

Gordon Ford College of Business

COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 2017- 2018

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COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Gordon Ford College of Business (GFCB)
College:	GFCB

Program Name:	Advanced Professionalism
0487	1730
CIP Code:	529999
Degree Type (AB, BS, etc.):	Undergraduate Certificate
STEM+H Degree (Y/N)	N
Minimum Hours Required:	12
List Concentrations (if any):	

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The undergraduate Certificate in Advanced Professionalism (CAP) is a credential that incents students to pursue focused curricula and services that enhance career readiness. The Certificate, only available to GFCB majors, requires 12 hours of coursework and students must pass a 0-credit hour course that confirms each student's participation in a variety of cocurricular activities offered by the GFCB and the Career Services Center (now ACDC). The co-curricular activities, tracked over the student's WKU career, range from developing a high-quality LinkedIn account to practicing interview and etiquette skills. The coursework focuses on enhancing a student's "soft skills" and includes courses in self-management, written and oral communication, leadership, and applied career experiences through a required internship. Three different colleges offer courses which may be used to complete the Certificate: GFCB, PCAL (COMM and ENG classes), and CEBS (LEAD classes). With proper planning and focus on appropriate coursework, some GFCB majors (Marketing and Management) may complete the Certificate with as few as 3 additional hours of coursework. For most majors, the Certificate would require 6 additional hours of coursework. The Certificate provides an incentive for students to focus their programs of study to enhance soft skills and workforce preparation.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	0	0	1	6	12	4
Conferrals	0	1	2	2	3	5
SCHP	0	0	0	3	12	44

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The program is intended to enhance all undergraduate degrees in the College by providing an incentive for students to take advantage of targeted "soft skill" courses and dozens of co-curricular activities intended to enhance employability and develop leaders in the workplace.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

The coursework is spread out over a student's degree pathway with both 100 and 400 level coursework. In addition, the co-curricular activities are to be completed throughout the student's college career. As a result, only our most recent graduating classes have had a full opportunity to pursue coursework and activities over their entire college career – as intended.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	201	3-14	201	4-15	201	5-16	201	6-17	201	7-18	17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	0	0	0	0	0	0	0	0	1	100	19/73.7%
Progression	-	-	-	1-	-		5	100	8	87.5	11,514/61.3%
150% Graduation Rate	-	-	-	85	-			-	-	-	-
Time to Degree		-		-		-	6	-	8	-	-

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

Learning Outcomes:

Students completing the Advanced Professionalism certificate will be able to:

- · Demonstrate career planning confidence, including positive career efficacy, career field exploration and goal setting
- Manage personal job acquisition process, from job search through application, interview, and offer stages
- Practice professional behaviors for business applications, including networking events, one-on-one and small group interactions, social media, and in the workplace setting
- Understand and practice self-management skills, including personal finance, time management, goal-setting, and work-life balance to enhance professional success
- Prepare and deliver polished professional written and oral communication deliverables

The program has not produced enough graduates for valid, formal SLOs assessment. Preliminary results suggest that students in our college feel confident in ability to gain full-time employment in their fields of study.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

All students complete their academic portion of the certificate with an internship. Employers are required to submit reviews of each student so that we are able to continue to provide feedback on professional development and assess the workplace preparedness of our students. Further, a fully developed LinkedIn account with connections to faculty and staff within the college is required as part of the Certificate. Through this mechanism we are able to follow the successful career progression of our graduates.

Dozens of articles on the importance of enhancing our graduates' levels of professionalism can be found in the popular press and academic literature. Professor of engineering and computer science at MIT, Anant Agarwal, recently noted that "Power Skills" may be a better term than "Soft Skills" as employees who possess these skills are much better positioned for long-term success in the workforce. Agarwal noted that Google found that communication, empathetic leadership, and thoughtful perception of others were the most revealed predictors of success with the company. And, he noted that his company's Twitter poll (edX) that employers value teamwork and collaboration, critical thinking, public speaking, and persuasive writing are the most valuable of the "power skills." (Oct 2, 2018, 03:18pm, Data Reveals Why The 'Soft' In 'Soft Skills' Is A Major Misnomer. Forbes.com.) In short, our efforts with this certificate.

In short, all potential career paths for our graduates could be improved with enhanced "soft skills" and professionalism.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

The college is evaluating the success of its core Business curriculum. Employer focus groups from that process recently suggested that enhanced soft skills continue to be desired by employers in our region and beyond.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty						12
Number of NTE Faculty						4
Cost per SCH						128
SCHP/FTF by Dept.	60	64	71	81	74	375
% SCH by FTF by Dept.	56.3	58.7	50.3	48.7	49.4	75.8
Median Class Size by Level	1	2	2	1	1	19
% Under-Enrolled Sections	25.0%	16.0%	8.0%	0.0%	3.8%	58.2
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

The Professional Education and Knowledge Program (PEAK) is our undergraduate program focusing on the enhancing the level of professional preparedness of our students and provides the overarching structure and administration for the CAP. PEAK is considered a "best practice" among business schools and is deemed a critical program by our advisory boards. As a result, donors provide both time and financial assistance with several co-curricular activities associated with Certificate completion. In addition, firms see the value of our GFCB experiences and our positive outcomes from internship and career placement are increasing.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

The department is listed as "BU" which includes our MBA program, our University Experience class, and BA 495 - the 0 credit hour course that evaluates the student's successful completion of the co-curricular activities. Three of the standard courses in the program are taught by FTE in the College and the Certificate size has not conflicted with classroom capacity. Part-time instructors teach our university experience class, BA 175. The Associate Dean "teaches" the BA 495 as part of the position's administrative responsibilities. The majority of additional resources associated with the Certificate are the time commitment by our staff and administration.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

The CAP aligns perfectly with WKU's Strategic Plan, *Climbing to Greater Heights*, by addressing our students' "Preparation for the Global Stage" and our alumni's "Alumni Ambassadors." The Plan states that WKU will provide "...high impact practices to develop hard and soft skills as well as to cultivate good, productive citizens" and "Bring alumni to campus to share their knowledge..." The focus of the CAP is to enhance the professionalism and leadership of our students and we rely heavily on the goodwill and time of our alumni to do so. The alumni provide endless hours of investment in the form of on campus workshops, on-site job shadowing and mentoring, and internship opportunities.

The CAP further aligns indirectly with the Plan in multiple ways. For instance, students who participate in CAP should see greater satisfaction from the coursework and have greater confidence in their degree planning and goals post-graduation which would improve retention efforts as identified in the Plan's "Completion and Success." Further, CAP assists WKU as a "Regional Lighthouse" by working to ensure that our graduates "work effectively with others."

Metrics include matched student/employer surveys gauging preparedness and fit, tracking of alumni interaction, and student feedback on alumni impact.

b. What aspects of the statewide strategic agenda are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

The following goals and objectives of the CPE's Strategic Agenda are addressed by CAP:

- 1. Increase degree and certificate completion, fill workforce shortages, and guide more graduates to a career path Objective 8. Promote academic excellence through improvements in teaching and learning.
 - Strategy 8.4. Prepare Kentucky postsecondary students for 21st century challenges by *strengthening essential learning outcomes* as articulated in the AAC&U's LEAP initiative.
- 2. Create economic growth and development and make our state more prosperous

Objective 9. Improve the career readiness and employability of postsecondary education graduates.

Strategy 9.1. Make career development ... a key strategy for student success. Improve career development through...tools that match skills to jobs and students with employers, and entrepreneurship training.

Strategy 9.2. Survey higher education alumni and Kentucky employers to assess the career readiness of Kentucky graduates and identify needed skills and competencies for current and future employment opportunities.

Strategy 9.3. Work with the employer community, foundations, and state agencies to provide "work and learn" opportunities, including experiential or project-based learning, co-ops, internships, externships, and clinical experiences.

Strategy 9.4. Promote regular, meaningful employer involvement in the development and evaluation of postsecondary programs that are relevant to their business/industry.

Metrics are the same as above.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

As described in 3.c, advancing our graduates' professionalism and career readiness are highly valuable to employers and leads to higher levels of career and education satisfaction. In addition, students completing the CAP should have a more realistic preview of work-life and career placement should be more successful for our graduates.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

This is the only program of its nature on WKUs campus and is a rare program for schools of business in our region. The program is similar to programs offered by a number of benchmark institutions, including Indiana State University, "Workplace Professional Skills Certificate"; Northern Illinois University, "Learning and Leadership in the Workplace"; and University of North Carolina at Charlotte, "Career Success Certificate." These programs provide certificate designation for completion of co-curricular activities in conjunction with campus resources, such as Student Affairs or Career Services. Most similar to our design is the "Leadership and Professional Development Program" certificate program offered by East Carolina University, which requires four formal courses in Leadership in addition to co-curricular activities. All students in their college of business complete this certificate.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

CAP focuses on broad-based, professional skills and career readiness, exactly the type of programming encouraged by the Hart Research Associates work on behalf of AAC&U (2015), "Falling Short? College Learning and Career Success." CAP provides "broad learning", emphasizes written and oral communication and applied learning opportunities – such as internships, and requires the completion of an e-portfolio. Further, CAP programming helps to "level the playing field" for our graduates. While lack of "soft skills" may be a national trend, one would expect the gap between prepared graduates and unprepared graduates to be wider in regions where the proportion of college graduates is relatively low. Our WKU students have greater capacity for growth in this area.

6. PROSPECTUS

a. What opportunities do you see for the program going forw students, how might the program be revised to take advanta interdisciplinary connections be made to increase the deman	ge of emerging trends in the discipline, how could new				
The current program design focuses on the traditional student program to increase flexibility for our growing transfer popula	t. A committee of faculty and administrators are reviewing the tion.				
b. How do program trends align with <u>national trends</u> over th	e last 5-10 years? (maximum 200 words)				
These types of programs are increasingly popular and are becoming common in business schools. Our accrediting agency lists 15 standards, which we continuously work to meet. Of these 15, four specifically encourage initiatives we pursue in our college and are exemplified by the CAP. Business schools that do not formally address professionalism and career readiness objectives will be facing a recruiting disadvantage.					
c. What if any significant changes has your program institute of students, and/or efficiency that may not yet be evident in sequencing/scheduling designed to enhance students' progre recruiting and marketing plan, or reallocation of faculty reso	ess towards degree, implementation of a comprehensive				
We have worked on marketing efforts and are seeking more s curricular activities.	treamlined method of tracking student participation in the co-				
d. Where do you see the program in five years? In ten years' impediments currently exist? (maximum 200 words)	? What would it reasonably take to get there? What				
I see a more flexible curriculum to accommodate a variety of student types. Further, the CAP will have stronger brand recognition as employers associate the Certificate with higher quality graduates. Both of these will result in greater enrollment and increased credentials. Tracking of activities is the most challenging component of the CAP to date. Our faculty and staff have reviewed multiple software options and at this point the costs are prohibitively expensive.					
e. What recommendation would you put forward for the pro	gram (check one)?				
☑ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)				
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)				



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Information Systems
College:	Gordon Ford College of Business

Program Name:	Applied Data Analytics
Reference Number:	#1734
CIP Code:	521301
Degree Type (AB, BS, etc.):	Certificate
STEM+H Degree (Y/N)	
Minimum Hours Required:	18
List Concentrations (if any):	

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The Applied Data Analytics certificate was developed to meet the high and growing demand for jobs requiring an understanding of data analytics. Our accrediting body (AACSB) is also emphasizing more skills in data analytics for the entire business curriculum. Specifically AACSB is requiring the following:

- "Evidence-based decision making that integrates current and emerging technologies, including the application of statistical tools and techniques, data management, data analytics and information technology throughout the curriculum as appropriate"
- "Ethical use and dissemination of data, including privacy and security of data"

The Applied Data Analytics certificate is an interdisciplinary STEM designated certificate. The certificate requires 18 hours of course work. Six hours of electives may be taken in any other discipline within the university as long as they meet the requirements for being a data analytics focused course.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	0	0	0	1	44	4
Conferrals	0	0	0	6	30	5
SCHP	0	0	0	57	300	44

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The Applied Data Analytics certificate was developed to provide employment opportunities to students and to help meet the growing demand for data analytic skills in the region and beyond. Data analytics has been identified by the AACSB as an increasingly important part of an accredited business program.

"IBM, which claims that the annual demand for data scientists, data developers and data engineers will lead to 700,000 new recruitments by 2020."

https://www.morningfuture.com/en/article/2018/02/21/data-analyst-data-scientist-big-data-work/235/, 12/2/2018.

Enrollment has grown 291% from 44 to 128 students this academic year (Fall 18). The certificate requires at least two Business Data Analytics (BDAN) courses. Due to demand for the certificate as well as students in other majors selecting these courses as electives, three sections are offered for one of the required BDAN courses and two sections are offered for the other BDAN course. Enrollment in each section is approximately 40.

Locally, Fruit of the Loom is aware of the certificate and recently made it known that they will consider students from any business discipline enrolled in the curriculum for internship opportunities. (source: Monica Duvall, GFCB Internship Coordinator)

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

Some students may be too advanced in their academic careers to switch majors or to declare a dual major with data analytics. The certificate in Applied Data Analytics offers students the opportunity to gain some knowledge in the area of analytics without having to disrupt their current academic path. The certificate is an interdisciplinary certificate and there are some students outside the college already pursing it. Growth of the certificate beyond its current offerings is limited due to faculty resources.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	201	3-14	201	4-15	201	5-16	201	.6-17	201	7-18	17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate											73.7
Progression							1	100	40	95	
150% Graduation Rate											
Time to Degree											

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

The student learning outcomes for Applied Data Analytics certificate are the same as the data analytics program, which are:

Model and computationally analyze business-oriented data Critically identify appropriate data models to solve business problems

Understand how to present and communicate graphical information related to various data analytic models Understand the technical security associated with data analytics

Means of assessment include in-class examinations and projects. Other program assessment include presentations in the capstone class (Data Visualization). All students in the Data Mining course are also required to participate in a poster presentation that are evaluated by all the faculty in the department. For those students that do internships, evaluations are done by their employers as well.

A "best example" of how findings improved the program were used to improve the program was to require the students to develop a shorter "elevator speech" for their poster presentations and be able to communicate the major points and outcomes of their project in three minutes or less. Faculty evaluations from the previous year indicated students needed to be more succinct with their poster presentations.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

Currently the only program in place to track the success of our graduates is to keep a list of employers who have employed our graduates. Recent employers include: Fruit of the Loom, Dollar General, ABR Systems Group, Brown-Forman, Enterprise, Los Angeles Chargers, Mars Petcare, New Acquisitions, CoreTrust, Restaurant Supply Chain Solutions, LLC, University of Kentucky, WorldPay, Camping World, Daymar Colleges Group, Martin Kia, Southern Star Central Gas Pipeline, Limestone Bank, Inc., Scott Industries, NRG Energy, Optum, Brooksource, DXC Technology, Hollister Co., Constellium, & Barton Mallow Construction Services. This list is for both Business Data Analytics majors and Applied Data Analytics certificate recipients.

"Employment of operations research analysts is projected to grow 27 percent from 2016 to 2026, much faster than the average for all occupations. As technology advances and companies seek efficiency and cost savings, demand for operations research analysis should continue to grow."

Operations Research Analysts - Bureau of Labor Statistics

https://www.bls.gov/ooh/math/operations-research-analysts.htm , 12/2/2018

"By 2020 the number of Data Science and Analytics job listings is projected to grow by nearly 364,000 listings to approximately 2,720,000.

THE DATA
SCIENCE /
ANALYTICS
LANDSCAPE

2,350,000

DSA job listings in 2015

By 2020, DSA job openings are projected to grow

15%

364,000

Additional job listings projected in 2020 Demand for both Data Scientists and Data Engineers is projected to grow

39%

DSA jobs remain open

5 days

longer than average

DSA jobs advertise average salaries of

\$80,265

With a premium over all BA+ jobs of

\$8,736

81%

Of DSA jobs require workers with 3-5 years of experience or more

HTTPS://WWW.IBM.COM/ANALYTICS/US/EN/TECHNOLOGY/DATA-SCIENCE/QUANT-CRUNCH.HTML

The professional opportunities for our graduates are the ability to choose an industry and a location anywhere in the country they wish to work.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

The department makes use of employer surveys which are conducted by the college of business as part of its ongoing accreditation process. The accrediting body is AACSB (Association to Advance Collegiate Schools of Business). A formal evaluation by AACSB is conducted every five years. The department also uses its advisory board for feedback. We currently have members from all over the country who work for such companies as SAS, Coca Cola, Deloitte and Touche, American Hospital Directory and WKU. This board typically meets at least once annually.

One best example of where information gained was used to improve the program was the feedback we received from the advisory board to incorporate more security topics into the curriculum. Currently every data analytics course covers a different aspect of security as it relates to data analytics. This was done because of the lack of faculty resources to create a separate security course, or even a cyber-security track for the program. The security topics were incorporated in two Business Data Analytics courses which are also required for the Business Data Analytics major.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

The demand for our students who are only pursuing a certificate is evident by employers who are willing to accept students for internships while the students are still pursuing the applied data analytics certificate. One such request recently came from Fruit of the Loom.

"Fruit of the Loom is looking for a Data Analytics Intern. This student can be a student majoring in Data Analytics or pursuing the certificate! They are looking for someone to start after the new year...please encourage students to apply! Thanks! (Handshake Posting #2226935")

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ.
						Median
Number of TE Faculty					8	12
Number of NTE Faculty					2	4
Cost per SCH					158	128
SCHP/FTF by Dept.	375	437	468	525	528	375
% SCH by FTF by Dept.	90.8	91.1	74	85.2	86.7	75.8
Median Class Size by	20	27	26	30	29	19
Level						
% Under-Enrolled	33.3	16.7	40.0	13.3	5.6	36.3
Sections by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

The data provided above is the same as that was provided for the data analytics program.

There is only one external revenue stream that is directly associated with the program. That revenue stream is departmental student fees. The fees are used to maintain and equip our four departmental computer labs. An additional 25 sections of service classes, colonnade classes, and minor classes are offered each semester which also have a departmental student fee associated with them. Enrollments exceed 30 students on average for each of these sections.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

The certificate requires 18 hours of courses with only 12 required hours from the Information Systems department. The required classes in the certificate include 6 hours of required business core classes and 6 hours of Business Data Analytics (BDAN) courses.

Six hours (two classes) of data analytics focused courses have been identified in every department within the college of business. Students are able to use these courses from their major to complete the interdisciplinary data analytics certificate. This explains why majors in the other disciplines are so eager to pursue this certificate since they only need to take two more BDAN courses.

The only other discipline outside the college that this certificate has been marketed to is Health Information Management in the College of Health and Human Services.

There is a reluctance to market this certificate to other colleges because of the lack of resources needed to offer additional sections to meet the student demand.

Also, the department lost an instructor last year and another faculty member is retiring on June 30, 2019.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of WKU's strategic plan are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

The Applied Data Analytics certificate directly addresses the following goals and strategies from WKU's strategic plan.

The data analytics program directly addresses the following goals and strategies from WKU's strategic plan. (Goals are bulleted)

- Diversity, Equity, and Inclusion: Work with the associate provost for global learning and with faculty and staff to continue to expand off-campus and on-campus educational opportunities.
 - By offering two delivery methods for this certificate and working with DELO marketing the certificate provides additional off-campus and on-campus opportunities to maximize student progression and completion.
- A Culture of Innovation: Schedule course offerings to maximize student progression and completion.

The certificate program offers all of its required departmental classes in a face-to-face format and an online format. This allows students to pursue the certificate in any format. The flexibility maximizes a student's progression.

- A Regional Lighthouse:
- Engage with the communities we serve to be a resource and partner in finding innovative solutions to social, economic, and other challenges.

Several data analytics internships include Tennessee Valley Authority, Hotrods, The Foundry, & Fruit of the Loom. Some of the internships are accepting students from the certificate program.

• Ensure that WKU students graduate with skills to think critically, solve problems, and engage effectively with others.

These skills are a major emphasis in the certificate program.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

The Applied Data Analytics certificate directly addresses the following goals and strategies from the statewide strategic agenda.

Objective 4, strategy 4.2: Strengthen partnerships with business and industry, workforce partner agencies, institutions of higher education, and other organizations that lead to increased student enrollment and engagement in adult education programs. The department has engaged with local high schools and KCTCS to develop ways to increase enrollment in the Applied Data Analytics certificate.

