



## Program Review Self-Study Template

Academic unit: EconomicsCollege: Barton School of BusinessDate of last review April, 2013

Date of last accreditation report (if relevant) \_\_\_\_\_

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

Degree: Bachelors - Economics CIP\* code: 45.0601Degree: 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>

Faculty of the academic unit (add lines as necessary)

Name	Signature
Jenchi Cheng	<u>Jenchi Cheng</u> 4/1/16
James Clark	<u>[Signature]</u> 4/9/16
DaEun Jung	<u>[Signature]</u> 4/4/16
Philip Hersch	<u>[Signature]</u> 4/4/16
William Miles	<u>[Signature]</u> 4-4-16
Jodi Pelkowski	<u>Jodi Pelkowski</u> 4/4/16
Martin Perline	<u>[Signature]</u> 4/4/16
Terence Decker	<u>Terence Decker</u> 4/4/16
Janet Wolcott	<u>Janet Wolcott</u> 4-4-16
_____	_____
_____	_____

Submitted by: Jenchi Cheng, Chair  
(name and title)Jenchi ChengDate 4/4/16

**1. Departmental purpose and relationship to the University mission (refer to instructions in the WSU Program Review document for more information on completing this section).**

a. 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.

b. 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.

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;

Master's Program:

to provide students with:

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

c. The role of the program (s) and relationship to the University mission: Explain in 1-2 concise paragraphs.

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.

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. Another faculty member contributes to printed and online study guide/tools used in conjunction with principles of economics textbooks. 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.

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

- e. 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.

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).

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 7.5% 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 the fall and spring semesters under review, the department offered Econ 611, Economics of Sports, primarily to serve the needs of both business majors in the Barton School and as a required class for sports administration majors in the College of Education. The sports administration program recently moved this class from a requirement to an upper division elective, therefore, the department will be re-evaluating how often to offer the course. 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. All accounting students that plan to take the CPA exam are required to take at least one upper division economics course (<http://www.ksboa.org/faq.htm>). Therefore, WSU accounting majors often take an upper division economics elective as part of their plan of study.

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. Two of the electives of the major, Econ 663 and 765, Economic Insecurity 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:

To meet the interests and goals of its students the program offers three tracks: Economic Analysis, Financial Economics, and International Economics. In each track, students can either choose to write a thesis (30 credit hours) or an independent research project (33 credit hours).

All three tracks have a 15-hour common core:

Econ 702: Mathematical Methods in Economics

Econ 731: Applied Econometrics I

Econ 801: Macroeconomic Analysis

Econ 804: Managerial Economics

Econ 803: Analysis of Business Conditions and Forecasting.

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.

The Economic Analysis Track 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.

The Financial Economics Track is designed for those students seeking careers in the financial sector. Beyond the core, students are required to take the MBA core course, Fin 850: Managerial Finance and Econ 740: Monetary Economics and Policy. The latter stresses contemporary monetary issues within the context of the global economy. Three additional courses (or two under the thesis option) are chosen from either finance or an economics related subject.

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 Finance and Investment. Elective courses are the aforementioned Econ 740 as well as internationally related graduate courses found elsewhere in the Business School (e.g., IB 831, International Business & Competitiveness). Students with appropriate backgrounds can also choose electives elsewhere in the university, such as a political science offering in international political economy.

#### 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.

**2. Describe the quality of the program 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).**

**Complete the table below and utilize data tables 1-7 provided by the Office of Planning Analysis (covering SCH by FY and fall census day, instructional faculty; instructional FTE employed; program majors; and degree production).**

Scholarly Productivity	Number Journal Articles		Number Presentations		Number Conference Proceedings		Performances			Number of Exhibits		Creative Work		No. Books	No. Book Chaps.	No. Grants Awarded or Submitted	\$ Grant Value
	Ref	Non-Ref	Ref	Non-Ref	Ref	Non-Ref	*	**	***	Juried	****	Juried	Non-Juried				
Year 1	3	0	2	0	1	0											
Year 2	6	0	1	0	1	0											
Year 3	8	0	2	0	1	0											

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

Tabulated research does not double count papers that were co-authored by Department members (e.g., 3 journal articles).

- 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 2015 consisted of seven faculty members with professorial rank: three full, three associate, and one untenured assistant professor. (One associate professor's primary responsibility is serving as associate dean of the Barton School). The department also has two lecturers, one who holds a PhD in economics, the other is an ABD. All tenure track faculty, except for the professor serving as associate dean of the Barton School, have graduate faculty standing. All tenure-track faculty members hold doctorates from well-recognized economics program.

Compared to Economics Departments at WSU's five peer institutions (New Mexico St., U. Mass.-Lowell, Nevada-Reno, North Dakota and Wright St.), we are understaffed. Those departments average 12 faculty members of tenure rank, ranging from 10 to 14. Given the administrative duties of the associate dean, we effectively have 6. Three years ago, for family reasons, the Department's econometrician resigned. Replacing her remains the Department's top need. The position has remained unfilled due to budgetary constraints. In the next 5 years, as many as 3 of the Department's faculty may retire. Any further reduction in faculty size would make it extremely difficult for the Department to maintain its program quality.

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. Faculty research papers continue to be

heavily cited by other scholars. Over the past 3 calendar years the number of cites generated by faculty research exceeds 500. Faculty have also been asked to serve as reviewers for many high quality journals.

#### Research Awards:

In the past, several faculty members have been awarded the Barton School Researcher of the Year Award. In 2011, Professor William Miles was awarded the University's Excellence in Research Award.

Barton Fellowships are awarded to Barton School of Business faculty members who have a consistent record of outstanding scholarship, instruction, and service to WSU. Fellowship recipients must also show promise of continued high productivity and contribution to the Barton School of Business. Two of our faculty have been acknowledged for their exemplary teaching, service, and research productivity by being recognized as Barton Fellows:

Philip Hersch (2013-2015), William Miles (2015-2017)

#### Teaching Productivity:

##### Credit hour Generation:

Although slightly lower than in the prior review period, overall SCH production remained steady over the past 3 fiscal years (AY13: 7054 – AY15: 7027). This is less than one-half of a percent reduction in credit hours. Teaching loads are determined according to the general guidelines of the Barton School of Business.

As measured by the Fall 2014 November 1<sup>st</sup> Census Day, the Department generated 2900 credit hours or 325.9 per FTE. The FTE number was 46.9% higher than for the University as a whole. Tenure eligible faculty accounted for 245.3 credit hours per FTE, 25.6% higher than for the University. These numbers are comparable for other years.

#### 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).

Regents Award for Excellence in Teaching: Jen-Chi Cheng (2008), Jodi Pelkowski (2006), Janet Wolcutt (1986), Martin Perline (1969).

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

Bloomberg Foundation Faculty Fellow: Martin Perline (2004- present)

**3. Academic Program: 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).**

- 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).

As reported in Table 8, the average ACT score of our majors is approximately 3 points higher than the university average. This has been a consistent trend of our majors.

- b. For graduate programs, compare graduate GPAs of the majors with University graduate GPAs:

Reported GPAs for entering M.A. students have been comparable to the University as a whole. For the 2013-15 period the average GPA for Economics students was 3.33 versus 3.5 for the University.

- 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 table below. 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. Definitions:

Learning Outcomes: Learning outcomes are statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire in their matriculation through the program (e.g., graduates will demonstrate advanced writing ability).

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.

Assessment criteria were changed in Spring 2014 to conform with suggestions stemming from the previous review. Therefore, we have only one full academic year's data to assess for each of the learning outcomes.