Objective 8, strategy 8.1: Promote the use of authentic assessments to evaluate student learning and provide data to inform pedagogy, assignment design, and curriculum review. The program uses a departmental advisory board to advise on pedagogy and curriculum review. Surveys are conducted with employers and graduates to inform on curriculum review.

This also relates to All of Objective 9, strategies 9.1-9.6: Improve the career readiness and employability of postsecondary education graduates.

It should be noted that the Applied Data Analytics certificate is a STEM designated program.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant <u>workforce</u> and/or provide supplemental data to the extent possible. (maximum 200 words)

The Applied Data Analytics certificate can be used in a variety of professions. Listed below is the work force 5 year projections for specific analyst positions with the state projected numbers in parenthesis.

Credit Analyst (119)

Certificate DA

Financial Analyst (229) Management Analyst (471) Market Research Analyst (524)

While the current program resources would never be able to produce enough graduates to meet this demand, the Applied Data Analytics certificate will provide a curriculum to help students stay in this region should they choose to do so.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

The Applied Data Analytics certificate is distinctive in that the faculty also created a Center for Applied Data Analytics that is used in conjunction with the data analytics program. The goals of the Center include seeking out internships for our students, have a meaningful impact on our communities we serve, and develop collaborative research with faculty and students in other colleges.

Initiatives under way in this area include the internships mentioned earlier and a Medical Adherence study being conducted between faculty in the college of business and faculty in the college of health and human services. Students in both colleges with have an opportunity to work on the data collected from this study. One potential outcome from this study would be to give the university some bargaining power to negotiate lower rates with their healthcare providers. Numerous successful internships have also provide a positive light on the program, the college, and the university.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

The demand for data analytic skills is increasing dramatically across the world as more and more data is produced in every sector. Having an Applied Data Analytics certificate at WKU is one way of addressing this demand for our students, the economy, and our communities. Many data analytics certificates are master level programs. The distinctiveness of our program is that there are few data analytic certificates at the undergraduate level and our certificate can easily be completed outside the college of business.

6. PROSPECTUS

a. What opportunities do you see for the program going forw students, how might the program be revised to take advantage interdisciplinary connections be made to increase the demandant	ge of emerging trends in the discipline, how could new d and quality of the program? (maximum 200 words)
One opportunity for the program is to market it to international as a STEM program, CPE ID 11932. Having the certificate mark in the country longer as they seek to work in the country after	eted a STEM program would allow foreign students to remain
Another opportunity for the certificate, as was mentioned earl college.	ier, would be to start marketing it to students outside the
A third opportunity is to reach out to recent graduates of WKU as a stand-alone resource.	and perhaps other business schools and offer the certificate
b. How do program trends align with national trends over the	last 5-10 years? (maximum 200 words)
Program trends are consistent growth with business and Comp been increasing in both of these areas over the last 10 years. Using graduate certificates being dominate. This positions this certificates undergraduate degree, entering the workforce for experience,	Undergraduate certificates in data analytics are rare with cate program nicely to fill the void for students earning their
. What if any similificant should be a second management in this day	Lucialis also most those some to increase much sticitus assessed
c. What if any significant changes has your program instituted of students, and/or efficiency that may not yet be evident in sequencing/scheduling designed to enhance students' progre recruiting and marketing plan, or reallocation of faculty resource.	the data provided? Examples might include revised course ss towards degree, implementation of a comprehensive
The Applied Data Analytics certificate is less than three years o changes have been instituted.	
d. Where do you see the program in five years? In ten years? impediments currently exist? (maximum 200 words)	What would it reasonably take to get there? What
	the certificate could double in size if the appropriate resources the multiple sections required to double in size. Since the
impediments currently exist? (maximum 200 words) Based on regional and national demand, in the next five years are devoted to it. This requires two additional faculty to teach department teaches four of six required classes for the certification.	the certificate could double in size if the appropriate resources the multiple sections required to double in size. Since the ate an increase of 80 students would require one additional
impediments currently exist? (maximum 200 words) Based on regional and national demand, in the next five years are devoted to it. This requires two additional faculty to teach department teaches four of six required classes for the certification of the second	the certificate could double in size if the appropriate resources the multiple sections required to double in size. Since the ate an increase of 80 students would require one additional



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Economics
College:	Gordon Ford College of Business

Program Name: Applied Economics						
Reference Number:	0410					
CIP Code:	450603					
Degree Type (AB, BS, etc.):	MA					
STEM+H Degree (Y/N)	N					
Minimum Hours Required:	30					
List Concentrations (if any):	General, Mathematical Methods					

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

MA in Applied Economics emphasizes the training of students with backgrounds in economics and other arts and sciences for careers that require strong analytical skills, technical tools, and communication abilities. Graduates of our program are employed in both the private and the public sectors as economists, statisticians, data scientists, business intelligence analysts, forecast analysts, consultants and in many other roles.

The program requires 30 hours and can be completed in one year. The program also offers a JUMP option which allows students double-count up to 12 hours of their coursework toward graduate and undergraduate degrees.

While most of our students are economics majors from WKU, we have been able to attract students from other universities (both in-state and out-of-state) as well as international students.

Admission to the program is based on GRE scores, letter of recommendation and prior coursework.

The program has a 15-hours core consisting of

- ECON 465G Regression And Econometrics
- ECON 502 Applied Microeconomic Theory
- ECON 503 Applied Macroeconomic Theory
- ECON 506 Applied Statistical Methods
- ECON 594 Forecasting

All students complete a capstone applied project (3-6 hours) and the rest of the program consists of electives which are usually cross-listed 4XX-G courses.

The program is offered entirely face-to-face. There is no online component.

There are two concentrations: General and Mathematical Methods. The latter requires electives to be chosen from graduate-level courses offered through the Mathematics department.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2015-16 2016-17		17/18 Univ.
						Median
Enrolled Students	23	17	26	21	11	19
Conferrals	10	10	10	7	15	6
SCHP	301	299	392	251	143	212

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The MA program contributes to other programs in the department in many ways:

- The program offers a JUMP option;
- Graduate students who receive assistantships serve as teaching assistants for introductory courses. This helps the department teach large sections, some of which have 250+ students;
- Qualified graduate students serve as instructors;
- Graduate assistants sere as tutors and hold office hours to help undergraduate students with their classes;
- Graduate students serve as research assistants for the faculty in the department, which has resulted in several faculty/student collaborated journal publications;
- The quantitative courses from the MA are offered as a separate Graduate Certificate in Economic Data Analytics.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

2017-2018 academic year had unusually low enrollments in this program. Through recruitment of traditional graduate students and by promoting the JUMP program we were able to significantly grow the program in the Fall of 2018. The table below shows enrollments in three core courses that are normally taken by our graduate students in their first semester and which can serve as a gauge of program enrollment:

Fall Enrollments in Core Courses

Course	2014	2015	2016	2017	2018
502	10	13	12	4	17
503	15	12	10	8	14
506	13	14	13	8	19

The table shows that the program not only rebounded from the previous year but also increased its enrollment. The increase is partly due to the strong growth of the JUMP program and partly due to increased visibility of our program – five of the students in this year's cohort came from other universities.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14		2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	11	72.7%	5	60%	9	88.9%	8	87.5%	6	100%	82.2%
Progression		No Data Provided									
150% Graduation Rate	8	87.5%	11	54.5%	5	80%	9	77.8%	8	87.5%	73.3%
Time to Degree	1	.81	1.	89	1.5		1.42		1.46		2.56

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

Student Learning Outcomes:

- 1. Ability to design and executive data analytic applications in economics and related areas
- 2. Ability to effectively communicate data analytic applications in written and other forms

Method of assessment: Applied Project or Thesis.

At the end of the program, students have to complete a master's project or thesis. Students must present their work to students and faculty of the Economics department in a conference-style presentation. The project is a capstone experience for graduate students. It showcases their ability to apply economic theory to a specific problem, to choose appropriate data and statistical methods to analyze the problem, and present the results of their research in a manner that is understandable to a wide audience. A faculty committee evaluates students on the quality of the work, appropriateness of the data analysis, understanding of results and presentation skills.

Each project is guided by a main advisor and two co-advisors. Advising is done as a service to the department, without imposing additional cost on the university. Upon completion, the faculty involved in the project determine possible areas of improvement. Based on those assessments, we have increased emphasis on data methods and statistics largely because students seemed well-equipped to analyze data that was available in an easy-to-use format but found it difficult to work with data that needed to be pulled from different sources.

In addition to the statistically-intensive core courses, the program offers another data-oriented elective (ECON 507 – Data Methods in Economics) in which students encounter a variety of techniques and packages such as data management, text mining, SQL and R. The course seeks to introduce students to the workflow of a typical data project, starting with gathering data from primary sources, data cleaning and, finally, organizing data for final analysis.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

We maintain personal contact with most of our graduates. We connect with our students through Linkedin and Facebook, which allows us to see updates in their careers. At least once a year, we invite former graduates to speak to our current MA students to offer advice about career opportunities. Furthermore, once a year we send out an email asking our graduates about their career changes, what was most useful about our program, and what they wished they had learned. Based on feedback obtained from our graduates, the data skills taught in the program proved very beneficial during job search and in their careers. To this end, we continue to emphasize data skills in our curriculum.

Most of our graduates find employment as data analysts or in similar positions such as forecast analysts or business analysts. The jobs are in many different industries as the skills they have are applicable in wide variety of environments. Some of the prevalent industries are health insurance and health services, business consulting, state and federal governments, and higher education.

One or two students per year continue their graduate studies in a Ph.D. program. Some of them have been accepted into highly-ranked programs such as UNC, UVA and the University of Michigan.

MA in Applied Economics – Ref. # 0410

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

Due to wide variation in career paths of our graduates, there is not a feasible way to collect systematic feedback directly from the employers. Therefore we rely on the direct feedback from our graduates to adjust what we teach in our program.

A common theme that has emerged from former students, especially from one of our recent graduates who now serves as a data scientist for the Pilot Corporation, has been "more software-related data skills." To that end, we have increased the emphasis on software-based quantitative methods throughout our curriculum. In ECON 506 and 507 we extensively cover SAS, a statistical software package which our students say is a skill highly desired by employers. ECON 507 and ECON 594 use another statistical package called R that is also in high demand. ECON 465G uses Stata, a software package widely used by government agencies and academic institutions. By exposing students to a wide variety of statistical software and by teaching them how to correctly apply statistical techniques, we have responded to what the market currently demands, and provided students with the foundation to learn the new techniques the market will demand in the future.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

Our students have been very successful in the job market. Many of our students have shared with us information on their starting salaries, and in the recent years most of them started above \$50,000 with some starting salaries as high as \$75,000.

Another notable fact is that even our international students have been able to find employment. Historically, companies are reluctant to hire international students because it's difficult to sponsor a work visa. This year, both of the international students who graduated from our program were able to find employment within two months after graduation.

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4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty					12	12
Number of NTE Faculty					0	4
Cost per SCH					\$426.14	\$128
SCHP/FTF by Dept.	626	692	625	687	647	375
% SCH by FTF by Dept.	80.1%	86.5%	75.4%	73.0%	73.1%	75.8%
Median Class Size by Level	11	10	13	11	8	8
% Under-Enrolled Sections	20%	33.3%	16.7%	16.7%	83.3%	58.2%
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

Economics department received a gift from a attorney Rick Holton, a Nashville attorney, who is also one of the first four graduates of the Economics program. He funded a graduate assistantship in the amount of \$10,000 per year. The Holton GAs works with the Center for Applied Economics. The Center itself has been actively engaged with local businesses, government and non-profits working on a variety of projects such as economic development opportunities in Allen county, economic impact studies for the Bowling Green Chamber of Commerce.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

Three things should be noted about the cost calculations above:

- 1) That cost of MA program can be measured directly: To provide this program we have to teach four graduate classes every year. The rest of the classes are ECON 4XX-G classes that are cross-listed with corresponding undergraduate classes. Normal teaching load in our department is 3 courses per semester, so the program can be taught with 2/3 of FTEF and that's how much faculty was allocated to this program to calculate SCHP.
- 2) As was shown above under *Program Productivity*, section c, normal enrollments are much higher than what we had in 2017-2018, which is what we had to use for computing Cost per SCH in the table above. If we were to use this year's enrollment, SCH should be in \$150-\$200 range.
- 3) The program is not just a cost it's also a benefit. Our graduate students also directly contribute to revenue generation. In the spring of 2018, two sections of ECON 203 with the total enrollment of 95 students were taught by GAs. Finally, GAs help our faculty teach large (250+ students) sections of introductory courses, which indirectly increases the revenue for the department as a whole.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of WKU's strategic plan are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

A Regional Lighthouse: Ensure that WKU students graduate with skills to think critically, solve problems, and engage effectively with others. This strategic goal almost perfectly mirrors how economists define themselves as a profession. American Economic Association defines economics as "...the study of how people use resources and respond to incentives, or the study of decision-making... Economics is a broad discipline that helps us understand historical trends, interpret today's headlines, and make predictions about the coming years... Using theoretical models or empirical data, economists evaluate programs, study human behavior, and explain social phenomena. And, their contributions inform everything from public policy to household decisions."

Facilitate continuing education, retraining, and degree completion, leveraging online resources and WKU's regional campuses: Offer quality graduate programs to further lifelong learning and retraining. The MA program directly addresses this aspect of WKU's strategic plan – it's a quality graduate program that offers students highly marketable skills and allows them to add to their existing skillset or to augment their careers.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

Objective 8. Promote academic excellence through improvements in teaching and learning.

The Economics Department has been able to attract high-quality faculty. Our recent hires include

- Ph.D. in Economics/J.D. from Vanderbilt's Law and Economics program, who also completed two clerkships for federal district judges;
- Ph.D. in Economics from the University of Kentucky, who completed a post-doctoral fellowship in environmental economics at UCLA:
- Ph.D. in Economics from University of Houston, who prior to coming to WKU was a member of the Obama Administration White House staff working in the Office of Management and Budget.

Objective 9.5 Identify current and emerging workforce demands, entrepreneurial business opportunities and stackable credentials that can lead to additional education/training.

The skills students learn in the MA program are highly valued in the job market. The program was structured in way that lets our undergraduates who have any business degree to progress seamlessly toward graduate education. A big part of this effort was a JUMP program that allows students to start working on their graduate degree while completing their bachelors.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

The top industries where our graduates find employment are (with projected job opening in Kentucky over the next five years and expected average wages, according to the Kentucky Future Skills Report):

- Health Care and Social Assistance (64,050; \$50,433)
- Educational Services (33,163; \$50,393)
- Finance and Insurance (11,962; \$53,833)

Therefore there appear to be ample employment opportunities for the graduates of this program.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

The MA in Applied Economics program is the only economics master's program in the state of Kentucky. In the past, WKU used to offer an MA in Economics but the program was suspended in late 1990's due to low enrollments. The focus of that program was to prepare students for a Ph.D. in economics.

When we brought back the program in 2007, we gave it an applied focus to provide a terminal degree for students looking for advanced careers in business and government. Therefore, instead of focusing on theory, the objective of the program became to give students the skills that are relevant in the job market. Arriving at roughly the start of the "big data" revolution, the newly-launched program heavily emphasized quantitative subjects, requiring three such courses in the core (Applied Statistical Methods, Regression and Econometrics, and Forecasting) and offering another quantitative class as an elective (Data Methods in Economics). This applied focus of the program was rather innovative ten years ago as at that time there were few applied economics masters' programs. Since then, more universities started offering such programs, proving that there is a demand for the kind of skills we give our students.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

Another example of how the program offers highly marketable skills is the joint certificate with the SAS Institute. SAS is a global leader in data analytics. Its software is used by many corporations, governments and academic institutions. The joint certificate serves as a seal of approval of the courses offered in our program and serves as another credential that distinguishes our students on the job market.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

There are five potential channels through which we can continue to grow the program:

- 1) Recruit WKU students, especially from non-economics majors. The program is structured in a way that makes it accessible to non-economics majors: As long as students completed some undergraduate coursework in economics, they can enter the program.
- 2) <u>Promote the JUMP program</u>, which will also have the side benefit of recruiting students into economics majors. Over the last couple of years, the JUMP has provided us with a steady stream of students.
- 3) Recruit more non-WKU students. Our program is already attracting students from other universities, including out-of-state. We are planning a more aggressive recruiting push (through our contacts at other universities in Kentucky, using ads, and by purchasing GRE Scores) to attract more out-of-state students.
- 4) <u>Recruit international students.</u> Over the years, we typically accepted 1-3 international students per year into our program. We believe there is a potential for increasing the number of high-quality international students in our program. Section C. below describes our recruitment strategy.
- 5) Offer an online option. Over the years, we've received a steady stream of inquiries whether our program is available online. Nationally, there are few similar programs that have an on-line option, so there might be an opportunity to significantly expand our reach.

b. How do program trends align with <u>national trends</u> over the last 5-10 years? (maximum 200 words)

There is not an accrediting agency for the programs like MA in Applied Economics, so it's hard to know specific trends in this area. The Bureau of Labor Statistics provides some guidance regarding employment trends for our graduates. The table below summarizes projected employment trends for the jobs similar to the job titles of our graduates:

		Typical Entry-	Number of	Job Outlook,	
	Median Pay	Level	Jobs,	2016-2016	
Profession	2017	Education	2016	(% growth)	
Market Research Analyst	63,230	Bachelor's	595,400	23%	
Economist	102,490	Master's	21,300	6%	
Statistician	84,760	Master's	40300	33%	
Financial Analysts	84,300	Bachelor's	296,100	11%	

These projections show that there are ample job opportunities for our graduates.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

One potentially significant change in our program is its re-classification into a different CIP code, which took place in the fall of 2018. The CIP code for the program has been changed to 450603 – "Econometrics and Quantitative Economics." This change puts our MA on the list of programs that qualify for STEM Optional Practical Training extension. Typically, OPT allows international students to work for one year in the U.S. after they complete a degree. The STEM extension allows international students to work for additional two years. OPT is one of the major reasons international students come to United States, and extending it to three years can be a major recruiting tool. We plan to run ads highlighting this aspect of our program and targeting them to an international audience.

Another significant change that was instituted years ago but continues to bear fruit, is our use of large sections in introductory undergraduate courses. This allowed us to allocate more faculty to upper-level courses, especially 400-level courses that are cross-listed as 400G courses. As a result, we can offer a larger selection of electives for our graduate students making sure they can progress through our program in timely fashion. Conversely, our graduate assistants help us teach these large undergraduate sections, resulting in cross-program support within our department.

MA in Applied Economics – Ref. # 0410

 \square Transform (Redesign/combine/reorient)

Where do you see the program in five years? In ten years? What would it reasonably take to get there? What								
impediments currently exist? (maximum 200 words)								
Over the next five years we expect to see steady growth in our programs will continue to provide us with the steady pipeline of international students should also supplement our enrollments to grow beyond 25 students. A key component of our program one-on-one interaction with a faculty advisor. Our faculty assur departmental service in addition to standard course loads, effection have in the program.	of JUMP students. Our outreach to out-of-state and so with current staffing, however, our program will not be able is the applied capstone project, which requires significant me those advisor responsibilities as non-teaching							
One potential area for expansion that could be implemented within next few years is offering our program online in addition to the traditional face-to-face delivery. One possible way to do so is to offer a business concentration within our master's program by using 12 hours of existing courses from the MBA program as electives and combining them with 18 hours of ECON courses. Therefore, the additional cost of an online option would be 1 FTEF, and it could break-even with as few as seven students per year.								
e. What recommendation would you put forward for the program (check one)?								
☐ Grow/Enhance (Significant strategic notential exists)	☐ Maintain (Core or important complementary program)							

 \square Suspend (Teach-out may be required)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Ogden College of Science and Engineering					
College:	Ogden College of Science and Engineering					

Program Name:	Brewing and Distilling Arts & Sciences
Reference Number:	0486
CIP Code:	
Degree Type (AB, BS, etc.):	Certificate
STEM+H Degree (Y/N)	N
Minimum Hours Required:	10
List Concentrations (if any):	N/A

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

BDAS 0486 is a workforce development certificate that provides students a broad background in the fundamentals of the brewing and distilling industries — the science, the business, and the history or geography, as well as an internship — they need to become more competitive in the marketplace or their existing place of employment. It is specifically designed to complement their existing professional background to facilitate professional advancement in the industry. Students may intend to move into any aspect of the brewing or distilling industry — whether it be in advertising, marketing, working on the Bourbon Trail, hospitality, accounting or as a brewer or distiller, or in one of the many other parts of the industry. Typical backgrounds may include students with degrees in Business, Agriculture, Tourism, Accounting, Biology, or Chemistry. At a large distiller such as Jim Beam, only about 10% of the workforce is actually dedicated to the production of alcohol and at a small distillery or brewery, an employee would be expected to take on a variety of different roles. There is a strong need for a certificate focused on the broader aspects of the industry.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16 2016-17		2017-18	17/18 Univ. Median
Enrolled Students	n/a	n/a	n/a	0	1	1
Conferrals	n/a	n/a	n/a	0	0	0
SCHP	n/a	n/a	n/a	0	0	0

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

This certificate was intended to serve a broad variety of workforce needs. Most of the courses are from already-existing programs. The fermentation science course, BDAS 500, is the exception.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

The 0486 certificate was initially designed for graduate students at WKU. However, most who have expressed interest in the program are actually working professionals who cannot attend regular on-campus courses and this has limited the growth in the past two years. This issue will factor heavily in the final recommendation for this certificate.

Student Credit Hour Production (SCHP) is not relevant for this certificate program, as there are no faculty dedicated to this program — they are located in other programs and the generated SCHP is credited to the home department of the faculty.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14		2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	n/a	n/a	n/a								
Progression	n/a	n/a	n/a								
150% Graduation Rate	n/a	n/a	n/a								
Time to Degree	n,	/a	n/a								

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

This multidisciplinary graduate certificate is designed to complement an existing degree in a related field, by providing a background understanding of topics related to the brewing and distilling industries—the science, the business, and the history, as well as an internship—students need to become competitive in the marketplace.

Students take four courses for the certificate. BDAS 500 is an intensive introductory study of the science of fermentation. BA 502 is a series of online modules designed to introduce the student to marketing, accounting, finance, management, and business math. HIST 531 examines the history of brewing and distilling, and BDAS 595 is a variable-credit internship placement in a sector of the brewing and distilling industry, in consultation with a faculty supervisor.

Student Learning Outcomes:

- Achieve basic familiarity with the brewing and distilling industries, including the underlying science, the management and business, and history;
- Complete a substantial hands-on practicum experience, through an internship, in a distillery or brewery.

Means of assessment:

- For BDAS 500, HIST 531, and BA 502, assessments are conducted through in-class written and oral examinations and assignments.
- For BDAS 595 (Internship) the assessment is conducted via written assignments, oral examinations, and a feedback interview with the student by the program co-coordinator.

A recent example of assessment for the internship came from a student who interned at Dry Grounds Brewery in Paducah. The interview helped us understand how to better design internship experiences at large versus small operations and will help us to improve the internship experiences to meet professional needs.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, and graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

This is a relatively new program. We anticipate the first graduate credential to be completed this coming year. \
The program is too new for extensive assessment at this time but we acknowledge that traditional graduate students is clearly not the primary audience for this certificate program, as graduate school does not necessarily enhance student prospects within the industry. Areas of professional opportunity are both direct (brewing and distilling) or supporting industries such as agriculture and tourism.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, and national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

In summer 2014 Dr. McMichael and I interviewed almost a dozen brewers and distillers in Kentucky to help us design the program. The courses we included were based on those interviews. The program co-coordinators make

regular visits to, and are in regular phone and e-mail contact with, breweries and distilleries in Kentucky, Tennessee, and Indiana, and attend industry conferences to get a sense of the changing needs in the industry. Based on that feedback we have modified the internship requirements, and instructors in the history and marketing courses have modified their curriculum.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

Data for the n/a columns above was either not available, or was not separated out from the other programs in a way that could be used for the CAPE process.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty					n/a	12
Number of NTE Faculty					n/a	4
Cost per SCH					n/a	128
SCHP/FTF by Dept.	n/a	n/a	n/a	n/a	n/a	375
% SCH by FTF by Dept.	n/a	n/a	n/a	n/a	n/a	75.8
Median Class Size by Level	n/a	n/a	n/a	n/a	n/a	19
% Under-Enrolled Sections	n/a	n/a	n/a	n/a	n/a	36.3%*
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

Revenue for this program was initiated through a gift from Alltech, Corp, the parent company of Kentucky Ale. Each year the BDAS program receives \$27,493, with the final payment coming in December 2019. The current (Jan 2019) account balance is \$51,824. Expenses for the program are minimal—student travel, program faculty conference travel, equipment and supplies for the BDAS 300 and 500 courses, and some other minor expenses—and come from that account, not the general university E & G budget. The student laboratory equipment was completely provided from this account.

The program coordinators are actively engaged in philanthropic outreach to other breweries and distilleries for continued program support.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

The costs for this certificate were not separated out from several other programs in the IR data we received. However, program costs for BDAS are minimal. The internship course is supervised as an overload by one of the program co-coordinators. The BA 502 course is offered as part of their regular departmental rotations. An alternate course for HIST 531 will need to be determined since this is a course that Dr. McMichael intended to offer on-line. The BDAS Foundation account will pay for BDAS 500 lab supplies and offers to pay replacement costs for the faculty who teaches that course.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

The BDAS program addresses a number of components of WKU's strategic plan, including:

"Facilitate high impact practices." — BDAS 595 is an internship, which all students must complete. An internships is a high-impact practice and much valued by employers.

"Engage with the communities we serve . . ." — The program has partnered with regional breweries and distilleries to created student-centered learning opportunities including promotional brewing opportunities.

"Sustainable Budget Model" — This program is independently funded.

"Incentivize and support research and creative activities that promote student learning" — Students conduct research relevant to the brewing and distilling industry, alongside industry professionals. Indeed, as a result of this certificate program, Jim Beam has initiated a research project on microclimates and temperature variations in barrel houses with the WKU Meteorological program.

"Develop shared intellectual capital and viable products through collaborations, internships, and other partnerships." — This program engages in ongoing partnerships with breweries and distilleries in Kentucky, Tennessee, and Indiana.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

The BDAS program meets a number of components of the statement strategic agenda, including: 4.2 — "Strengthen partnerships with business and industry..."

This program works closely with brewers and distillers to ensure that faculty have access to relevant industry information, data, trends, and other "teachable" information for use in their course offerings. The program itself relies heavily on consulting advice from brewers and distillers in the region, and in turn the co-coordinators give their own expertise to the industry at conferences and through site visits. As part of this, Bourbon Women of Kentucky offered a student an internship at their prestigious annual conference.

6.3 — "Share, implement, and evaluate high-impact educational practices . . ."

The internship is the cornerstone of the BDAS certificate, and provides students with real-world experience in preparation for the job market. Program coordinators work closely with small and large regional operations.

9.4 — "Promote regular, meaningful employer involvement in the development and evaluation of postsecondary programs. . ."

Program coordinators meet regularly with industry leaders to help refine the program and student opportunities.

9.5 — "Identify current and emerging workforce demands . . ."

Program coordinators attend the major industry conference in brewing and in distilling, and gather information from the brewing and the distilling trade associations to help understand employment and market trends. The brewing class and the internship experience is a direct result of industry input.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

Craft brewing in Kentucky is a \$750 M industry (2017), while distilling employs more than 15,000 and is worth \$8.5 billion to the state (2016). Distilling is a signature industry in Kentucky and this certificate is designed to improve professional opportunities for students in many places within the industry. The workforce data at the supplied link does not have a category for brewing or distilling. However, almost any category in the list fits a program complemented by the BDAS certificate. For example, Biology, Chemistry, Engineering and Agriculture, all relate to the alcohol industry in some way.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

There are approximately thirty brewing majors and minors in the country, with more being created each year. The vast majority are fermentation science programs, while a few focus on business or hospitality. The largest and most well-known brewing programs are at UC Davis, Oregon State, and Niagara College Canada. Ours is, as of this submission, the only interdisciplinary program that complements an existing career and speaks to broader career interests apart from becoming a brewmaster or a master distiller. The design of the BDAS reflects statewide industry feedback and provides WKU with a strategic, marketable, and unique niche that contributes to our success.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

From the outset, this certificate was intended to meet broad workforce needs of the brewing and distilling industries.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

Most of the potential students in the program have expressed interest in the distilling side of the industry, many of whom already work in the industry in some capacity, wish to move to the distilling industry, or envision founding a craft distillery. When we initially designed the graduate BDAS certificate, we underestimated this degree of interest, which dominates our contacts with potential students. The graduate BDAS certificate program needs to transform and market itself to that side of the industry more effectively. Most of these potential students want or need on-line coursework that is practical with their full-time employment. The graduate certificate will move to a professional certificate with options for experiential learning and for novel, focused laboratory experiences offered as short courses. Indeed, the graduate courses could easily be modularized in a similar format to the existing BA 502. In line with the interest shown by potential students, the coursework will focus on distilling. The cocoordinator has had a number of productive discussions with Jim Beam to establish professional on-line courses for their current employees. The interest is there and this is where the certificate program must move towards in the next two years.

Projected Timeline and Outcomes:

2019-2020: Curricular modularization, on-line course materials prepared, and distillation labs designed. Advisory Board or Steering Committee established. Recruitment of students – target of 5/year.

2020-2021: Refinement of curricular materials, research proposal for student distillation (including licensure) equipment, Recruitment of students – target of 5/year. Review of outcomes to establish continuation of graduate certificate program.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

Brewing and Distilling programs are not listed in the national trends. Indeed there are only one or two programs that train people for both industries, and no other programs at all that are not fermentation science programs. In that sense, our program is unique, and we are therefore the leader in our programmatic discipline. This is likely why we field so many requests from nationwide breweries and distilleries asking if we have students ready for employment or internships.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

This program is in its third year.

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)

In five years this program should mature to 5-10 graduate students/year as a professional certificate to complement students' career paths.

e. What recommendation would you put forward for the program (check one)?

☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)
☑ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	GFCB
College:	GFCB

Program Name:	Business Core Competencies		
Reference Number	0487		
CIP Code:	520201		
Degree Type (AB, BS, etc.):	Graduate Certificate		
STEM+H Degree (Y/N)			
Minimum Hours Required:	16.5		
List Concentrations (if any):			

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

BUSINESS CORE COMPETENCIES (BCC): This is a fully online graduate certificate focused on the "core" classes of the MBA degree. Required are 4 core MBA courses plus the MBA Foundation Modules (BA502). The target audience is students without a recent business degree, since the preparatory Foundation Modules are part of the certificate requirements. All courses required for the BCC are subsequently offered as part of the MBA. While it can serve as a standalone certificate, all hours can be applied toward the Online MBA program if a student wishes to pursue an MBA after completing the certificate. To date, we have not had to offer additional sections of any course to accommodate BCC students.

This certificate is part of our "stackable" concept: certificate students can either stop with the certificate OR apply and meet standard MBA admission standards and use the 4 core courses as part of the 10 course MBA. Other universities have such a certificate and refer to it as a "mini-MBA".

Admission to the certificate requires only the WKU graduate admission requirements, while MBA admission requires the WKU graduate admission requirements along with the GMAT.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ.
						Median
Enrolled Students	0	0	0	4	6	4
Conferrals	0	0	0	3	1	5
SCHP	0	0	0	41	50	44

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The BCC certificate was first offered in FY 16. While all of the courses required for the BCC are part of the standard Online MBA courses regularly offered, students must apply for admission to the certificate before they can graduate with the certificate. Students do not have to apply until they anticipate graduation if they are already part of the MBA program. Only students not admitted to the MBA must apply – who are earning the BCC independent of the MBA – seem to apply in advance of their graduating semester. That is the numbers, I would suggest, that we see here.

We hope that enrolling in the BCC will serve as a pathway toward application for the online MBA program for most students.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

It is too early to know if the BCC is leading to Online MBA admissions – or if we have created a market for this lesser credential.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	201	3-14	201	4-15	201	5-16	201	6-17	201	7-18	17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	0	0	0	0	0	0	0	0	2	50	19/73.7%
Progression	-	-	-	-	-	-	-	-	-	-	-
150% Graduation Rate	-	-	-	-	-	-	-	-	-	-	-
Time to Degree		-		-		-		-		-	-

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

At this time we do not have Assurance of Learning (AOL) efforts, including the SLOs, unique to the certificate. We do, however, include the learning of these students as part of the MBA AOL efforts. The MBA SLOs are repeated here, for review:

We use direct (rubrics for assignments, cases, and/or tests) and indirect indicators (surveys) for our MBA SLOs. GFCB's Assurance of Learning committee oversees assessment, reporting, and adjusting. AACSB accreditation demands careful assurance of learning across all programs.

Our MBA Graduates will:

- 1. (**Discipline Knowledge**) ...have a solid understanding of the knowledge in the relevant business disciplines Assessment: Annual Major Fields Test MBA standardized ETS MBA test.
- 2. (**Qualitative Reasoning**) ...demonstrate the skill of integrating discipline knowledge to identify, analyze, and offer solutions to business problems and situations

Assessment: Business case(s) rubric in capstone BA590 – includes standardized scoring from a national "strategy game".

- 3. (Quantitative Reasoning) ...apply quantitative modeling and data analysis techniques that can solve real world business problems and employ tools and technologies to effectively communicate this analysis.

 Assessment: Business case(s) rubric in capstone BA590 includes standardized scoring from a national "strategy game".
- 4. (**Teamwork/Communication**) ... have the communication, collaboration, and team skills necessary to successfully complete a project.

Assessment: Rubric analysis of peer evaluations related to cases and learning games.

* Additional PMBA SLO: (Global Awareness) PMBA students will demonstrate an understanding of business and intercultural similarities and differences between the US and other nations which impact business.

Assessment: Student paper rubric in the international elective (most written after PMBA study-abroad).

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

Since this is a new program (FY 16+) we have yet to gather feedback unique to the certificate. Feedback about the MBA program is found in that CAPE report.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

e. What else should evaluators know about the	e success of students in this program? (optional, maximum 100 words)

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty						12
Number of NTE Faculty						4
Cost per SCH						128
SCHP/FTF by Dept.	60	64	71	81	74	375
% SCH by FTF by Dept.	56.3	58.7	50.3	48.7	49.4	75.8
Median Class Size by Level	18	18	19	20	18	8
% Under-Enrolled Sections	25.0%	16.0%	8.0%	0.0%	3.8%	58.2
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

The BCC certificate classes are taught by the Online MBA faculty. These faculty teach the online courses outside of effort through funds generated by the fees placed upon Online MBA courses and collected by DELO. No additional faculty resources have been needed to date to accommodate the additional enrollment of BCC students in the Online MBA courses.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

Again, this is a certificate for which we added no sections. Certificate students are either jointly completing an MBA, or are taking the particular MBA courses required for the certificate: MBA Foundation Modules (4.5 credits), and MBA core courses in Accounting, Finance, and 2 of the 4 remaining core classes (Economics, Information Systems, Marketing, and Organizational Behavior).

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

"Continuing Education...Quality graduate programs to further lifelong learning and retraining... (and) providing certificate programs to match job market opportunities." A graduate certificate in business may be exactly what a mid or late career individual needs to advance his/her career and to create new occupational opportunities. The certificate can often be more achievable than a complete graduate degree.

"Enroll a diverse body of regional and global undergraduate, graduate, and nontraditional Students." As a fully online certificate program, the BCC reaches beyond our region with students from diverse locations.

"Bolster the stature and fiscal support of WKU's Graduate School, and strengthen its external reputation." In the past 5 years the Online MBA has gained national attention with improved rankings, moving up 6 universities (#72 to #66) in the latest US News report – top ranking program in Kentucky. Selected, again, as the #1 online MBA in Kentucky (MBA Online Report, 2019). Top 5-20% scores on the national ETS MBA test are also well-known across the region. The interest in the BCC is arguably positively impacted by the success of the MBA program.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

From the 2016-2012 Strategic Agenda: KCPE...

"Increase degree and certificate completion, fill workforce shortages, and guide more graduates to a career path." Certificate programs like the BCC do exactly this. The BCC provides a business certificate for workers who already have an undergraduate degree, an option that previously did not exist. There is an increasing need for managers of all types to have certifications beyond the UG degree. The Bureau of Labor Statistics predicts that the overall demand for managers will grow at the rate of 6% over the next 10 years. However, managers in many industries (Computer and IS managers) are predicted to grow at the rate of 12%, faster than average.

"Encourage more people to take advantage of postsecondary opportunities." Programs like the BCC Certificate make the opportunity to add an educational credential more attainable. Such short programs may provide the educational improvement necessary to improve the workplace and/or incent the student to complete a full graduate degree. The online delivery of the BCC Certificate provides the flexibility needed for working professionals to more easily take advantage of the opportunity.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

Often it is the manager, or the aspiring manager (or leader), who seeks an MBA or associated certificate. Demand for managers (see "b)" above) is an occupation predicted for future growth. Since KY has a lower overall educational achievement than average in the US, certificates in particular are going to increase in value and currency.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

The distinction is that this certificate is the only graduate general business certificate available, as far as known, in the state. We are providing this flexible and appealing idea without increasing the number or sections or courses offered by using the existing Online MBA schedule.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness?	(optional,
maximum 100 words)	

The BCC Certificate is still a relatively new certificate, at only 2 years old. It will be a few years before we know the dynamics.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)						
The BCC Certificate was created to meet the needs of emerging trends, including employers' desires for ongoing and higher- evel academic training for their employees. The certificate is intentionally interdisciplinary across the GFCB, drawing on coursework from 4 of the 6 departments. In addition, the Foundation Modules provide basic coverage of all 6 departments.						
b. How do program trends align with <u>national trends</u> over the	last 5-10 years? (maximum 200 words)					
The desire for, and number of, graduate certificates is growing nationally. Employers are seeking efficient and effective opportunities for continuing education for employees. Certificates provide that opportunity through focused, more concise academic offerings. The BCC Certificate provides those without a business degree a valuable opportunity to gain formal training in the core business disciplines over a shorter timeframe than the complete MBA.						
c. What if any significant changes has your program instituted of students, and/or efficiency that may not yet be evident in a sequencing/scheduling designed to enhance students' progre recruiting and marketing plan, or reallocation of faculty resources.	the data provided? Examples might include revised course ss towards degree, implementation of a comprehensive					
The BCC Certificate was started only 2 years ago.						
d. Where do you see the program in five years? In ten years? impediments currently exist? (maximum 200 words)	What would it reasonably take to get there? What					
Increasing enrollment is predicted and likely explained by either	r an increasing number of					
a) employees who want to go back to school online for a new edut do not want to earn a full degree; and/or	ducational credential to advance their career opportunities					
b) our MBA students becoming aware that the 2 nd credential ca Foundation Modules (meaning they did not have a recent busin	an be easily added to their Online MBA if they needed the MBA ness degree).					
To build a large and successful certificate based upon a) above (those just interested in the certificate) we may need to expand the advising staff (we lost our dedicated MBA recruiter and advisor in the FY 18 budget cut). We may also need to add a course section to the 1 year Online MBA rotation – which is currently funded by the Online MBA student fee.						
e. What recommendation would you put forward for the program (check one)?						
☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)					
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)					



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Information Systems
College:	Gordon Ford College of Business

Program Name:	Business Data Analytics (BDAN)
Reference Number:	#504 / #507
CIP Code:	521301
Degree Type (AB, BS, etc.):	BS
STEM+H Degree (Y/N)	Υ
Minimum Hours Required:	72, (27), includes 45 hours of business core classes
List Concentrations (if any):	

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

Business Data Analytics (BDAN) was developed to meet the high and growing demand for jobs requiring a degree in data analytics. One major emphasis of this degree program is to train our students on data analysis and the use of business intelligence tools. Another major emphasis is to be able to communicate visually the result of their data analysis. Most data analytic programs are master's level degrees while this is an undergraduate program.

The BDAN program requires 27 hours within the major and 45 hours of business core classes.

There are three 300 level analytics courses and three 400 level courses that students are required to take as part of the major. In a given semester the 300 level courses are offered in a face-to-face format while in the same semester the required 400 level courses are offered in an online format; this offering then rotates from semester to semester. The remaining 9 required hours are earned by using approved courses from other departments within the college. Using courses this way also makes it easier for students to earn a dual major of BDAN and another of those majors.