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



## 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	Not met = 26.1% Meets = 43.5% Exceeds = 30.4% (N = 23)	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 identify and analyze the conditions of cost minimization using isocost and isoquant analysis.	Econ 302 (Homework Questions and Exam 2 Questions)	80% Meet or Exceeds Expectations	Not met = 17.4% Meets = 30.4% Exceeds = 52.2% (N=23)	Target met.
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	Not met = 13.0% Meets = 47.8% Exceeds = 39.1% (N =23)	Target met. No action required.
4. Students will describe Keynesian IS-LM Aggregate Supply model.	Econ 301 (Exam Questions)	80% Meet or Exceeds Expectations	Not met = 25% Meets = 34.4% Exceeds = 40.6% (N =32)	Target met. No action required.
5. Students will define the basic Solow growth model.	Econ 301 (Exam Questions)	80% Meet or Exceeds Expectations	Not met = 6.2% Meets = 21.9% Exceeds = 71.9% (N =32)	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) See Appendix A for details.	Target/Criteria (desired program level achievement)	Results	Analysis
1. Students will conduct research using statistical tools.	Research Project (Econ 803)	80% Meet or Exceeds Expectations	Not met = 6.7% Meets = 66.7% Exceeds = 26.7% (N = 15)	Target met. No action required.
2. Students will be able to work through the standard model of the profit maximizing firm	Econ 804 (Exam1)	80% Meet or Exceeds Expectations	Not met = 14.3% Meets = 0.0% Exceeds = 85.7% (N=14)	Target met. No action required.
3. Students will be able to analytically differentiate between competitive and noncompetitive market structures.	Econ 804 (Exam 2)	80% Meet or Exceeds Expectations	Not Met = 7.1% Meets = 35.7% Exceeds = 57.6 (N =14)	Target met. No action required.
4. Students will be able to work basic game theory models	Econ 804 (Exam 3)	80% Meet or Exceeds Expectations	Not met= 0.0% Meets = 42.8% Exceeds = 57.2% (N =14)	Target met. No action required.
5. Students will be able to use optimization techniques as applied to economic models	Econ 702 (Exam 1) Econ 702 (Exam 2)	80% Meet or Exceeds Expectations	Not met = 16.6% Meets = 41.7% Exceeds = 41.7% (N =12)	Target met. No action required.
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% Meet or Exceeds Expectations	Not met = 16.6% Meets = 62.5% Exceeds = 16.6% (N =18)	Target met. No action required.
7. Students will be able to solve long-run macroeconomic growth models.	Econ 801 (Exam 1)	80% Meet or Exceeds Expectations	Not met = 22.2% Meets = 55.6% Exceeds = 22.2% (N =18)	Outcome was slightly below target level. Action: More class time will be devoted to the topic and discussion on Robert Gordon's book on the slowdown in long-term growth will be introduced.

- 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).

Based on the University exit survey, the number of undergraduate economics majors reporting they were satisfied or very satisfied exceeding the University average: 91.3% vs. 81.7% (unweighted averages 2013-2015). For economics master’s students the reported percentages are comparable to other University graduate programs: 81.2% vs. 83.1%.

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

- 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).

Outcomes:	Results	
	Majors	Non-Majors
<ul style="list-style-type: none"> <li>o Have acquired knowledge in the arts, humanities, and natural and social sciences</li> <li>o Think critically and independently</li> <li>o Write and speak effectively</li> <li>o Employ analytical reasoning and problem solving techniques</li> </ul>		
N/A – see explanation below		

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/>

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) accreditation.

- 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 information here:

We do not offer any concurrent courses.

- g. Indicate whether the program is accredited by a specialty accrediting body including the next review date and concerns from the last review.

Provide information 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 2018. No specific concerns were expressed regarding either program in the last review.

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 information here:

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.

- h. Provide a brief assessment of the overall quality of the academic program using the data from 3a – 3e and other information you may collect, including outstanding student work (e.g., outstanding scholarship, inductions into honor organizations, publications, special awards, academic scholarships, student recruitment and retention).

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. Of the 49 majors for the three years reviewed, one was a DSI finalist, one was a Jabara Scholar, and one was a Clay Barton Scholar. Fourteen of the graduated economics majors (29%) were inducted into Omicron Delta Epsilon, an international honor society for students in economics. Three 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 students tied for second place in the 2013 Oral Humanities URCAF presentations. In 2014, one of the students received first place. Two majors were named a WSU Senior Honor Men and one was named a WSU Senior Honor Women, a distinction given to only five male and five female university graduates per year. Two majors were awarded the Neff Memorial Award for Outstanding Senior, a distinction given to one Barton School of Business graduating senior each year. Two majors were awarded the Neff Memorial Award for Outstanding Junior, a distinction given to one Barton School of Business junior each year. Of the 49 economics majors, 22 (44.9%) of students graduated with honors (6 graduated Cum Laude, 11 graduated Magna Cum Laude, and 5 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. The student body is diverse with approximately a 50-50 split between domestic and international students. The latter including students from Asia, Africa, Europe and Latin America. A number of students have presented their research at the University's graduate research symposium, GRASP. Recently, a student received media attention for his work on forecasting population growth for all Kansas counties. (The project was primarily done over the summer under the auspices of the WSU Center for Economic Development and Business Research).