Business Data Analytics

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	53	86	106	86	80	89
Conferrals	9	8	27	28	18	22
SCHP	207	468	519	585	648	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The Business Data Analytics program was developed to provide employment opportunities to students and to help meet the growing demand for data analysis in the region and beyond. Data analytics has been identified by AACSB as an increasingly important part of an accredited business program.

"IBM, which claims that the annual demand for data scientists, data developers and data engineers will lead to 700,000 new recruitments by 2020."

https://www.morningfuture.com/en/article/2018/02/21/data-analyst-data-scientist-big-data-work/235/, 12/2/2018.

The department offers an 18-hour interdisciplinary certificate in Applied Data Analytics. Enrollment has grown 291% from 44 to 128 students this academic year. The certificate requires at least two BDAN courses. Due to demand for the certificate as well as students in other majors selecting these courses as electives, three sections are offered for one of the BDAN courses and two sections are offered for the other BDAN course. Enrollment in each section is approximately 40.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

In recent years two major programs have transferred out of the department: the Computer Information Technology (CIT) program, which currently has an enrollment of over 600 students, transferred to Ogden College, and the Systems Management (SM) program is now in the College of Education as the Workforce Administration (WFA) degree program. This illustrates that the department is very entrepreneurial in nature and is continuing to use that approach to grow the BDAN program like it did with CIT and SM, so it will remain in the College of Business. However, with limited resources, the growth is likewise limited.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	201	.3-14	201	4-15	201	5-16	201	.6-17	201	7-18	17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention	16	56.3	4	50	11	72.7	9	77.8	13	100	69.4
Rate											
Progression			70	70	80	71.3	75	64	36	83.3	61.3
150% Graduation Rate	1	100	NA	NA	1	0.0	8	62.5	16	43.8	54.1
Time to Degree		5	3	.8	4	.1	3	.81	4	.08	4.39

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

The student learning outcomes for the data analytics program are:

Model and computationally analyze business-oriented data
Critically identify appropriate data models to solve business problems
Understand how to present and communicate graphical information related to various data analytic models
Understand the technical security associated with data analytics

Means of assessment include in-class examinations and projects. Other program assessments include presentations in the capstone class (Data Visualization). All students in the Data Mining course are also required to participate in a poster presentation that are evaluated by all the faculty in the department. For those students that do internships, evaluations are done by their employers as well.

A "best example" of how findings improved the program was requiring the students to develop a shorter "elevator speech" for their presentations and be able to communicate the major points and outcomes of their project in three minutes or less. Faculty evaluations from the previous year indicated students needed to be more succinct with their poster presentations.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

Currently the only program in place to track the success of our graduates is to keep a list of employers who have employed our graduates. Recent employers include: Fruit of the Loom, Dollar General, ABR Systems Group, Brown-Forman, Enterprise, Los Angeles Chargers, Mars Petcare, New Acquisitions, CoreTrust, Restaurant Supply Chain Solutions, LLC, University of Kentucky, WorldPay, Camping World, Daymar Colleges Group, Martin Kia, Southern Star Central Gas Pipeline, Limestone Bank, Inc., Scott Industries, NRG Energy, Optum, Brooksource, DXC Technology, Hollister Co., Constellium, & Barton Mallow Construction Services.

"Employment of operations research analysts is projected to grow 27 percent from 2016 to 2026, much faster than the average for all occupations. As technology advances and companies seek efficiency and cost savings, demand for operations research analysis should continue to grow."

Operations Research Analysts - Bureau of Labor Statistics https://www.bls.gov/ooh/math/operations-research-analysts.htm , 12/2/2018

"By 2020 the number of Data Science and Analytics job listings is projected to grow by nearly 364,000 listings to approximately 2,720,000.

THE DATA
SCIENCE /
ANALYTICS
LANDSCAPE

2,350,000

DSA job listings in 2015

By 2020, DSA job openings are projected to grow

15%

364,000

Additional job listings projected in 2020 Demand for both Data Scientists and Data Engineers is projected to grow

39%

DSA jobs remain open

5 days

longer than average

DSA jobs advertise average salaries of

\$80,265

With a premium over all BA+ jobs of

\$8,736

81%

Of DSA jobs require workers with 3-5 years of experience or more

HTTPS://WWW.IBM.COM/ANALYTICS/US/EN/TECHNOLOGY/DATA-SCIENCE/QUANT-CRUNCH.HTML 12/2/2018

The professional opportunities for our graduates are the ability to choose an industry and a location anywhere in the country they wish to work.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

The department makes use of employer surveys which are conducted by the College of Business as part of its ongoing accreditation process. The accrediting body is AACSB (Association to Advance Collegiate Schools of Business). A formal evaluation by AACSB is conducted every five years. The department also uses its advisory board for feedback. We currently have members from all over the country who work for such companies as SAS, Coca Cola, Deloitte and Touche, American Hospital Directory and WKU. This board typically meets at least once annually.

One best example of where information gained was used to improve the program was the feedback we received from the advisory board to incorporate more security topics into the curriculum. Currently every data analytics course covers a different aspect of security as it relates to data analytics. This was done because of the lack of faculty resources to create a separate security course for the program.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

Many Saudi Arabian students switched majors to become Business Data Analytics majors. This required them to complete an extra year of classes. This explains the 150% graduation rate of 43.8%. The data analytics program has better measures in every category in this section when compared to the university AY 17/18 values.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty					8	12
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Business Data Analytics

% SCH by FTF by Dept.	90.8	91.1	74	85.2	86.7	75.8
Median Class Size by Level	20	27	26	30	29	19
% Under-Enrolled Sections	33.3	16.7	40.0	13.3	5.6	36.3
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

There is only one external revenue stream that is directly associated with the program. That revenue stream is departmental student fees. The fees are used to maintain and equip our four departmental computer labs. An additional 25 sections of service classes, colonnade classes, and minor classes are offered each semester which also have a departmental student fee associated with them. Enrollments exceed 30 students on average for each of these sections.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

The program has been gradually phasing in the online delivery of all BDAN courses over the past three years. This was done to make sure the number of courses being offered with less than 15 students was at a minimum within the department. In AY 18/19 the department phased in the last required BDAN course. The department can now offer all six required BDAN courses in either an online format or face-to-face format. This allows us to extend our reach to include additional students who want to enroll in a +2 program or complete a dual major. In the past students could not take our courses because required courses in their first major were offered at the same time as the BDAN courses. Now with an online delivery format more students are able to pursue the dual major.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

The data analytics program directly addresses the following goals and strategies from WKU's strategic plan. (Goals are bulleted)

• Diversity, Equity, and Inclusion: Work with the associate provost for global learning and with faculty and staff to continue to expand off-campus and on-campus educational opportunities.

By offering two delivery methods for this program and working with DELO marketing the program provides additional off-campus and on-campus opportunities to maximize student progression and completion.

• A Culture of Innovation: Schedule course offerings to maximize student progression and completion.

The data analytics program offers all of its required major classes in a face-to-face format and an online format. This allows students to pursue the degree as a dual major or in an online format. The flexibility maximizes a student's progression.

- A Regional Lighthouse:
- Engage with the communities we serve to be a resource and partner in finding innovative solutions to social, economic, and other challenges.

Several data analytics internships include Tennessee Valley Authority, Hotrods, The Foundry, & Fruit of the Loom.

• Ensure that WKU students graduate with skills to think critically, solve problems, and engage effectively with others.

These skills are a major emphasis for the data analytics program.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

The data analytics program directly addresses the following goals and strategies from the statewide strategic agenda.

Objective 4, strategy 4.2: Strengthen partnerships with business and industry, workforce partner agencies, institutions of higher education, and other organizations that lead to increased student enrollment and engagement in adult education programs. The department has engaged with local high schools and KCTCS to develop ways to increase enrollment in the data analytics program.

Objective 8, strategy 8.1: Promote the use of authentic assessments to evaluate student learning and provide data to inform pedagogy, assignment design, and curriculum review. The program uses a departmental advisory board to advise on pedagogy and curriculum review. Surveys are conducted with employers and graduates to inform on curriculum review.

This also relates to All of **Objective 9, strategies 9.1-9.6:** Improve the career readiness and employability of postsecondary education graduates.

It should be noted that the data analytics program is a STEM designated program.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

The data analytics degree can be used in a variety of professions. Listed below is the work force 5 year projections for specific analyst positions with the state projected numbers in parenthesis.

Credit Analyst (119)
Financial Analyst (229)
Management Analyst (471)
Market Research Analyst (524)

While the current program resources would never be able to produce enough graduates to meet this demand, the data analytics program will provide a curriculum to help students stay in this region should they choose to do so.

It should also be noted that analyst positions typically start at a higher salaries than other types of entry level positions. The implications for this are higher tax revenues for the state and region.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

The program is distinctive in that the faculty also introduced a Center for Applied Data Analytics which is used in conjunction with the data analytics program to seek out internships for our students, have a meaningful impact on our communities we serve, and develop collaborative research with faculty and students in other colleges.

Initiatives under way in this area include the internships mentioned earlier and a Medical Adherence study being conducted between faculty in the college of business and faculty in the college of health and human services. Students in both colleges with have an opportunity to work on the data collected from this study. One potential outcome from this study would be to give the university some bargaining power to negotiate lower rates with their healthcare providers. Numerous successful internships have also provide a positive light on the program, the college, and the university.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

The demand for data analytic skills is increasing dramatically across the world as more and more data is produced in every sector. Having a data analytics degree at WKU is one way of addressing this demand for our students, the economy, and our communities. Many data analytics programs are master level programs. The distinctiveness of our program is that there are few data analytics program at the undergraduate level and our program can easily be completed as a dual major with any other college of business major.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

One opportunity for the program is to market it to international students. The data analytics program is classified as a STEM program, CPE ID 4937. Having the program marketed as a STEM program would allow foreign students to remain in the country longer as they seek to work in the country after graduation. Another opportunity for the program would be to create a data security track which would help meet the growing demand for data security professionals in the state and country.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

Program trends are consistent growth with business and Computer and Information Sciences. Graduation rates have also been increasing in both of these areas over the last 10 years. Undergraduate programs in data analytics are rare with graduate programs being prevalent. This positions this program nicely to fill the void for students earning their undergraduate degree, entering the workforce for experience, and then returning later for advanced degrees.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

This academic year was the first year we were able to offer all six of our required data analytics course online and face-to-face in one academic year. This will allow us to fully market the program as a +2 program and to further promote the accessibility as a dual major within the college.

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)

Based on regional and national demand, in the next five years the program could double in size if the appropriate resources are devoted to it. This requires two additional faculty to teach the multiple sections required to double in size. In ten years, the department may be able to offer specific data analytics tracks. One track that would be implemented first would be a data security track, which is listed among the fastest growing occupations by the Unites States Bureau of Labor Statistics. This would require one additional faculty member.

Another possibility for the data analytics program is to offer it as an online program. The impediments that exist for doing this include the ability of the College of Business to offer the remaining 45 hours of business core classes online. More faculty would need to be hired to teach the online sections required for this new population of students. Other programs within the College of Business would experience the same impediments if they were to offer an online degree program.

e. What recommendation would you put forward for the program (check one)?

Business Data Analytics

☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Information Systems
College:	Gordon Ford College of Business

Program Name:	Business Data Analytics (BDAN)
Reference Number:	#504 / #507
CIP Code:	521301
Degree Type (AB, BS, etc.):	BS
STEM+H Degree (Y/N)	Υ
Minimum Hours Required:	72, (27), includes 45 hours of business core classes
List Concentrations (if any):	

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

Business Data Analytics (BDAN) was developed to meet the high and growing demand for jobs requiring a degree in data analytics. One major emphasis of this degree program is to train our students on data analysis and the use of business intelligence tools. Another major emphasis is to be able to communicate visually the result of their data analysis. Most data analytic programs are master's level degrees while this is an undergraduate program.

The BDAN program requires 27 hours within the major and 45 hours of business core classes.

There are three 300 level analytics courses and three 400 level courses that students are required to take as part of the major. In a given semester the 300 level courses are offered in a face-to-face format while in the same semester the required 400 level courses are offered in an online format; this offering then rotates from semester to semester. The remaining 9 required hours are earned by using approved courses from other departments within the college. Using courses this way also makes it easier for students to earn a dual major of BDAN and another of those majors.

Business Data Analytics

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	53	86	106	86	80	89
Conferrals	9	8	27	28	18	22
SCHP	207	468	519	585	648	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The Business Data Analytics program was developed to provide employment opportunities to students and to help meet the growing demand for data analysis in the region and beyond. Data analytics has been identified by AACSB as an increasingly important part of an accredited business program.

"IBM, which claims that the annual demand for data scientists, data developers and data engineers will lead to 700,000 new recruitments by 2020."

https://www.morningfuture.com/en/article/2018/02/21/data-analyst-data-scientist-big-data-work/235/, 12/2/2018.

The department offers an 18-hour interdisciplinary certificate in Applied Data Analytics. Enrollment has grown 291% from 44 to 128 students this academic year. The certificate requires at least two BDAN courses. Due to demand for the certificate as well as students in other majors selecting these courses as electives, three sections are offered for one of the BDAN courses and two sections are offered for the other BDAN course. Enrollment in each section is approximately 40.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

In recent years two major programs have transferred out of the department: the Computer Information Technology (CIT) program, which currently has an enrollment of over 600 students, transferred to Ogden College, and the Systems Management (SM) program is now in the College of Education as the Workforce Administration (WFA) degree program. This illustrates that the department is very entrepreneurial in nature and is continuing to use that approach to grow the BDAN program like it did with CIT and SM, so it will remain in the College of Business. However, with limited resources, the growth is likewise limited.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	201	.3-14	201	4-15	201	5-16	201	.6-17	201	7-18	17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention	16	56.3	4	50	11	72.7	9	77.8	13	100	69.4
Rate											
Progression			70	70	80	71.3	75	64	36	83.3	61.3
150% Graduation Rate	1	100	NA	NA	1	0.0	8	62.5	16	43.8	54.1
Time to Degree		5	3	.8	4	.1	3	.81	4	.08	4.39

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

The student learning outcomes for the data analytics program are:

Model and computationally analyze business-oriented data
Critically identify appropriate data models to solve business problems
Understand how to present and communicate graphical information related to various data analytic models
Understand the technical security associated with data analytics

Means of assessment include in-class examinations and projects. Other program assessments include presentations in the capstone class (Data Visualization). All students in the Data Mining course are also required to participate in a poster presentation that are evaluated by all the faculty in the department. For those students that do internships, evaluations are done by their employers as well.

A "best example" of how findings improved the program was requiring the students to develop a shorter "elevator speech" for their presentations and be able to communicate the major points and outcomes of their project in three minutes or less. Faculty evaluations from the previous year indicated students needed to be more succinct with their poster presentations.

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It should be noted that the data analytics program is a STEM designated program.

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d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)

Based on regional and national demand, in the next five years the program could double in size if the appropriate resources are devoted to it. This requires two additional faculty to teach the multiple sections required to double in size. In ten years, the department may be able to offer specific data analytics tracks. One track that would be implemented first would be a data security track, which is listed among the fastest growing occupations by the Unites States Bureau of Labor Statistics. This would require one additional faculty member.

Another possibility for the data analytics program is to offer it as an online program. The impediments that exist for doing this include the ability of the College of Business to offer the remaining 45 hours of business core classes online. More faculty would need to be hired to teach the online sections required for this new population of students. Other programs within the College of Business would experience the same impediments if they were to offer an online degree program.

e. What recommendation would you put forward for the program (check one)?

Business Data Analytics

☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Economics
College:	Gordon Ford College of Business

Program Name:	Business Economics
Reference Number:	724
CIP Code:	520601
Degree Type (AB, BS, etc.):	BS
STEM+H Degree (Y/N)	N
Minimum Hours Required:	73
List Concentrations (if any):	none

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The Economics department is home to <u>four undergraduate</u> (three majors and a minor) and <u>two graduate</u> programs. The B.S. in Economics (Ref. #724) is one of the three undergraduate majors. This major prepares students for a broad range of career paths with opportunities in finance, management, insurance, business consulting, government, education, research, and policy analysis.

The major combines courses in economics with those in accounting, finance, information systems, management, marketing, and quantitative business analysis. This unique array of courses provides the students with both the general and specific skills desired by employers. While this major shares many courses with the Economics major, the business component of this degree is aimed at the students seeking careers in business. The program enrollment remains stable and continues to attract high-quality students. The program enrollment remains stable and continues to attract high-quality students.

Key features of the major are:

- Admission requirements: Overall GPA of 2.5 with a separate 2.5 GPA in the following courses:
 - ACCT 200 Financial Accounting
 - ACCT 201 Managerial Accounting
 - CIS 141 Basic Computer Literacy
 - COMM 145 Fundamentals of Communication & Public Speaking
 - ECON 202 Macroeconomics Principles
 - ECON 203 Macroeconomics Principles
 - ECON 206 Statistics
 - MATH 123 Math for Business
- The remainder of the program consists of upper-level Economics and Business courses.
- No second major or minor required.
- With the exception of a few courses offered on-line, almost all courses are conducted face-to-face
- The majority of students are traditional full-time students.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	147	112	102	126	120	89
Conferrals	15	17	11	16	10	22
SCHP	780	696	725	872	770	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The Economics department serves many other programs within the University and the College of Business:

- ECON 150 <u>Introduction to Economics</u>, ECON 202 <u>Microeconomics Principles</u>, and ECON 203 <u>Macroeconomics Principles</u>, are widely used by many programs. At least one of these courses is required by thirty-one programs across all colleges. Both ECON 202 and ECON 203 are required by eleven programs.
- ECON 202, ECON 203 and ECON 206 <u>Statistics</u> are part of the College of Business admissions core required for the majority of students in the College.
- Several upper-level courses (ECON 306 <u>Statistical Analysis</u>, ECON 307 <u>Financial Data Modeling</u>, ECON 414

 <u>Managerial Economics</u>, and ECON 380 <u>International Economics</u>) are required by other majors within the College of Business.
- ECON 150, ECON 202, and ECON 203 are Colonnade Explorations courses.
- ECON 375 <u>Moral Issues of Capitalism</u>, ECON 385 <u>Economic Development</u>, and ECON 434 <u>Environmental</u> <u>Economics</u> are Colonnade Connections courses.
- Most upper-level electives are cross-listed as graduate-level ECON 4XX-G courses that serve as electives for the MA in Applied Economics. This allows the department to lower the instructional costs of the graduate program.
- The department offers a JUMP program, and upper-level electives are double-counted toward the undergraduate and graduate degrees.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

The Business Economics major is an established program, and although its enrollment took a dip 2014-2016, it mostly recovered during the last two years.

The department contributes to the university in many other ways beyond teaching service courses. Our faculty regularly offer study-abroad programs, which have helped attract students into the College and into the major. The economics faculty are also actively involved in the Honors program, regularly offering dedicated Honors sections and Honors augmentations.

3. SUCCESS OF STUDENTS - BUSINESS ECONOMICS (Ref. # 724)

a. Data Provided by IR	2013-14		201	2014-15		2015-16		2016-17		17-18	17/18
	N	%	N	%	N	%	N	%	N	%	Univ.
											Values
First-Year Retention	41	58.8%	39	56.4%	31	61.3%	34	76.5%	47	59.6%	69.4%
Rate	41	36.6%	39	30.4%	31	01.3%	34	70.5%	47	59.0%	09.4%
Progression			109	43.1%	92	50.0%	91	44.0%	102	50.0%	61.3%
150% Graduation Rate	35	40.0%	28	46.4%	28	67.9%	53	49.1%	39	46.2%	54.1%
Time to Degree	4.76 (N=15)	3.52 (l	N=16)	4.61 (I	N=11)	4.48 (1	N=16)	3.80 (l	N=10)	4.39

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

The Economics department, as a part of the College of Business, has adopted the following learning goals:

- 1. The ability to communicate effectively in written and oral forms.
- 2. An awareness of ethical issues in business and society.
- 3. Critical thinking skills through strategic problem-solving using integrated business knowledge.
- 4. An awareness of global business environment.
- 5. A basic knowledge of business disciplines and areas.

The Economics department maintains a robust assessment program, primarily through a capstone course of ECON 499 - <u>Senior Assessment Seminar</u>. During the seminar, students complete a research paper and present it to faculty at a poster session. The project is a culminating experience that draws from the knowledge acquired in the major, uses the analytical skills obtained in the program, and teaches students how to effectively communicate complex ideas. The students are rated on content, organization, language, and use of visual aids.

During the senior assessment, the students also complete an exam that covers both introductory and intermediate topics from Micro- and Macroeconomics. This exam provides a gauge of how well the students retain and apply their knowledge.

The senior assessment also includes an exit survey in which we ask students about job prospects, if they were happy with their choice of major, and what they wish they and we had done differently. The survey is conducted on-line to give students an opportunity to provide anonymous feedback. Therefore, in this exit survey, the students assess us, rather than us assessing them.

One of the examples of how we used students' feedback is that recently we started requiring students to take ECON 465 - <u>Regression and Econometrics</u> (our research methods course) before completing the Senior Assessment Seminar. This change lead to a dramatic improvement in the quality of students' senior assessment projects with some of them even being presented at national conferences.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

The senior assessment survey administered by the department provides us with a window into our students' job prospects and their plans following graduation. Based on the most recent two surveys (Spring and Fall 2018), 12 out of 50 graduating seniors had jobs, 4 were in the interview process, and 17 were either accepted or applying to graduate schools. Our students report being confident entering the job market and having the skills that make them competitive.

One of the common trends apparent from the survey is that students want more data-analytical skills as they find them to be a highly desired characteristic in the job market. We are subsequently incorporating more data skills into existing courses.

According to the *Postsecondary Feedback Report,* Business Economics majors who graduated from WKU had a 3-year median wage of \$35,134, compared to \$33.608 for the overall Business category. Our graduates' earnings are on par with other comprehensive universities: The overall 3-year median wage for EKU, WKU and Morehead was \$35,514.

The *Postsecondary Feedback Report* states that the key areas of professional opportunity for Business Economics graduates in Kentucky are Other Industries (33%), and Finance and Insurance (16%), Professional, Scientific and Technical services (11%), Retail (10%), and Manufacturing (9%). According to the *Kentucky Future Skills* report all these areas are expected to grow in the future.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

Due to wide variation in career paths of our majors, there is not a feasible way to collect systematic feedback directly from the employers. College of Business as a whole, however, has formed a Business Executive Advisory Council which has local and national representation of business leaders. The College holds regular meetings with the Council and shares information on curricular initiatives in the college to make sure they align with current business trends.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

Part of the reason for lower than average First-Year Retention Rate and perhaps the other statistics as well, is that historically Business Economics tended to be the default choice for the students seeking admission into the College of Business. As the students progress toward their degrees, they switch away from this major to other majors in the college. This phenomenon creates an impression of low student success rate.

4. COSTS, REVENUE AND EFFICIENCY

The cost per SCH calculated below combines ECONOMICS (Ref. # 638), BUSINESS ECONOMICS (Ref. # 724), MATHEMATICAL ECONOMICS (Ref. # 731) and ECONOMICS MINOR (Ref. #356).

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ.
						Median
Number of TE Faculty					12	12
Number of NTE Faculty					0	4
Cost per SCH					\$126.41	\$128
SCHP/FTF by Dept.	626	692	625	687	647	375
% SCH by FTF by Dept.	80.1%	86.5%	75.4%	73.0%	73.1%	75.8
Median Class Size (Upr. Div.)	26	27	34	33	33	19
% Under-Enrolled Sections	28.6%	12.9%	17.1%	17.1%	17.1%	36.3%
(Upper Div.)						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

Since 2011, BB&T Center for the Study of Capitalism at the Economics department has brought in \$242,600 of outside funding. The center itself was formed through a \$1,000,000 donation to the College of Business. With the help of the grants, the Center was able to bring such nationally renowned speakers as Steve Forbes, the publisher of *Forbes* magazine, Stephen Moore, former member of *Wall Street Journal* editorial board, Daniel Hannan, a member of European Parliament, and many others. Some of the grant funding has been used to support student research in the form of stipends to conduct work on their projects and to cover students' conference travel expenses.

The Center for Applied Economics has been actively engaged with local businesses, government and non-profits. The Center received funding from the Turner Family Foundation to study economic development opportunities in Allen county, as well as funding from Bowling Green Chamber of Commerce to conduct economic impact studies.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

Over the years, the Economics department has taken many steps to ensure that our programs runs in an efficient manner:

- Our department has had the highest SCHP per FTE at WKU for the last five years;
- Our introductory courses (ECON 202 <u>Micro</u>, ECON 203 <u>Macro</u> and ECON 206 <u>Stats</u>) are usually close to or at the maximum capacity of 48 students, which is limited by room size;
- We offer large sections (100-250 students) of principles courses;
- Many of our intermediate courses are also close to maximum capacity we have the second highest average class size for upper-division courses.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of WKU's strategic plan are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

A Regional Lighthouse: Ensure that WKU students graduate with skills to think critically, solve problems, and engage effectively with others. This strategic goal almost perfectly mirrors how economists define themselves as a profession. American Economic Association defines economics as "...the study of how people use resources and respond to incentives, or the study of decision-making... Economics is a broad discipline that helps us understand historical trends, interpret today's headlines, and make predictions about the coming years... Using theoretical models or empirical data, economists evaluate programs, study human behavior, and explain social phenomena. And, their contributions inform everything from public policy to household decisions."

Global Learning: Ensure that a world view and international issues are intentionally incorporated across the curriculum, preparing WKU graduates to enter a competitive global workforce.

International issues are incorporated throughout the Economics curriculum:

- International trade is a topic that is covered in Microeconomics and Macroeconomics Principles courses;
- International Economics (ECON 380) is a course dedicated entirely to international issues such trade, tariffs and exchange rate policies;
- Economic Development (ECON 385) focuses on global development issues;
- Economics faculty have been active participants in Study Abroad programs, taking students to Australia, Costa Rica, New Zealand, the Netherlands and South Africa.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

Objective 8. Promote academic excellence through improvements in teaching and learning.

The Economics department has been able to attract high-quality faculty. Our recent hires include

- Ph.D. in Economics/J.D. from Vanderbilt's Law and Economics program, who also completed two clerkships for federal judges;
- Ph.D. in Economics from the University of Kentucky, who completed a post-doctoral fellowship in environmental economics at UCLA;
- Ph.D. in Economics from the University of Houston, who prior to coming to WKU was a member of the White House staff working in the Office of Management and Budget.

Objective 9.5 Identify current and emerging workforce demands, entrepreneurial business opportunities and stackable credentials that can lead to additional education/training.

The Economics department offers a MA in Applied Economics, and our undergraduate majors are structured so that students can seamlessly progress to graduate education. A big part of this effort is a JUMP program that allows seniors to start working on their graduate degree while completing their bachelors.

Objective 10.4 Increase opportunities for undergraduate student to conduct or assist in research.

During the senior assessment seminar, all students have to complete a research project and present it to the faculty. Our faculty have been able to secure outside grants to fund students' research and to cover students' expenses to present their research at national conferences.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

The top industries where Business Economics majors find employment are (with projected job opening in Kentucky over the next five years and expected average wages, according to the *Kentucky Future Skills Report*):

- Finance and Insurance (11,962 projected job openings; \$53,833 average wage)
- Professional, Scientific, and Technical Services (17,728 projected job openings, \$60,321 average wage)
- Manufacturing (39,895 projected job openings, \$44,099 average wage)

Employment opportunities in Kentucky for Business Economics majors continue to look strong.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

Economics department contributes to educational efforts within the state in a variety of ways:

- We offer courses on remote campuses both face-to-face and through ITV.
- We offer dual-credit economics courses for high-school students across the region.
- We have steadily grown the number of courses that are offered on-line to facilitate non-traditional learners.

Our department maintains a strong reputation among economics departments across colleges and universities in Kentucky. Our faculty play an active role in Kentucky Economic association:

- Since 2000, three of our faculty members served as Presidents of the association;
- Two faculty members served as editors of the Journal of Applied Economics and Policy, the association's journal;
- In 2017, the Economics department hosted the annual meeting of the association on WKU's campus, bringing 150 faculty and students from across the state;
- Our faculty regularly present their work at the KEA and many national conferences.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

AACSB, the accrediting agency for the colleges of business, cultivates high standards of instruction and professionalism among business colleges accredited by this organization. As a part of the College of Business, the economics department abides by the high standards placed on the college by AACSB.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

One area of growth for our department is to expand our reach among females and minority students. A 2017 study by Wendy Stock called "Trends in Economics and Other Undergraduate Majors" published in *American Economic Review* finds that "...economics' share of second majors has increased over time, not only among students generally, but also among females and minorities (two groups chronically underrepresented in economics)." WKU's Economics department followed that national trend. As the table below shows, our enrollment of male students remained largely flat over the last five years but the female enrollments steadily increased:

Number of St	tudents Enro	lled or Seeki	ng admissio	n in Economi	cs,				
Business Econmics and Economics and Mathematical Economics Majors									
Census year	2014	2015	2016	2017	2018				
Female	50	51	61	62	64				
Male	157	133	146	164	163				

The study also finds that enrolling in Economics major tends to be correlated with majors in math, engineering, computer science, and technology, as economics complements those majors well. Therefore, another growth opportunity is to find ways to encourage double majors in economics among those students.

Stock's study also makes an excellent point that that double majoring across relatively dissimilar disciplines yields higher returns to graduates than double majors in relatively closely related disciplines. Therefore, promoting our major to students within and outside the College of Business presents an opportunity to increase both the number of our majors as well as gender, racial, and intellectual diversity of our students.

b. How do program trends align with <u>national trends</u> over the last 5-10 years? (maximum 200 words)

According to the aforementioned study in AER, "Economics' <u>share</u> of <u>first</u> majors has been flat for more than a decade", and a similar trend has been observed nationally in business and political science majors. The table below shows the number of first majors in all Economics majors at WKU:

First Major Enrollement in all Economics Majors									
Year	2014 2015 2016 2017								
Enrollment	184	190	220	240	228				

As the data suggests, our programs generally did better than national average over this period with an overall increase in the number of first majors. This points to growing interest in economics at WKU, a trend we hope to sustain.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

To increase efficiency, the Economics department uses large sections to teach principles courses. In the Fall of 2018, there was a Microeconomics Principles section with 260 students. In the Spring of 2019, there is a section of that class with more than 215 students currently registered. Thus, over the two-semester period one faculty member will teach an equivalent of almost ten full sections of that course with a typical enrollment of 48 students. As a result, our department has the highest SCHP per FTE while the cost per credit hour is well below the median.

What is not apparent from the data is that using large sections allowed us to free up faculty to teach more upper-level electives, which reduced scheduling conflicts for our students, allowing them to graduate on time. One example of that is we can now offer ECON 464 - Mathematical Economics on a regular basis. In the past, due to staffing shortages, offering this course often came at the expense of another upper-level elective. This course is a part of our new and very successful major in Mathematical Economics, so being able to offer it every spring ensured that our students could graduate on time.

BS in BUSINESS ECONOMICS - Ref. #724

☐ Transform (Redesign/combine/reorient)

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)						
We expect Business Economics to grow over time. The interest opportunities are projected to be abundant, and the enrollmen	•					
In the immediate future, we will be able to meet the demand we to experience bottlenecks in some of our upper-level courses.	vith current staffing, but if the growth continues, we will begin					
One area of opportunity we have not been able to exploit is Co Connections courses: ECON 375 – <u>Moral Issues of Capitalism</u> , Environmental Economics. However, due to staffing constraint: per semester. Additionally, there are other courses (ECON 380 - <u>Poverty and Discrimination</u>) that would be a good fit for Connection because we couldn't ensure they would be offered on increase our contribution to the Colonnade program.	ECON 385 - <u>Economic Development</u> , and ECON 434 – s, we've typically been able to offer only one of these courses – <u>International Economics</u> , and ECON 430 – <u>Economics of</u> ctions courses but we didn't include them in the colonnade					
e. What recommendation would you put forward for the prog	ram (check one)?					
☐ Grow/Enhance (Significant strategic potential exists)	☑ Maintain (Core or important complementary program)					

 \square Suspend (Teach-out may be required)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	GFCB
College:	GFCB

Program Name:	Business Sustainability
Reference Number	0474
CIP Code:	529999
Degree Type (AB, BS, etc.):	Graduate Certificate
STEM+H Degree (Y/N)	
Minimum Hours Required:	12
List Concentrations (if any):	

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The MBA program had offered MBA electives on Business Sustainability. Next, we created a certificate containing 4 interdisciplinary classes on sustainability with a business focus. We were the first in KY to offer such courses at the graduate level.

3 of the 4 courses can be used as MBA electives. For Online MBA students the net cost can be one class to add the Sustainability certificate. Non-MBA students are admitted using the WKU admission standards and must take 12 credit hours.

Unfortunately, a student wanting ONLY the certificate had to wait 15-18 months to complete the 4-course certificate. Effective Spring '19 the Business Sustainability courses will move to the On-Demand format:

- allowing those interested in just that certificate to compete it timely,
- paying its own way using a cost structure outside of effort (the On-Demand fee-to-pay approach, which pays by the student),
- and yet, allowing MBA students to continue to use these electives which are removed from the Online MBA rotation.

Here are the 4 sustainability courses in an abbreviated form:

Survey; Sustainable Operations; Sustainability, Innovation and Entrepreneurship; and Sustainability Marketing.

Students must complete all 4 but may substitute one course from "Global Pathways to Sustainability (SUST)."

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	0	0	1	1	5	4
Conferrals	0	0	0	3	3	5
SCHP	0	0	12	12	27	44

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The 4 certificate courses can be used as electives in the MBA degree, allowing MBA students to graduate with both a degree and a certificate.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

In FY 18 we had 5 unique certificate students, as I understand the number. Under the new FY 19 model, students enrolled will "pay" the professor through tuition/fees outside of effort. Thus, if enrollment is low, the program costs will follow suit.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14		2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	0	0	0	0	0	0	0	0	1	100	19/73.7%
Progression	-	-	-	-	-	-	-	-	-	-	-
150% Graduation Rate	-	-	-	-	-	-	-	-	-	-	-
Time to Degree	-		-		-		-	-		-	-
b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs											

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

Since the program is new, we do not have separate (non-MBA) SLOs at this time.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty						12
Number of NTE Faculty						4
Cost per SCH						128
SCHP/FTF by Dept.	60	64	71	81	74	375
% SCH by FTF by Dept.	56.3	58.7	50.3	48.7	49.4	75.8
Median Class Size by Level	18	18	19	20	18	8
% Under-Enrolled Sections	16.0%	8.0%	0.0%	3.8%	58.2	
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

Having an increasing number of graduates with an excellent understanding of organizational sustainability will help organizations comply with regulations and guidelines, as well as, benefit society. In WKU's Strategic Plan, the university is challenged to "promote sustainable practices and efficient use of campus resources."

As a Regional Lighthouse we are challenged to find "innovative solutions to social, economics, and other challenges". Some of the largest challenges in society and business are issues of sustainability.

As part of *Continuing Education* we are, through this forward-looking certificate, "provid(ing) certificate programs to match job market opportunities."

This certificate is exactly the type of certificate that will lead to enrollment by mid and even late career individuals who need

- a comprehensive understanding of business sustainability from regulations to innovations and operational efficiencies to marketing, and/or
- wish to seek employment in this emerging area.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

From the 2016-2012 Strategic Agenda: KCPE...

"Increase degree and certificate completion, fill workforce shortages, and guide more graduates to a career path." Certificate programs like the Business Sustainability Certificate do exactly this. This program provides a certificate for workers who already have an undergraduate degree, an option that previously did not exist. There is an increasing need for managers of all types to have certifications beyond the UG degree. The Bureau of Labor Statistics predicts that the overall demand for managers will grow at the rate of 6% over the next 10 years. However, managers in many industries (Computer and IS managers) are predicted to grow at the rate of 12%, faster than average.

"Encourage more people to take advantage of postsecondary opportunities." Programs like the Business Sustainability Certificate make the opportunity to add an educational credential more attainable. Such short programs may provide the educational improvement necessary to improve the workplace and/or incent the student to complete a full graduate degree. The online delivery of the Certificate provides the flexibility needed for working professionals to more easily take advantage of the opportunity.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

According to the Bureau of Labor Statistics, the demand for sustainability and/or environmental specialists, for instance, is predicted to grow at 2 times the average rate over the next 10 years.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

WKU has the reputation as a leader in many aspects related to sustainability. In a recent conference on our campus with perhaps 25 organizations and colleges in attendance, WKU's efforts were acknowledged as leading in the state. Only the University of Louisville had comparable programs as represented at the conference.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, naximum 100 words)			

6. PROSPECTUS
a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)
We believe that demand for preparation in business sustainability issues will continue to increase. The move in FY 19 to enable students to achieve the certificate in as short as a semester is predicted to increase enrollment. We will monitor enrollment closely.
b. How do program trends align with <u>national trends</u> over the last 5-10 years? (maximum 200 words)
There is a great deal of attention to sustainability and the topics we deal with in the certificate program. The Bureau of Labor Statistics reports that, just among management occupations, the following categories benefit from a background in sustainability:
 Chief executives include high-level positions, such as chief sustainability officer, environmental vice president, and director of corporate responsibility. They develop and direct sustainability strategies (many named in the last 2 years).
 General and operations managers work to ensure that sustainability strategies are implemented in day-to-day operations and that any sustainability measures are incorporated into the production process.
 Industrial production managers plan, direct, and coordinate the production activities required to produce a vast array of manufactured goods; improving the industrial production process and to find ways to reduce waste and improve efficiency.
 Transportation, storage, and distribution managers finding ways to reduce waste and make movement of goods more sustainable
According to the BLS: "Several newer programs offer degrees or certificates in sustainability or environmental management. Many larger organizations prefer that senior managers also have a graduate degree, such as a Master of Business Administration (MBA)."
c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)
The program is relatively new – and the change to On-Demand will now allow students to graduate in as short as one or two semesters. This aligns with the expectations of the adult learner.
d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)
We could become the program of choice and be a program that graduates 12-24 per year (on the medium term)
e. What recommendation would you put forward for the program (check one)?

 \square Maintain (Core or important complementary program)

 \square Suspend (Teach-out may be required)

☐ Grow/Enhance (Significant strategic potential exists)

 \square Transform (Redesign/combine/reorient)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Economics
College:	Gordon Ford College of Business

Program Name:	Economic Data Analytics
Reference Number:	0491
CIP Code:	450603
Degree Type (AB, BS, etc.):	Graduate Certificate
STEM+H Degree (Y/N)	N
Minimum Hours Required:	12
List Concentrations (if any):	

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The Economic Data Analytics certificate is a new program that was launched in the fall of 2017. The program is based on the courses already offered in the MA in Applied Economics (Ref. # 0410). The certificate packages the quantitative courses from the MA and offers them as a separate degree.

The certificate is offered at virtually zero additional instructional cost – the courses it uses already exist to serve the MA program, so any students enrolling in this certificate only increase enrollments in our graduate classes.

The certificate is accessible to a wide range of students: Aside from the university-wide admission criteria for graduate students (2.75 GPA, baccalaureate degree, and English proficiency), the only additional requirement is completion of an introductory statistics course.

The certificate is aimed at several audiences:

- Working professionals seeking to learn advanced data skills but who do not have the opportunity to complete the entire master's degree due to cost or time constraints.
- Recent graduates looking to add a credential to enhance their skills before entering the job market.
- Students who might be interested in the MA but unsure whether they want to commit to the entire program.

The program is offered entirely face-to-face. There is no online component.