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

- a. Evaluate 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.

**Undergraduate:**

For the first two years of the assessment period, the program averaged 35 applicants per year, 30 admits and 12 enrollees (Fall census day). The last year of the assessment period shows a significant increase across the three categories of undergraduates, with 86 applicants, 79 admits and 35 enrollees identified. According to Table 12, a smaller percentage of our undergraduate students (7% of junior and seniors and 16.7% of freshmen and sophomores in 2014) compared to the university overall (15.7% of junior and seniors and 19.2% of freshmen and sophomores in 2014) are identified as being part of under-represented minorities. Interestingly, the percentage of undergraduates from under-represented minorities with degrees conferred was closer to the university with 5% fewer minorities in two of the years, but a slightly higher percentage in one year.

**Master's program:**

Over the assessment period the program averaged 66 applicants per year, 49 admits and 20 enrollees (Fall census day). These numbers are down from the preceding assessment cycle, which may, in part, be attributable to the improving economy. The number, however, is still at the upper end of the program's enrollment goal. Approximately, one-third of the enrollees were either recent or former WSU undergraduates. Unrepresented minorities averaged (unweighted) 11.2% of enrollees over the 2013-2015 Fall Census day periods, comparable to the University average of 10.3% for all M.A. programs.

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

Employment of 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.
Year 1	\$44,750	50%	83.33%	16.7%	0%	16.7%	↓ 6% projected growth in employment of economists
Year 2	\$43,750	60%	80%	0%	20%	5.9%	
Year 3	\$36,000	100%	100%	0%	0%	13.3%	

\* 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)

According the Kansas Board of Regents DegreeStats website, 88% of our program graduates are employed in Kansas, with reported median entering earnings of \$48,187 ([http://www.ksdegreestats.org/program\\_search.jsp](http://www.ksdegreestats.org/program_search.jsp)).

- 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:

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. At a significant number of universities and colleges, one or more courses in economics is required of all students. One study (John J. Siegfried, "How Many College Students Are Exposed to Economics," *Journal of Economic Education*, Spring 2000, pp. 202-204) found that 40% of all students at four-year institutions took at least one class in economics. In a more recent study (William Bosshardt and Michael Watts, "Undergraduate Students' Coursework in Economics," *Journal of Economic Education*, Volume 39, Issue 2, 2008, pp. 198-205), a review of sample transcript data from the Baccalaureate and Beyond (BB) study by the National Center for Education Statistics indicated 59.3% of all students completed at least one course in economics. This near-universal inclusion of economics in academic studies is evidence that economics is widely considered to be an important component of undergraduate education.

A study published in 2014 (John J. Siegfried, "Trends in Undergraduate Economics Degrees, 1991–2013," *The Journal of Economic Education*, 2014, Volume 45, Issue 4, 387-391, DOI: 10.1080/00220485.2014.942411) found an 18% increase in undergraduate degrees in economics awarded by U.S. colleges and universities between 2007 and 2010. Between 2010 and 2013 the number of undergraduate degrees in economics has been fairly stagnant.

In a September 12, 2012 article by Kelsey Sheehy in the US News and World Report titled, "College Majors with the Best Return on Investment," economics was identified as a major with potential for income growth, reporting median starting pay of \$47,300 and median mid-career pay of \$94,700. 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 2014 and 2024. The Bureau of Labor Statistics report the median annual wage of economists to be \$95,710, as of May 2014. 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 19%.