Graduate Certificate in Economic Data Analytics – Ref. # 0491

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	0	0	0	0	1	5
Conferrals	0	0	0	0	1	6
SCHP	0	0	0	0	6	44

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The certificate

- Can serve as a "gateway" to the MA in Applied Economics;
- Offers graduate students in the MA program an opportunity to earn another credential.

c. Wh	at el	se s	houl	d eva	luators	know a	bou	t t	his	s program'	's prod	lucti	ivity?	' (opt	iona	I, max	imum :	TO0) word	ds)
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The program is new, and we have not yet had the opportunity to grow it.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14		2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate		No Data Provided									
Progression		No Data Provided									
150% Graduation Rate		No Data Provided									
Time to Degree					No Data	Provided	t				

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

Student Learning Outcomes:

- A. **Discipline Knowledge:** Certificate graduates will demonstrate advanced knowledge in quantitative economics disciplines including applied economic statistics, econometrics and time series forecasting, as well as data management skills.
- B. **Critical and Strategic Thinking:** Certificate graduates will learn how to apply quantitative skills to analyze data, provide actionable insights based on their analyses and communicate their results effectively to non-technical audiences.
- C. **Economic Modeling:** Certificate graduates will demonstrate competency in three core skills data manipulation, applied statistics and economic theory to identify appropriate statistical models to study economic phenomena, to create forecasts of economic data and to evaluate the quality of the models and forecasts.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

There is a high demand in the job market for people with quantitative skills. For 2012-2022, the Bureau of Labor Statistics projected growth of 18% (685,800 additional jobs) for Computer and Mathematical occupations, 10.1% (125,700 jobs) for Life, Physical and Social Sciences, and 12.5% (898,100 jobs) for Business and Financial Operations occupations. For economists, employment is projected to grow 6 percent from 2014 to 2024, and the job prospects will be best for those with graduate degrees and strong analytical skills. This graduate certificate offers skills at the intersection of all the above occupations and will help meet demand for skilled labor in these areas.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

As this is a new program, we have not yet had an opportunity to collect feedback from employers.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

Graduate Certificate in Economic Data Analytics – Ref. # 0491

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty					12	12
Number of NTE Faculty					0	4
Cost per SCH					\$0	\$128
SCHP/FTF by Dept.	626	692	625	687	647	375
% SCH by FTF by Dept.	80.1%	86.5%	75.4%	73.0%	73.1%	75.8%
Median Class Size by Level	11	10	13	11	8	8
% Under-Enrolled Sections 20%		33.3%	16.7%	16.7%	83.3%	58.2%
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

The Economics department has been able to attract outside funding though its centers and the MA program. There is no additional funding associated specifically with the certificate.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

All of thecourses needed to teach the certificate are currently offered as a part of regular faculty loads who teach in the MA in Applied Economics. Even though enrollment in the MA has grown, the program is still below full capacity. Therefore, there are no additional instructional costs associated with the certificate as we don't need to offer additional courses or sections of existing courses to offer the certificate. With our current staffing, we can reasonably sustain 10-12 students in the certificate program without having to offer additional sections.

Graduate Certificate in Economic Data Analytics - Ref. # 0491

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of WKU's strategic plan are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

Facilitate continuing education, retraining, and degree completion, leveraging online resources and WKU's regional campuses: Provide certificate programs to match job market opportunities. The certificate directly addresses this part of WKU's strategic plan – its purpose is to offer students highly marketable skills to enhance their career success.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

Objective 9.5 Identify current and emerging workforce demands, entrepreneurial business opportunities and stackable credentials that can lead to additional education/training.

The skills students learn in the certificate program are highly valued in the job market. The program is designed to let students add to their existing skillset and to provide additional training to advance their careers.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

We expect that the jobs of the certificate recipients will be similar to those of the students who earn the MA in Applied Economics. The top industries where our MA graduates find employment are (with projected job opening in Kentucky over the next five years and expected average wages, according to the Kentucky Future Skills Report):

- Health Care and Social Assistance (64,050; \$50,433)
- Educational Services (33,163; \$50,393)
- Finance and Insurance (11,962; \$53,833)

Therefore there appear to be ample employment opportunities for the graduates of this program.

This certificate can also increase the probability of employment for students seeking analyst-type positions working for the U.S. government. Our MA graduates have been able to find employment in federal agencies such as the Census Bureau, the Department of Agriculture, and the Bureau of Labor Statistics. Many such jobs require a minimum of 15 credit hours of quantitative courses to be eligible to apply. The certificate helps potential applicants meet this threshold without having to earn a master's degree.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

Similar certificates are offered in other institutions across the United States, which demonstrates demand for such programs. However, no such programs are available in the state of Kentucky, so the offering would be able to meet local need for such a degree.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

Graduate Certificate in Economic Data Analytics – Ref. # 0491

6. PROSPECTUS

		ard? For example, where are potential new markets for
		ge of emerging trends in the discipline, how could new
	ciplinary connections be made to increase the demand	
	re several potential markets we could develop to grow	
1)		. The certificate would serve as great complement to any
	business degree as it would allow student to combine	their discipline knowledge with solid data skills.
21	Working professionals. This contificate offers a law see	t way to gain data applytical skills for warking professionals
2)	who want to enhance their skills or to change careers.	st way to gain data-analytical skills for working professionals
	willo wallt to elilialice their skills of to change careers.	
3)	Offer an online option. This certificate would be a grea	at candidate for an on-line program. If our MA program were
3,	to expand to offer an on-line option, that would enable	· -
	to expand to one, an on mic option, that would chast	e as to other time destinate on line as well
b. How	do program trends align with <u>national trends</u> over the	last 5-10 years? (maximum 200 words)
Certifica	ate programs similar to this one have been a growing tr	end and are offered by many universities:
•	Applied Business Analytics, Appalachian State Universi	ity (peer institution)
•	Applied Data Analysis, University of Wisconsin-Milwau	ıkee
•	Applied Econometrics and Data Science Foundations, '	Valparaiso University
•	Applied Economics, Southern Methodist University	
•	Applied Economics, Georgia Southern University	
•	Economic Data Analytics, University of Akron	
•	Graduate Certificate in Applied Microeconomics, Ame	rican University
•	Graduate Certificate in Economics Analysis, University	of Maryland
•	Quantitative Methods in Applied Economics, Johns Ho	pkins University
•	Statistical Methods, North Carolina Central University	
		within the past three years to increase productivity, success
		the data provided? Examples might include revised course
-		ss towards degree, implementation of a comprehensive
		rces to better align with demand. (maximum 200 words)
Not app		
	re do you see the program in five years? In ten years?	What would it reasonably take to get there? What
	ments currently exist? (maximum 200 words)	
	tificate has significant potential, especially if it were to l	
		eby increasing the revenue without incurring additional cost.
At this t	ime, the program does not require any additional resou	irces.
e. What	recommendation would you put forward for the prog	ram (check one)?
	,	
⊠ Grov	v/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)
☐ Tran	sform (Redesign/combine/reorient)	\square Suspend (Teach-out may be required)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Economics
College:	Gordon Ford College of Business

Program Name:	Economics
Reference Number:	638
CIP Code:	450601
Degree Type (AB, BS, etc.):	AB
STEM+H Degree (Y/N)	N
Minimum Hours Required:	34
List Concentrations (if any):	none

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The Economics department is home to <u>four undergraduate</u> (three majors and a minor) and <u>two graduate</u> programs. The AB in Economics (#638) is one of the three undergraduate majors. This major prepares students for a broad range of career paths with opportunities in finance, management, insurance, business consulting, government, education, research, and policy analysis.

The major offers critical thinking and data-analytical skills that are highly valued on the job market and in graduate programs. The program continues to grow and attract high-quality students.

Key features of the major are:

- Admission requirements: Overall GPA of 2.0 with a separate 2.0 GPA in the following courses:
 - ECON 202 Microeconomics Principles
 - ECON 203 Macroeconomics Principles
 - ECON 206 Statistics
 - CIS 141 Basic Computer Literacy
 - MATH 123 Math for Business
- The remainder of the program consists of upper-level ECON courses.
- Unlike the Business Economics major, AB in Economics requires a second major or a minor so that students would
 combine the broad thinking of economics with an area-specific discipline such as finance or business data analytics,
 or a non-business major such as political science or engineering.
- With the exception of a few courses offered on-line, almost all courses are conducted face-to-face
- The majority of students are traditional full-time students.

AB in ECONOMICS - Ref. #638

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	60	63	72	76	83	89
Conferrals	14	23	19	22	29	22
SCHP	651	580	795	848	862	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The Economics department serves many other programs within the University and the College of Business:

- ECON 150 <u>Introduction to Economics</u>, ECON 202 <u>Microeconomics Principles</u>, and ECON 203 <u>Macroeconomics Principles</u>, are widely used by many programs. At least one of these courses is required by thirty-one programs across all colleges. Both ECON 202 and ECON 203 are required by eleven programs.
- ECON 202, ECON 203 and ECON 206 <u>Statistics</u> are part of the College of Business admissions core required for the majority of students in the College.
- Several upper-level courses (ECON 306 <u>Statistical Analysis</u>, ECON 307 <u>Financial Data Modeling</u>, ECON 414

 <u>Managerial Economics</u>, and ECON 380 <u>International Economics</u>) are required by other majors within the College of Business.
- ECON 150, ECON 202, and ECON 203 are Colonnade Explorations courses.
- ECON 375 <u>Moral Issues of Capitalism</u>, ECON 385 <u>Economic Development</u>, and ECON 434 <u>Environmental Economics</u> are Colonnade Connections courses.
- Most upper-level electives are cross-listed as graduate-level ECON 4XX-G courses that serve as electives for the MA
 in Applied Economics. This allows the department to lower the instructional costs of the graduate program.
- The department offers a JUMP program, and upper-level electives are double-counted toward the undergraduate and graduate degrees.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

The Economics major, despite being an established program, maintained strong growth even as enrollments in the University declined. The department regularly offers study-abroad programs which have attracted many students into the College and the major. The economics faculty are also actively involved in the Honors program, regularly offering dedicated Honors sections and Honors augmentations.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	20	13-14	201	.4-15	20	15-16	20:	16-17	20	17-18	17/18
	N	%	N	%	N	%	N	%	N	%	Univ.
											Values
First-Year Retention											69.4%
Rate	2	100.0%	7	71.4%	6	50.0%	10	100.0%	1	100.0%	
Progression			46	71.7%	64	75.0%	71	77.5%	73	75.3%	61.3%
150% Graduation Rate	1	0.0%	2	50.0%	1	100.0%	0	0	2	50.0%	54.1
Time to Degree	3.93 (N=14)	4.14 (l	N=22)	4.48 (N=19)	4.29 (1	N=22)	3.94 (N=29)	4.39

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

The Economics department, as a part of the College of Business has adopted the following learning goals:

- 1. The ability to communicate effectively in written and oral forms.
- 2. An awareness of ethical issues in business and society.
- 3. Critical thinking skills through strategic problem-solving using integrated business knowledge.
- 4. An awareness of global business environment.
- 5. A basic knowledge of business disciplines and areas.

The Economics department maintains a robust assessment program, primarily through a capstone course of ECON 499 - <u>Senior Assessment Seminar</u>. During the seminar, students complete a research paper and present it to faculty at a poster session. The project is a culminating experience that draws from the knowledge acquired in the major, uses the analytical skills obtained in the program, and teaches students how to effectively communicate complex ideas. The students are rated on content, organization, language, and use of visual aids.

During the senior assessment, the students also complete an exam that covers both introductory and intermediate topics from Micro- and Macroeconomics. This exam provides a gauge of how well the students retain and apply their knowledge.

The senior assessment also includes an exit survey in which we ask students about job prospects, if they were happy with their choice of major, and what they wish they and we had done differently. The survey is conducted on-line to give students an opportunity to provide anonymous feedback. Therefore, in this exit survey, the students assess us, rather than us assessing them.

One of the examples of how we used students' feedback is that recently we started requiring students to take ECON 465 - <u>Regression and Econometrics</u> (our research methods course) before completing the Senior Assessment Seminar. This change lead to a dramatic improvement in the quality of students' senior assessment projects with some of them even being presented at national conferences.

AB in ECONOMICS - Ref. #638

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

The senior assessment survey administered by the department provides us with a window into our students' job prospects and their plans following graduation. Based on the most recent two surveys (Spring and Fall 2018), 12 out of 50 graduating seniors had jobs, 4 were in the interview process, and 17 were either accepted or applying to graduate schools. Our students report being confident entering the job market and having the skills that make them competitive.

One of the common trends apparent from the survey is that students want more data-analytical skills as they find them to be a highly desired characteristic in the job market. We are subsequently incorporating more data skills into existing courses.

According to the *Postsecondary Feedback Report*, economics majors who graduated from WKU had a 3-year median wage of \$32,796, compared to \$26,268 for the overall Social and Behavioral Sciences category. Our graduates also did well compared to other universities: The overall 3-year median wage for EKU, WKU and Murray was \$31,434.

The *Postsecondary Feedback Report* states that the key areas of professional opportunity for the economics graduates in Kentucky are Health Care (26%), Other Industries (24%), Retail (11%), Educational Services (9%), and Finance and Industry (8%). According to the *Kentucky Future Skills* report all these areas are expected to grow in the future.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

Due to wide variation in career paths of our majors, there is not a feasible way to collect systematic feedback directly from the employers. The College of Business as a whole, however, has formed a Business Executive Advisory Council which has local and national representation of business leaders. The College holds regular meetings with the Council and shares information on curricular initiatives in the College to make sure they align with current business trends.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

First-Year Retention Rate and 150% Graduation Rate for the Economics major in the table above are based on only those students who were first-time, full-time, degree-seeking students who entered in a given fall semester with a declared major in our program. This results in a very small sample, because most students who enter our major switch from another major. Therefore these statistics are not reliable and should be interpreted with caution.

AB in ECONOMICS - Ref. #638

4. COSTS, REVENUE AND EFFICIENCY

The cost per SCH calculated below combines ECONOMICS (Ref. # 638), BUSINESS ECONOMICS (Ref. # 724), MATHEMATICAL ECONOMICS (Ref. # 731) and ECONOMICS MINOR (Ref. # 356).

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ.
						Median
Number of TE Faculty					12	12
Number of NTE Faculty					0	4
Cost per SCH					\$126.41	\$128
SCHP/FTF by Dept.	626	692	625	687	647	375
% SCH by FTF by Dept.	80.1%	86.5%	75.4%	73.0%	73.1%	75.8
Median Class Size (Upr. Div.)	26	27	34	33	33	19
% Under-Enrolled Sections	28.6%	12.9%	17.1%	17.1%	17.1%	36.3%
(Upper Div.)						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

Since 2011, BB&T Center for the Study of Capitalism at the Economics department has brought in \$242,600 of outside funding. The center itself was formed through a \$1,000,000 donation to the College of Business. With the help of the grants, the Center was able to bring such nationally renowned speakers as Steve Forbes, the publisher of *Forbes* magazine, Stephen Moore, former member of *Wall Street Journal* editorial board, Daniel Hannan, a member of European Parliament, and many others. Some of the grant funding has been used to support student research in the form of stipends to conduct work on their projects and to cover students' conference travel expenses.

The Center for Applied Economics has been actively engaged with local businesses, government and non-profits. The Center received funding from the Turner Family Foundation to study economic development opportunities in Allen county, as well as funding from Bowling Green Chamber of Commerce to conduct economic impact studies.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

Over the years, the Economics department has taken many steps to ensure that our programs run in an efficient manner:

- Our department has had the highest SCHP per FTE at WKU for the last five years;
- Our introductory courses (ECON 202 <u>Micro</u>, ECON 203 <u>Macro</u> and ECON 206 <u>Stats</u>) are usually close to or at the
 maximum capacity of 48 students, which is limited by room size;
- We offer large sections (100-250 students) of principles courses;
- Many of our intermediate courses are also close to maximum capacity we have the second highest average class size for upper-division courses.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of WKU's strategic plan are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

A Regional Lighthouse: Ensure that WKU students graduate with skills to think critically, solve problems, and engage effectively with others. This strategic goal almost perfectly mirrors how economists define themselves as a profession. American Economic Association defines economics as "...the study of how people use resources and respond to incentives, or the study of decision-making... Economics is a broad discipline that helps us understand historical trends, interpret today's headlines, and make predictions about the coming years... Using theoretical models or empirical data, economists evaluate programs, study human behavior, and explain social phenomena. And, their contributions inform everything from public policy to household decisions."

Global Learning: Ensure that a world view and international issues are intentionally incorporated across the curriculum, preparing WKU graduates to enter a competitive global workforce.

International issues are incorporated throughout the economics curriculum:

- International trade is a topic that is covered in *Microeconomics* and *Macroeconomics Principles* courses;
- <u>International Economics</u> (ECON 380) is a course dedicated entirely to international issues such trade, tariffs and exchange rate policies;
- <u>Economic Development</u> (ECON 385) focuses on global development issues;
- Economics faculty have been active participants in Study Abroad programs, taking students to Australia, Costa Rica, New Zealand, the Netherlands, and South Africa.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

Objective 8. Promote academic excellence through improvements in teaching and learning.

The Economics department has been able to attract high-quality faculty. Our recent hires include

- Ph.D. in Economics/J.D. from Vanderbilt's Law and Economics program, who also completed two clerkships for federal judges;
- Ph.D. in Economics from the University of Kentucky, who completed a post-doctoral fellowship in environmental economics at UCLA;
- Ph.D. in Economics from the University of Houston, who prior to coming to WKU was a member of the White House staff working in the Office of Management and Budget.

Objective 9.5 Identify current and emerging workforce demands, entrepreneurial business opportunities and stackable credentials that can lead to additional education/training.

The Economics department offers a MA in Applied Economics, and our undergraduate majors are structured so that students can seamlessly progress to graduate education. A big part of this effort is a JUMP program that allows seniors to start working on their graduate degree while completing their bachelors.

Objective 10.4 Increase opportunities for undergraduate student to conduct or assist in research.

During the senior assessment seminar, all students have to complete a research project and present it to the faculty. Our faculty have been able to secure outside grants to fund students' research and to cover students' expenses to present their research at national conferences.

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c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant <u>workforce</u> and/or provide supplemental data to the extent possible. (maximum 200 words)

The top industries in which economics majors find employment are (with projected job opening in Kentucky over the next five years and expected average wages, according to the *Kentucky Future Skills Report*):

- Health Care and Social Assistance (64,050; \$50,433)
- Educational Services (33,163; \$50,393)
- Finance and Insurance (11,962; \$53,833)

Employment opportunities in Kentucky for economics majors continue to look strong.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

The Economics department contributes to educational efforts within the state in a variety of ways:

- We offer courses on remote campuses both face-to-face and through ITV.
- We offer dual-credit economics courses for high-school students across the region.
- We have steadily grown the number of courses that are offered on-line to facilitate non-traditional learners.

Our department maintains a strong reputation among economics departments across colleges and universities in Kentucky. Our faculty play an active role in Kentucky Economic association:

- Since 2000, three of our faculty members served as Presidents of the association;
- Two faculty members served as editors of the Journal of Applied Economics and Policy, the association's journal;
- In 2017, the Economics department hosted the annual meeting of the association on WKU's campus, bringing 150 faculty and students from across the state;
- Our faculty regularly present their work at the KEA and many national conferences.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

AACSB, the accrediting agency for the colleges of business, cultivates high standards of instruction and professionalism among business colleges accredited by this organization. As a part of the College of Business, the Economics department abides by the high standards placed on the college by AACSB.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

One area of growth for our department is to expand our reach among females and minority students. A 2017 study by Wendy Stock called "Trends in Economics and Other Undergraduate Majors" published in *American Economic Review* finds that "...economics' share of second majors has increased over time, not only among students generally, but also among females and minorities (two groups chronically underrepresented in economics)." WKU's Economics department followed that national trend. As the table below shows, our enrollment of male students remained largely flat over the last five years but the female enrollments steadily increased:

Number of Students Enrolled or Seeking admission in Economics,								
Business Eco	nmics and Ec	onomics and	l Mathemati	cal Economic	s Majors			
Census year	2014	2015	2016	2017	2018			
Female	50	51	61	62	64			
Male	157	133	146	164	163			

The study also finds that enrolling in an economics major tends to be correlated with majors in math, engineering, computer science, and technology, as economics complements those majors well. Therefore, another growth opportunity is to find ways to encourage double majors in economics among those students.

Stock's study also makes an excellent point that that double majoring across relatively dissimilar disciplines yields higher returns to graduates than double majors in relatively closely related disciplines. Therefore, promoting our major to students outside the College of Business presents an opportunity to increase both the number of our majors as well as gender, racial, and intellectual diversity of our students.

b. How do program trends align with <u>national trends</u> over the last 5-10 years? (maximum 200 words)

According to the aforementioned study in AER, "Economics' <u>share</u> of <u>first</u> majors has been flat for more than a decade", and a similar trend has been observed nationally in business and political science majors. The table below shows the number of first majors in all Economics majors at WKU:

First Major Enrollement in all Economics Majors								
Year	2014	2015	2016	2017	2018			
Enrollment	184	190	220	240	228			

As the data suggests, our programs generally did better than national average over this period with an overall increase in the number of first majors. This points to growing interest in economics at WKU, a trend we hope to sustain.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

To increase efficiency, the Economics department uses large sections to teach principles courses. In the Fall of 2018, there was a <u>Microeconomics Principles</u> section with 260 students. In the Spring of 2019, there is a section of that class with more than 215 students currently registered. Thus, over the two-semester period one faculty member will teach an equivalent of almost ten full sections of that course with a typical enrollment of 48 students. As a result, our department has the highest SCHP per FTE while the cost per credit hour is well below the median.

What is not apparent from the data is that using large sections allowed us to free up faculty to teach more upper-level electives, which reduced scheduling conflicts for our students, allowing them to graduate on time. One example of that is we can now offer ECON 464 - <u>Mathematical Economics</u> on a regular basis. In the past, due to staffing shortages, offering this course often came at the expense of another upper-level elective. This course is a part of our new and very successful major in Mathematical Economics, so being able to offer it every spring ensured that our students could graduate on time.

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d. Where do you see the program in five years? In ten years? impediments currently exist? (maximum 200 words)	What would it reasonably take to get there? What					
We expect the Economics major to grow over time. The interest in the major continues to be robust nationally, and the enrollments in our program continue to be strong.						
In the immediate future, we will be able to meet the demand with current staffing, but if the growth continues, we will begin to experience bottlenecks in some of our upper-level courses.						
One area of opportunity we have not been able to exploit is Co Connections courses: ECON 375 – <i>Moral Issues of Capitalism</i> , E <i>Environmental Economics</i> . However, due to staffing constraint per semester. Additionally, there are other courses (ECON 380 <i>Poverty and Discrimination</i>) that would be a good fit for Conneprogram because we couldn't ensure they would be offered on increase our contribution to the Colonnade program.	CON 385 - <u>Economic Development</u> , and ECON 434 – s, we've typically been able to offer only one of these courses – <u>International Economics</u> , and ECON 430 – <u>Economics of</u> ctions courses but we didn't include them in the colonnade					
e. What recommendation would you put forward for the prog	gram (check one)?					
☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)					
☐ Transform (Redesign/combine/reorient)	\square Suspend (Teach-out may be required)					



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

11/02 IR DATA

Department/School:	Management
College:	Gordon Ford College of Business

Program Name:	Entrepreneurship
Reference Number:	542
CIP Code:	520701
Degree Type (AB, BS, etc.):	BS
STEM+H Degree (Y/N)	N
Minimum Hours Required:	70
List Concentrations (if any):	

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The major in Entrepreneurship is designed to integrate coursework and actual experience to develop entrepreneurial potential and to provide the opportunity to turn capability into reality. Coursework and practical experiences allow the student to apply principles of innovative thought, idea generation, market development, financial analysis, legal and ethical compliance, and human resource development. Students are prepared to start and develop a new venture, to immediately contribute to the growth and expansion of the fast-growth firm, to be leaders in social or non-profit activities, and to be corporate "intrapreneurs" if employed in larger firms.

Majors within the Gordon Ford College of business require students to meet admission requirements including a minimum overall 2.5 GPA and a 2.5 GPA in major admission courses.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	50	40	46	60	59	89
Conferrals	8	6	10	6	10	22
SCHP	278	246	260	310	363	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

As part of the Entrepreneurship Major, the ENT 312 (Entrepreneurship) course is delivered as a *Colonnade Connections* (*Systems*) course. This course is offered in both face-to-face and online formats and is an important element in the Department of Management's *PLUS 2* completer program. Additionally, ENT 312 is a core course in the *Brewing and Distilling undergraduate certificate program*. This course is of substantial importance to both business students and students pursuing degrees that are well-suited to freelance type work (photojournalism, broadcasting, art, dance, exercise science, etc.) In fall 2018, 47.6% of enrollment in ENT 312 came from nonbusiness majors.

The ENT 312 course had 64 students across all sections offered in Fall 2014. In fall 2018, there are currently 311 students enrolled across sections. The enrollments in our major courses have increased substantially as well, more than doubling enrollments in most supporting courses.

The ENT major is the curricular arm of the Center for Entrepreneurship and Innovation (CEI), which since 2014 has helped students win more than \$50,000 in prize money to launch their businesses and hosts a multiple national award winning Small Business Institute Program.

The ENT major is very applied; thus, contributing to the mission of the department/college/university.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

With ENT 312 joining the Colonnade Connections category, the entrepreneurship program is touching more students than ever before; providing important entrepreneurial skills to students across WKU. By nature, most entrepreneurship majors across the nation are relatively small. However, the productivity of this program has increased dramatically, which we expect to boost enrollments in our programs over time.

The ENT 312 course also collects artifacts for Evidence & Argument assessment and provides those for QEP assessment; thus, advancing the assessment of the university in this area.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14 2014-15		2015-16		2016-17		2017-18		17/18 Univ.		
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	5	80.0%	10	30.0%	6	50.0%	13	76.9%	14	57.1%	69.4%
Progression	N/A	N/A	41	63.4%	33	69.7%	41	58.5%	55	58.2%	61.3%
150% Graduation Rate	N/A	N/A	13	38.5%	5	0.0%	6	50.0%	5	80.0%	54.1%
Time to Degree	3	.75	8.	.47	4.	.13	4.	.33	5	.17	4.39

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

The program student learning outcomes are:

- (1) Students will be able to conceive a business idea and develop a business plan for it.
- (2) Students will be able to analyze small businesses and make recommendations.
- (3) Students will learn the interrelationships between business competitiveness and diversity of peoples, ideas and cultures.

Each fall, students in ENT 380 write business plans as part of the course. They conceive an idea, assess feasibility, and write a formal business plan. Those business plans are assessed through competition each fall, based on a rubric. In prior years, it was evident that students lacked skills in basic financials. As such, this fall our local SBDC representative came into the classroom to assist students with that portion of their plan. Substantial improvements were made; thus, closing-the-loop on this issue.

The ENT 312 student learning outcomes match the Connections (systems) SLOs. All students enrolled in ENT 312 are assessed for both the Evidence & Argument QEP, as well as the Colonnade Systems assessment requirements. During August 2018, we assessed student performance across the artifacts from ENT 312. We found that students exhibited a basic grasp of how systems evolve (pass rate 75% on affiliated questions) and had improved the program to a point where this was no longer a concern for assessment. As such, we created an assignment related to macro systems and functional areas of the firm (functional systems) to place additional focus on an area of demonstrated weakness.

The ENT program as part of the GFCB also has a mechanism for assessing learning outcomes through the AOL (Assurance of Learning) process. The AOL committee is responsible for the review of the assurance of learning process and outcomes for the undergraduate degree program through assessment via direct and indirect measures, including case studies, course-embedded assignments, etc.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

We are able to gain access to alumni information for our programs from Alumni affairs and can analyze the success of our graduates in progressing as an employee, business owner, or moving on to graduate/professional school. For example, we have 1829 records (50%) from alumni affairs with employment information from alumni from the 1960's to present. We know that of 1829 records from management alumni with information provided, 102 are owners of businesses (approximately 6%).

However, we also keep in touch with recent graduates who have launched their own businesses. We run a high-touch program. Through both our curriculum and our associated work via the Center for Entrepreneurship and Innovation, we spend hundreds of hours each academic year mentoring students outside the classroom. We maintain contact with our students beyond graduation. When they start businesses, they are proud and contact us to let us know. We have social media through the Center for Entrepreneurship and Innovation that allows us to follow many of our graduates and keep track

of their business (or employment) successes. We get to know students well both within and outside the classroom and are able to build relationships that facilitate connection well beyond graduation.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

Management Department Advisory Council representatives provide feedback each semester via an advisory council meeting. The advisory council members represent a wide variety of industries and often employ and/or work with our students.

Additionally, we have several students complete internship credit through the entrepreneurship program each semester. Requirements for the internship are that students receive an evaluation from either their employer or an assigned mentor (if the student runs his/her own business), which lets us know of any areas of deficiency.

In a program with an applied nature, such as ours, we likewise consistently gain feedback from small business owners within the community that work with our students in consulting contexts. They provide continual feedback through these semester long projects.

Our students regularly enter competitions, assessing competency in writing business plans. Dr. Bolton and Dr. Peake joined the program in fall 2014. In the subsequent two years of competitions, we used feedback from entrepreneur and venture capitalist judges to improve our curriculum in the business planning course. In the third year, several finalists placed in the top 3 at state level competitions, winning approximately \$40,000; thus, highlighting how we used information to improve our program and subsequently, student success and outcomes.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

Students enrolled in courses within our curriculum have won more than \$50,000 in prize money for their businesses since Spring 2015.

Students enrolled in the capstone consulting course have placed in the top 3 projects at national competition, 4 times since spring 2015 for their work with local businesses. We also have current students in the program launching and running successful businesses here at WKU, such as Bailey Dahlquist of RAW and Robert Bowden the III of Spartan 4x4. Our recent alumni run successful businesses, in industries such as lawn and homecare, fitness, and home aquatic resources.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty					12	12
Number of NTE Faculty					3	4
Cost per SCH					\$115	\$128
SCHP/FTF by Dept.	528	500	507	602	572	375
% SCH by FTF by Dept.	83.1%	81.5%	75.7%	72.5%	67.6%	75.8%
Median Class Size by Level	27	27	29	29	30	19
% Under-Enrolled Sections	20.2%	19.5%	18.0%	15.2%	16.3%	36.3%
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

For our online completer program, in which the ENT program is engaged, we generate DELO revenue.

The ENT major provides a curricular component for the Center for Entrepreneurship and Innovation, which offers faculty and financial resources through the CEI budget (competitions, student travel, etc.) and Foundation support from the initial endowment provided to the CEI. The CEI likewise has an endowed professorship, which assists in recruitment and retention of faculty for the entrepreneurship program. Support from donors likewise provides an attractive scholarship for entrepreneurship majors.

Entrepreneurship is a growing topic of interest to donors across the nation, and as such, we see substantial continued potential for donors to contribute to the work of the program; particularly, as it increases in cross-disciplinary work through the Center for Entrepreneurship and Innovation.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

All Management faculty members participate in the delivery of all programs offered from the department.

As summarized above, Management Department programs are highly efficient. Our COST per SCH is over 10% lower than the University median while our SCHP/FTF is over 52% higher than the University median. Our median class size is over 57% higher than the University median. Under-Enrolled sections are over 50% lower than the University median.

According to information provided on the Academic Affairs web site for CAPE, the Management Department ranks second in undergraduate student enrollment and ranks third in SCHP per Full-Time faculty member.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

We address the *Culture of Innovation* aspect very clearly in our ENT major program. We support the *Colonnade Program* through the offering of ENT 312 as a Connections (Systems) course. Given the nature of our field, we must *continuously update our curriculum* to reflect the latest events and opportunities available to entrepreneurs. Our courses engage *high impact practices* and *collaborative learning* through applied activities. We are known as a flexible program to help students reach their goals; upholding rigor but also *ensuring completion and success*.

We are invested in *global learning and diversity*. From a curriculum standpoint, we offer an international entrepreneurship course. In the spring Cuban entrepreneurs will engage with students on campus for a week of programming as part of the IYO Cuba initiative. In conjunction with the Management Department, we hosted Women Entrepreneurship Week activities in fall 2018.

Our faculty and students engage in at least two *K-12 initiatives* per semester, such as local Shark Tanks, Idea Festivals, and Advisory Boards. We provide such service in hopes that these young entrepreneurs may become future Hilltoppers.

We offer courses in our curriculum as part of the PLUS 2 program, which addresses *continuing education and accessibility initiatives*.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

The *KY Innovation Act (2000)* makes a direct call for KY to produce a strong, entrepreneurial economy. We are working to support this mandate through producing students who both create innovation and understand the value of innovation to our state's economic development.

We directly address the persistence and timely completion aspect (*Objective 6*) by working with students throughout their program, maintaining flexibility with electives, and keeping in close contact with students in our program. As can be seen from 2015 forward, we are well-aligned with completion times in the 3-4 year range.

We are engaged in the completer program (2+2) with courses from our curriculum, which are offered online, addressing **Objective 7**. This provides additional degree pathways for students to complete their degree.

Our program likewise promotes academic excellence through improvements in teaching and learning (*Objective 8*). With our engagement in the community through collaborative learning and applied projects, we provide opportunities for faculty to learn more about what is expected of our students in the "real world" and prepare students for the challenges at hand (*Objective 9*). Further, we support this objective through engaging employers in advisory councils and seeking their input on the programs across our department.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

The most recent data from the Bureau of Labor Statistics (2016) suggests that the rate of start-ups continues to increase. Kauffman (2017) data corroborates this assertion, highlighting growth in US entrepreneurship over the three years prior. Demand for entrepreneurship programs continues to increase with more than 5000 entrepreneurship courses offered across the US (Kauffman, 2015) with the number of college start-ups continuing to rise (Entrepreneur, 2017).

The outlook for entrepreneurship is solid (Forbes, 2018), with venture capital investments in start-ups reaching their highest level ever (\$148 billion in 2017), improvements occurring in the patent system, the growth of the "gig economy," the increasing importance of intellectual property, and the multitude of opportunities that AI and other technologies bring.

Our entrepreneurship program prepares students in developing innovative mindsets, crafting business models, performing market research, assessing and securing resources, among other critical skills. A recent article by Fast Company suggests that <u>all employees</u>, now more than ever, are expected to move their divisions forward through *innovation* and *entrepreneurial skills*. Our entrepreneurship major has the opportunity to provide students with the toolkit necessary to join both the "gig economy" and traditional employment as *the skills valued in entrepreneurship are transferable to myriad contexts*.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

The ENT major provides students the opportunity to begin developing a business concept when they enroll in the first course, which is also a *Colonnade Connections (Systems)* course. Students are encouraged to pivot and develop that model throughout the course sequence. Students in our program currently run two well recognized Bowling Green-based businesses – RAW and Spartan 4x4.

The innovative and experiential curriculum from our program has received two *Small Business Institute® Best Practices*National Awards (1st place) in 2016 and 2017, and the Small Business Institute® National Showcase Award in 2018 for innovative development and management of our program.

Our students have a strong history placing and winning in statewide business plan and model competitions. We had both the KY Cabinet of Economic Development and Alltech sponsored competition 1st place business plan winners in 2017. Our students accumulated over \$40,000 in winnings that spring.

The capstone course in our sequence conducts strategic consulting projects with local small businesses. Since spring 2015, student teams from this course *impacted* the community through nearly <u>5700 consulting hours</u> for <u>20 clients</u>. The top consulting projects from the class have been recognized in the top 3 in national competition 4 times since spring 2015.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

The applied nature of our program facilitates student success as either business owners or valuable employees. These students are well-equipped to contribute to <u>economic development</u> in Kentucky and beyond. The University of Louisville and University of Kentucky do not have undergraduate majors in entrepreneurship. UK has a certificate, while UofL has a minor. NKU, EKU, Morehead State, and Murray State all have entrepreneurship major tracks; however, they are not as engaged or branded nationally in entrepreneurship as we are due to student competition and faculty professional service.

We are the most well-recognized and awarded Kentucky undergraduate program in Entrepreneurship.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

There are regional, *untapped markets*, such as Louisville and Nashville, which provide opportunities to recruit students interested in entrepreneurship. Jefferson County Community College provides a substantial untapped market of students. Nashville boasts a large proportion of students interested in entrepreneurship. As such, we engage in recruitment efforts, whenever possible, in events that host a large number of students from those areas.

ENT 312 is part of the Brewing and Distilling certificate program requirements. We are working with Dr. Wilson in engineering and Dr. Arnold in art to further our collaborations and partnerships. Emerging trends point to *collaborative* courses that merge disciplines, particularly engineering and entrepreneurship, and we are working to move these relationships forward. We are undertaking a research project on entrepreneurship curriculum in engineering capstone courses.

Additionally, we want to create a new upper level course focused on the "launch," in which student teams are provided with a small sum of money to launch a business during the semester. Through this process, students learn how to set up a business, operate, and potentially fail in a safe environment. This leverages a major trend that we believe would give our students practical experience and the opportunity to "fail-up."

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

Recent news articles herald students as the future of entrepreneurship (Forbes, 2018) and suggest that student entrepreneurship rates are on the rise (Entrepreneurship, 2017). Programs supporting student entrepreneurs in these endeavors are critical to their success. VentureWell (2016) indicates that approximately 40% of students want to start their own business. There are over 1500 entrepreneurship programs and 5000 entrepreneurship courses offered across the US, which suggest this is now considered a necessary component of a well-rounded education.

Since 2014, we have seen a steady increase in course enrollments. We see substantial potential for growth and continuous improvement under consistent leadership and with our Colonnade offering, and have demonstrated our competitiveness on the national landscape through awards and recognition.

National trends indicate that entrepreneurship programs must be well-integrated across campus, inclusive, applied and global-oriented (VentureWell, 2016). We are addressing these trends through *integrating our program* with other areas of the university, working to *promote diversity* through our programs and guests, ensuring *applied learning experiences* in each of our courses, and incorporating *global elements* in our courses and programming. We flex and pivot our programs and curriculum with upcoming trends to ensure our minor students are current and marketable.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

In addition to Entrepreneurship education, there is documented growth in family business management programs. Although more than 80% of businesses operating globally are "family businesses," most students are unprepared to go to work with their own or others' families. We added a family business management course to our curriculum last year, which merges family science, strategy, and organizational behavior concepts. Our students leave prepared to launch a family business, work in another family's business, or go back to their family business as a key contributor. Half the battle is being aware of problems that occur within family businesses and how they can be addressed. With this course offering, we normalize family business issues and present an opportunity to further engage in the community with the numerous area family businesses.

We are aware that a major or minor is often not feasible for students in skill-based disciplines or with extensive curriculum requirements. As such, prior to the curriculum freeze, we were working to develop a certificate program. Once the program evaluation is over, we hope to resume our work in developing a certificate program that will directly benefit students in their ability to become self-employed or part of an entrepreneurial team.
d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)
With our current trajectory, we will begin filing paperwork to be considered as a notable undergraduate entrepreneurship program in the US through outlets such as Princeton Review and US News & World Report. In 5-10 years, by continuing to move with trends in entrepreneurship education, we have the opportunity to make the top 50 programs, given that we have sufficient resources.
We are exceptionally short-handed from a faculty perspective. We currently have one full-time faculty member dedicated to our program. To meet our goals, and frankly to simply maintain our current status developed over the past four years, we need more hands on deck. We have a small/family business expert currently in place, and need an innovation expert, venture finance expert, and a programming expert to round out our team and facilitate a nationally-recognized program of excellence.
As such, we would be able to pursue these objectives by adding two full-time faculty members and an MBA-level executive director/instructor to run programming. This would allow tenure-track faculty to primarily focus on teaching and mentoring students, high impact research, and professional service to help project the WKU brand, while the executive director would be able to focus on teaching and programming.
a What recommendation would you nut forward for the program (check one)?

 \square Maintain (Core or important complementary program)

☐ Suspend (Teach-out may be required)

 \boxtimes Grow/Enhance (Significant strategic potential exists)

☐ Transform (Redesign/combine/reorient)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Finance
College:	Gordon Ford College of Business

Program Name:	FIN
Reference Number:	200
CIP Code:	52.0804
Degree Type (AB, BS, etc.):	Certificate
STEM+H Degree (Y/N)	N
Minimum Hours Required:	24
List Concentrations (if any):	n/a

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The Financial Planning Certificate (FPC) is part of our one-two combo offering that is designed to prepare students to become excellent personal financial advisors. Department's primary offering in this space is the Personal Financial Planning (PFP) concentration of the Finance major. Though a few students seeking the FPC are pursuing the Business Finance concentration in Finance, the FPC is meant for students who are majoring in a different area who want to pursue a financial planning career or complement their chosen major. Both programs (FPC as well as the PFP) are CFP®-Board registered programs. Graduates who successfully complete the program are eligible to sit for the Certified Financial Planner™ examination.

The need for financial planners has been growing exponentially over the last few years and that trend is not going to slow down any time soon with over 10,000 baby boomers reaching retirement age every year. As detailed on the CFP® Board website (https://www.cfp.net/for-employers-of-cfp-professionals/benefits-of-cfp-certification), "recruiters and prospective employers recognize CFP® certification as the most desired designation in this growing field."

The FPC requires <u>no</u> additional resources beyond what are required to sustain a thriving Personal Financial Planning concentration of the Finance major.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ.
						Median
Enrolled Students	11	9	13	14	19	4
Conferrals	10	35	15	16	11	5
SCHP	147	185	120	219	166	44

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The number of students seeking the Financial Planning Certificate (FPC) has almost doubled over the five-year window and is almost 5 times the University median in 2017-18. With the exception of 2014-15, the number of students graduating with a FPC has remained stable in the 10 - 15 range and in 2017-18 it was twice the University median. The number of Student Credit Hours in the Certificate has increased 13% since 2013 and is almost 4 times University median.