#### Placement:

Of the 49 students who have graduated in the past three academic years, three entered our own Master's Program through the Accelerated Degree Program and four additional students continued into our basic Master's Program in Economics (total of seven, or 14.3%). One of our students entered WSU's Master's in Public Administration Program. Three of undergraduates went to law school (at Washington University in St. Louis, 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; Georgia Pacific; BG Products; Spirit AeroSystems; and Beyond Body Therapy. Students have found employment in the financial divisions, HR Positions, project managers, real estate, and sales positions at Textron; Office of the Comptroller Of the Currency (U.S. Treasury Department); Wheeler, Kelly and Hagny, Inc.; Graham Advisors, LLC.; Farmers Insurance; The Martens Companies; Real Property Solutions; Intrust Bank; UMB; MidAmerican Bank; Cargill; and IMG.

#### 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 48 students who have graduated in the past three academic years, 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: CoBank, Federal Reserve Bank of Richmond, WSU Center for Business and Economic Research, Chesapeake Energy, DISH Network, Spirit AeroSpace, Guohong Investment Group, Kuwaiti Bank, Koch Industries, Koch Supply and Trading, Koch Flint Hills, Koch Minerals, Brierley & Partners LLC, John Hancock, NYCACS, BalancedCorp, and the Kansas Department of Labor. Other graduates have continued with their academic studies, remained with their prior employer, gone to work in their family business, or started their own business. We know of only three domestic students who were not successful in finding employment related to the degree.

**5. Analyze the service the Program 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).**

Evaluate table 16 from the Office of Planning Analysis for SCH by student department affiliation on fall census day.

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, less than 7.5% of SCH were taken by undergraduates majoring in economics. Over 86% of the SCH are taken by non-majors. The remaining (approximately 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 and 674, International Economics and Business and International Finance, 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 a required class for sports administration majors in the College of Education. 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) and Economics 302 (Intermediate Microeconomics), and Econ 403 (Business Forecasting)) are taught annually by Department faculty that otherwise would probably not be offered. Only one section of each of these three courses is taught once a year, with enrollments in Econ 301 and Econ 301 consistently above 35 students per section. Consequently, the allocation of the Department's teaching load devoted exclusively to the undergraduate economics major amounts to just three classes per year.

Master's Program:

At the graduate level, most courses are primarily taken by students enrolled in the master's program. An 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). Three classes (Econ 702, 740 and 731) are also open to undergraduates.



**6. Report on the Program'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
<b>Undergraduate Program</b>	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 97 in Fall 2012 to 123 in Fall 2015; Number of graduates have increased from 13 in 2012 to 22 in 2015
	Hire, retain, and promote qualified faculty to teach undergraduate courses		All current tenure-track faculty have graduate faculty status and are actively engaged in research.  The number of faculty has been reduced, however, placing a greater burden on remaining faculty.
	To have students obtain an understanding of basic macro and microeconomic models.	Learning Outcomes Data	All but two targets were met, improvement warranted.
<b>Master's Program</b>	Enroll minimum 10 new qualified students per year.	Enrollment data	Number of new students enrolled has ranged from 14 to 24. More than 95% have been admitted under full standing.
	To have at least 80 percent of graduates obtain position consistent with career goals.	Student self-reported data (supplemented, where possible, with online searches, e.g., LinkedIn).	Based on information available 84% of students searching for new employment obtained positions or continued their academic studies.

	To maintain qualified faculty to teach graduate classes and supervise student research.	Graduate faculty credentials and annual activity reports.	<p>All current tenure-track faculty have graduate faculty status and are actively engaged in research.</p> <p>The number of faculty has been reduced, however, placing a greater burden on remaining faculty. As noted earlier, the Department currently lacks a faculty member with a specialty in econometrics. Although other faculty can cover these classes, an econometrician is central to any economics graduate program.</p>
	To have students obtain an advanced understanding of basic macro and microeconomic models.	Learning Outcomes Data Section 3c	With one exception all learning outcomes are being met. The exception fell just short of the target criterion.
	To have students acquire the ability to perform empirical economic research	Learning Outcomes Data Section 3c	Students are performing particularly well in this area.

## 7. Summary and Recommendations

- 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). Identify three year goal (s) for the Program to be accomplished in time for the next review.

Provide assessment here:

Undergraduate:

We have seen a steady increase in majors in both the liberal arts and business school. 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 2009 to 2011, we graduated an average of 11 individuals per year. For the three year period reviewed here, we graduated an average of 16 majors per year. The department continues to offer and support an active student group and membership to an international honor society. The WSU Alpha Chapter of ODE International Honor Society was the first chapter in the state of Kansas and has existed for many decades. Given that the honor society has both a minimum GPA and minimum hours requirement, an additional group exists for students, Economists Anonymous. This organization allows students to attend the meetings and events while they are deciding what area to major and as their interests develop. The student-led Economists Anonymous and ODE organizations host three or four events per semester for students. Student group participation continues to increase as the number of majors and students interested in economics grow.

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. According to an article by Bosshardt, Watts, and Becker (“Course Requirements for Bachelor’s Degrees in Economics,” *American Economic Review: Papers and Proceedings*, May 2013), 56% of BS economics programs require an econometrics course of its undergraduate majors while just under one-third require a senior seminar. 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 made this a requirement yet 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.

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 the 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:

In terms of enrollment, the program has been at the upper end of its goal to enroll 10-20 students per year. This is lower than the previous review period, but given current resources is a more manageable number. The number of students graduating has numbered about 15 annually over the reporting period. Based on self-reported data, graduates have also been successful post-graduation.

With one exception, all learning outcome targets are being met. An intervention has been introduced for the missed target.

Diminished resources continue to be a concern. Compared with peer institutions, the Department is understaffed. The lack of an econometrician is a key deficiency. Aside from teaching econometrics related classes, an econometrician is a research resource for other faculty both within the Department and the Business School as a whole. In the prior Program Review, a concern was raised regarding the lack of graduate assistantships. The awarding of assistantships is a recruiting tool for the M.A. program. Since the last review, the number of GAs in the Department has been cut from 4 to 3.5. Additionally, GA stipends and benefits are well below those of other universities.

Program goals for the upcoming three years remain unchanged:

- a. To maintain a qualified faculty to teach graduate courses and supervise student research.  
(This includes, if possible, recovering lost faculty positions).
- 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**  
**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.

<p>Students will define costs minimization using isocost and isoquant analysis.</p>	<p>Intermediate Microeconomics</p> <p>Homework Questions and Exam 2 Questions</p>	<p>Failure to demonstrate basic knowledge of concepts.</p>	<p>Demonstrates basic knowledge of concepts.</p> <p>Correctly labels graphs identifying cost minimization.</p> <p>Some Understanding of marginal rate of technical substitution.</p>	<p>Demonstrates advanced knowledge of and ability to apply concepts.</p> <p>Correctly labels graphs identifying cost minimization. Correctly identifies and explains marginal rate of technical substitution.</p>	<p>80% Meets or exceeds expectations.</p>
<p>Students will differentiate short-run and long-run implications of a change in market conditions in a perfectly competitive market.</p>	<p>Intermediate Microeconomics</p> <p>Homework Questions and Exam 3 Questions</p>	<p>Failure to demonstrate basic knowledge of concepts.</p>	<p>Demonstrates basic knowledge of concepts.</p> <p>Correctly labels graphs identifying a perfectly competitive market in the short run, a change in market conditions, and long run implications.</p>	<p>Demonstrates advanced knowledge of and ability to apply concepts.</p> <p>Correctly labels graphs identifying a perfectly competitive market in the short run, a change in market conditions, and long run implications.</p> <p>In addition, understands the efficiency differences between short run and long run equilibriums.</p>	<p>80% Meets or exceeds expectations.</p>

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.	Demonstrates basic knowledge and concepts.  Correctly labels graphs in IS-LM model.  Some understanding of the impact of changes in monetary or fiscal policy even if math mistakes are made.	Demonstrates advanced knowledge and ability to apply concepts. 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.	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.	Students demonstrate knowledge of the Solow model, and correctly identify either the effect of investment or that of population growth on per capita output.  They may make some arithmetical	Demonstrates advanced knowledge of ability to apply concepts.  Students correctly label graphs, and correctly identify the impact of greater investment and population growth on	80% Meets or exceeds expectations.

			mistakes.	per-capita output, and correctly complete algebraic problems.	
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### 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.



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 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.
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.

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.