As mentioned in the Summary section above, the Certificate requires NO new courses beyond what Personal Financial Planning (PFP) concentration (Finance major) students are required to take. The topics covered in the eight classes, that are required in the Certificate, as well as the learning objectives in those classes, are dictated by the Certified Financial Planner Board of Standards, Inc. and are part of the registration requirements specified by that organization.

Our Center of Excellence (Center for Financial Success) also employs a number of FPC (as well as PFP) students. These CFS employees provide group presentations to hundreds of WKU students each semester, as well as personal one-on-one peer counseling to WKU students and staff on budgeting, proper use of credit, proper administration of individual's student loan accounts, and repayment plans for student loans.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

Students enrolled in the FP Certificate (as well as PFP Concentration in Finance) receive most of the instruction face-to-face in a classroom setting. The instruction emphasizes the use of case studies, project-based learning (involving real-world clients), the development of strong written and verbal communication skills through various activities both within and outside the classroom, and the ability to work in teams.

The 2018-19 enrollment in the required upper-level PFP-specific course sections (which are the same ones that are required in FPC) averages 33 students for the regular sections and 21 students for two Honors sections (FIN 331).

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14		2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	1	0.0%	0	0	0	0	0	0	0	0	19/73.7%
Progression			6	66.7%	6	83.3%	12	100.0%	12	83.3%	11,514/61.3%
150% Graduation Rate	n/a		n/a		n/a		n/a		n/a		n/a
Time to Degree	n/a		n/a	•	n/a	•	n/a		n/a	•	n/a

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

The Progression rates for the Certificate are better than those for the University. However, the First-Year Retention rates are mostly meaningless because practically no freshmen come to WKU with the goal of getting this Certificate. Instead, it is a path that is often pursued by students after they have been exposed to the value of this credential—either in Personal Finance class (FIN 161) or at other avenues, including listening to one of the presentations delivered by the staff of our Center for Financial Success.

Students in the Personal Financial Planning (PFP) Track of Finance Major and in the Financial Planning Certificate (FPC) are assessed based on the 72 SLOs (including subparts) that are established by the Certified Financial Planner Board of Standards, Inc. (see https://www.cfp.net/docs/for-education---resources-for-registered-programs/cfpboard learning objectives resource document.pdf).

For PFP students, assessment of SLOs occurs via our Senior Assessment process as well as via our Capstone course (FIN 450 – Financial Plan Development). For the FPC students who are not Finance Majors, the assessment exclusively occurs in the latter.

Closing the Loop: The development of the Capstone class in Financial Planning (that impacts both the PFP students as well as the FPC students) was, in part, driven by the desire to better assess graduating students' knowledge in a comprehensive manner and to make changes, if necessary, to the curriculum. This required class (FIN 450) was first offered in Spring, 2014. A second example is our curricular response to a low score on the senior assessment relating to the subject matter of the Efficient Markets Hypothesis. The faculty added education around this subject in FIN 331 and also made changes to the existing coverage in FIN 330 and FIN 332.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

We track the number of students passing the Certified Financial Planner™ examination; passage rates for 1/2012-10/2018 exam takers are 75% for WKU PFP Track students and 81% for WKU PFP Certificate students, significantly higher than the national average (64% in 2017).

We began formally tracking the employment of all PFP graduates (including those graduating with a Certificate) recently. For May 2018 graduates: 12% went to graduate school; 53% have jobs directly related to PFP and investments; 12% took a job in another business field; 6% entered the military (as an officer); 12% are still looking for work; and 6% are unknown.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

Our Finance Advisory Council provides valued periodic recommendations, and we regularly meet with employers in our region to informally survey them. Guest speakers (to our Financial Management Association and Financial Planning Association student chapters, and in classes) provide additional insights into career and practice trends.

Feedback received from practitioners, faculty at other institutions, and our Finance Advisory Council all led to the creation of

FIN 400/401 PFP Practice Management (course/lab), which was first offered in Fall 2018. These two courses provide greater training in financial coaching and the use of relevant software. We also incorporated project-based learning (via major projects with real-world clients) into our FIN 444 course, and we provided greater exposure to different financial planning software programs in FIN 444 and FIN 450. Employers inform us that our graduates possess (relative to other university graduates) the strong financial counseling and interpersonal skills that employers so strongly desire and an outstanding knowledge of investments.

Both the Professors primarily responsible for delivering instruction in this area—Andrew Head and Ron Rhoades—possess the CFP® designation an maintain consulting practices. As part of the Continuing Education requirement of this designation, they attend and participate in conferences and panel sessions which allows them to incorporate in our offerings the latest trends in the profession.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

Financial Planning students receive many opportunities to tour financial planning and investment firms, practice networking skills while attending professional conferences/symposia/events, and to undertake internships with firms.

The Department of Finance organizes and hosts the WKU Personal Financial Planning Symposium bi-annually, providing high-quality, nationally recognized speakers in support of practitioners' continuing education, and providing students with further opportunities to network with practitioners and employers.

The Certificate in Financial Planning is a low- to no-incremental cost offering that provides a valuable opportunity to the students to enhance their skills base and to be on track to earn a highly coveted designation in the booming world of financial planning.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty					7	12
Number of NTE Faculty					1	4
Cost per SCHP					\$155	\$128
SCHP/FTF by Dept.	495	637	461	595	552	375
% SCH by FTF by Dept.	91.8%	97.4%	92.3%	88.9%	89.3%	75.8%
Upper Div Median Class Size	25	39	26	38	40	19
% Upper Div < 15 enrollment	12.2%	12.5%	17.4%	14.6%	7.1%	36.3%

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

{As per instructions, the table above refers to the *department* numbers. It allocates faculty FTEF across all three department programs (Major, Minor, and Certificate) and combines SCHP generated). This is done because these three programs are at the same degree level and fully share a common set of courses and faculty. The narrative below also refers to the *department*, not the Certificate}

A number of Finance faculty have received GFCB's AIM High Research Grants (ranging from \$5,000 - \$10,000) since the program was put in place in 2015.

The Center for Financial Success (CFS) receives ongoing external funding in the amount of \$4,500 per year. The Center has also received many non-recurring gifts. In part, these gifts have enabled us to hire 4 student financial counselors (2 other students volunteer in the Center). In Fall 2018 alone over 500 WKU students will have heard a presentation given by the CFS staff. In addition, they have conducted over 50 client meetings and are expanding their pilot program with University Experience courses. As a part of this partnership, CFS coaches give two presentations in the University Experience classes and use a hands-on budgeting assignment for students to manage their own budgets.

Over the last two years, the department has received dedicated external funding in the amount of close to \$10,000 to support student travel to conferences and competitions.

Finally, our first ever WKU Personal Financial Planning Symposium was almost exclusively funded (\$18,000+) by external sponsors. We fully expect our next Symposium (scheduled for September 2019) to be funded by external sponsors as well.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

The primary (almost exclusive) cost driver for us is faculty compensation—a variable that is solely driven by market forces. However, in terms of efficiency, our SCHP/FTF ratio in 2017-18 is almost 50% higher than the University median and has increased by 12% over the last 4 years. With the exception of FIN 161, our entire program is taught at the upper division. Yet, our median class size is in the upper 30s and the average enrollment (excluding the capstone class) in 2018-2019 academic year is 35! Over the last five years, our average for under-enrolled sections is 13% compared to the University average over the same period of 41%.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

Department goals, with reference to WKU's strategic plan:

- 1) Recruit, retain, and graduate high-quality students (*Preparation for the Global Stage; Completion & Success; Affordability & Accessibility*).
 - One of the largest slate of Honors offerings in GFCB.
 - Faculty mentored two Gatton Academy students in a research project resulting in a presentation and a best paper award at the Financial Education Association meeting.
 - The Center for Financial Success (CFS) uses student advisors to counsel clients (fellow students, staff, and members of the community) on financial matters.
 - CFS works with several UC 175 classes to help incoming freshmen to create sustainable & realistic financial plan for their 4-year WKU journey.
 - Emphasis on experiential learning including hands-on Practicum classes, field trips and conferences, and competitions.
- 2) Improve the quality of life for our communities (A Regional Lighthouse; Quality of Life; Global Learning).
 - Representation on WKU Foundation Investment committee and leadership of the Budget Council
 - Dr. Rhoades serves as a subject matter expert regarding fiduciary duties for financial and investment advice and has served as an advocate with the US department of Labor, US Securities and Exchange Commission, and U.S. Congress on behalf of AARP, Better Markets and Save Our Retirement coalition.
- 3) Foster academic excellence through a program focused on core competencies (*Preparation for the Global Stage; Completion & Success; Continuing Education*).
 - To ensure student affordability, lowest cost alternatives for student materials have been adopted in every Finance class.
 - Flipped classrooms were implemented in the Principles of Finance and Applied Investments. Both provided good results and student satisfaction.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

Strategy 2.5: Partner with Kentucky high schools in offering a dual credit Personal Finance class. Number of sections and classes have increased at participating high schools.

Strategy 2.6: Dr. Rhoades' led the development and formation of the GFCB's Living Learning Community (commenced in Fall 2018) that facilitates the accomplishment of the goals relating to intervention strategies for incoming freshmen students who may not be college-ready.

Strategy 5.3 The Center for Financial Success offers peer counseling to students and makes presentations about personal financial topics to various groups in the university to provide advice regarding the cost of college, student debt, and loan repayments.

Strategy 8.4 Professor Head is working on the Kentucky "Standards Revision and Writing Committee for Financial Literacy" S.B.1 (2017).

Strategy 9.1: Created a new course – Career Readiness in Finance that prioritizes career development.

Strategy 9.3: Working with Advisory Council on an active mentoring program, development of real-world case studies, job shadowing, and business tours to enhance experiential learning, externships, and clinical experiences for our students.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200

words)

Projections in the Kentucky Future Skills Future Demand, 2017-2021 provide forecasts of growth direction, the number of expected job openings, and an idea of expected pay for a number of job positions in the state. Forecasts for Personal Financial Planning graduates are included in two of the jobs identified on the site: 1) Personal Financial Advisor - very fast growing, 506 positions with an average salary of \$88,363; and 2) Financial Analyst – fast growing, 229 positions with salary ranging from \$66,955 to \$83,389.

Also, as per Bureau of Labor Statistics (BLS), the job outlook for Personal Financial Advisors is projected to grow 15% from 2016 to 2026 (much faster than average), and 32% per 2016 Ernst Young study (https://www.ey.com/Publication/vwLUAssets/EY-the-next-generation-of-financial-advisors/\$FILE/EY-the-next-generation-of-financial-advisors.pdf).

The 2017 median pay for all personal financial advisors was \$90,640 per year, per BLS. Our recent graduates report starting annual salaries of \$35,000 to \$75,000, with some also receiving signing bonuses and/or annual bonuses during the first year. Our top students often land positions 12-18 months in advance of their graduation dates.

Many personal financial advisors own their own firms, and some of our graduates possess high six-figure or even seven-figure annual compensation.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

WKU's Personal Financial Planning (PFP) program was the first in the state (and part of a select few nationwide) that was CFP Board Registered and has been in existence for 32 years. It is widely regarded as one of the strongest programs in the country. One of the distinctive features of our program is that it is housed in a Finance department (which is not always the case for PFP programs) in a College of Business—by far the location preferred by CFP Board as well as the employers. This arrangement allows our students to receive a solid foundation of broader financial concepts and investments—well beyond that achieved in most other programs.

The reputation of WKU's Personal Financial Planning has been enhanced via Professor Head's contribution to the Financial Planning Competency Handbook (1ST and 2nd editions), which serves as a vital reference tool for Program Directors and practitioners (https://www.financial-planning.com/news/are-financial-planning-educators-reshaping-the-industry). The reputation has been further enhanced by Dr. Rhoades – who is frequently quoted in the national media, participates on the committees of several financial planning organizations, and who is frequently invited to speak at national conferences.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

The B.S. Finance (Personal Financial Planning concentration) and Personal Financial Planning Certificate programs are increasingly known throughout the region (from Chicago to St. Louis to Birmingham to Atlanta to Ohio, all parts in between, and even on the West Coast) as a provider of top talent for financial advisory firms. Through the bi-annual Symposium as well as numerous speaking engagements by Ron A. Rhoades, continuing education is provided to the financial planning profession. Dr. Rhoades' advocacy efforts around the fiduciary standard of conduct seek to improve investment outcomes for all Americans. The emphasis of the program on development of students' emotional intelligence, and the use of project-based and other experiential learning activities, fosters the ability of graduates to think critically, solve problems, and engage effectively with others.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

The personal Financial Planning Certificate is a perfect complement to other majors in which personal financial advice might be given -- such as accounting, marketing and social work. In addition, psychologists can often benefit from a thorough knowledge of personal financial planning, given the importance of financial decisions in everyday life and the stressors inadequate financial planning can cause. Also, future educators may use the Certificate as a basis for teaching personal finance courses in secondary schools—especially as the state embarks on a brand-new financial literacy requirement that is scheduled to go into effect over the next 3 – 5 years.

The next steps for us are to take our value proposition to departments referenced above with the following message: "If you desire to form strong relationships with others that often last a lifetime and provide counseling to others on their important financial decisions and investments, the Personal Financial Planning Certificate may be right for you." We are considering whether to offer a different 12-credit-hour certificate in Financial Counseling, qualifying students for the external "Accredited Financial Counselor" designation, as a means to facilitate the development of financial counseling and financial literacy skills for students entering such fields as psychology, social work, and education.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

The Personal Financial Planning program provides students with knowledge, skills and technical expertise to begin their journey toward becoming a financial planner or financial counselor. Financial Planning is consistently ranked among the nation's fastest growing (Money Magazine) and most rewarding (Jobs Rated Almanac) careers. Per Bureau of Labor Statistics, the job outlook for Personal Financial Advisors is projected to grow 15% from 2016 to 2026 (much faster than average), and 32% as per 2016 Ernst Young study (https://www.ey.com/Publication/vwLUAssets/EY-the-next-generation-of-financial-advisors.pdf).

Due to demographic trends, older financial planners are retiring at twice the rate new ones are entering the field (Ernst Young study), leading to shortages of talent; the average age of financial advisors is now 50.

Demand for our graduates has consistently exceeded the number of students in the major. Our graduates earn competitive salaries and have a variety of career options.

Our graduates have:

- Been offered positions with firms across the United States
- Attended national conferences in Nashville, Baltimore, Boston Seattle, San Diego, and Orlando
- Toured wealth management firms in Louisville, Nashville, Indianapoli and beyond
- Accepted internships with regional and national firms
- Gone on to law school
- Gone on to own and manage leading financial planning firm

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

Prerequisite requirements were eliminated in two classes (FIN 331 and 350) giving students more flexibility and efficiency for students to complete required classes for the Certificate.

The Finance department has a listserv for current students in which job and internship opportunities, information about department events, deadlines, organizational meeting notices, etc. are shared with students. Listserv membership includes students pursuing the Certificate.

Commencing 1½ years ago, each semester Finance students are now provided with a 24-page Finance Department Career

Planning Guide, containing major maps and substantial information on how to secure internships and jobs.

The Finance department possesses its own Marketing Committee, which undertook in the past three years a comprehensive recruitment plan with implementation of the following projects:

- 1. Finance Department social, held each Fall, to connect finance major and minor students with each other, faculty, FMA and FPA student chapters, and other resources;
- 2. Display case to highlight the Finance major, minors, programs, student organizations, and upcoming opportunities for students for experiential learning;
- 3. Annual newsletter, now delivered to over 1,500 alumni and supporters as well as to Finance major and minor students;
- 4. Extensive use of social media to connect with alumni, current and prospective students.

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What

u. Where do you see the program in live years: In ten years: What would it reasonably take to get there: What							
impediments currently exist? (maximum 200 words)							
In the current, tight, budgetary environment, the Certificate in Financial Planning is at the perfect intersection of value-add							
and almost zero resource needs. We have a highly efficient, ve	ry productive, and high in demand major (Finance). The						
Certificate does not require us to offer any additional classes. Y	et, it helps a group of students hone a set of skills and						
complete the educational requirements for a designation that	is highly valued in the marketplace. The Certificate has seen						
modest to high growth over the last few years and we expect t	hat to continue in the future.						
e. What recommendation would you put forward for the prog	gram (check one)?						
☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)						
☐ Transform (Redesign/combine/reorient) ☐ Suspend (Teach-out may be required)							



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Finance
College:	Gordon Ford College of Business

Program Name:	FIN
Reference Number:	357
CIP Code:	
Degree Type (AB, BS, etc.):	Minor
STEM+H Degree (Y/N)	N
Minimum Hours Required:	27
List Concentrations (if any):	n/a

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

WKU's Finance Department offers a minor in Finance. It is a great complement to many other majors within the GFCB and other majors throughout the university. It allows those students who are unable to pursue a major in Finance (because of switching costs) or students who simply want to pair their existing major with a strong financial foundation, to still accomplish those goals.

The Principles of Finance (FIN 330) class is required for graduation for all business majors. For these GFCB majors, the minor requires an additional 12 hours of approved finance electives from any 300 or 400 level finance courses. For non-GFCB majors, including the prerequisites for FIN 330, the minor requires a total of 27 hours of coursework.

In addition to the traditional face-to-face classes, one Finance elective is offered via IVS and many other electives are offered online. This gives students flexibility in scheduling and completing their electives.

The Finance minor requires \underline{no} additional resources beyond what are required to sustain a thriving Finance major. Somewhere between 85 – 90% of students in Finance elective classes are Finance majors. Thus, these classes would be scheduled as such without any regard to demand from the minors. Given the tremendous value attached in the workforce to finance skills, the minor is affording a diversification of skills for many graduates.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ.
						Median
Enrolled Students	46	43	46	51	67	26
Conferrals	10	13	10	15	17	6
SCHP	180	189	150	192	318	187

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The number of students electing to minor in Finance has grown 46% since 2013 and is now 2.5 times University median.

Students graduating with a minor in Finance has grown 70% since 2013 and is now almost 3 times University median.

The number of Student Credit Hours in the minor has increased 77% since 2013 and is 1.7 times University median.

As detailed in this self-study—as well as the self-study for the Finance major—the demand for graduates with knowledge in this discipline is as robust as ever. The minor in Finance is filling this demand for students who are either unable to major in Finance, or who desire additional courses in Finance to complement their skills and learning in other business areas. Except for the foundational class (FIN 330), the flexible, open architecture of the minor (where the students can fulfil the requirements with any 300/400 level electives) is not only good for students but also requires no additional class offerings on our part.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

Students pursuing a minor in Finance can also earn a Certificate in Financial Planning by taking additional Personal Financial Planning upper division courses as their minor electives in Finance. Completion of certificate courses meets the requirements set by the CFP Board of Standards, Inc. for taking the Certified Financial Planner™ exam following graduation. The CFP® certification is considered the ultimate seal of quality in the ever growing world of financial planning. The complete requirements for the Certificate are laid out in the separate self-study for that program.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14		2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate											
Progression											
150% Graduation Rate											
Time to Degree	4.74 (1	N=10)	3.97 (N	l=12)	7.43 (N	I=10)	4.71 (N	l=15)	3.84 (1	V=17)	4.20

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

Graduates with minors in Finance take less time to complete their degrees than do minors for the University.

The department does not directly assess the performance of minors in Finance. Since the minor is open ended (students can pick <u>any</u> four finance electives), implementing an assessment process would not be possible. However, SLOs in the Finance department are closely aligned with the GFCB undergraduate SLOs. We use an indirect measure of minor performance by examining the performance of all business graduates using GFCB undergraduate SLOs.

- Written and oral communication: GFCB graduates consistently demonstrate acceptable written (3.59/5; acceptable is 3) and oral (3.44/5; acceptable is 3) communication skills.
- Legal and ethical awareness: GFCB graduates consistently demonstrate acceptable ethical awareness (3.48/5; acceptable is 3) skills.
- *Discipline knowledge*: GFCB graduates consistently demonstrate acceptable discipline knowledge on an assessment artifact administered to graduating seniors (76.91/100; acceptable is 70).

Since we don't directly assess, there are no closing the loop examples, but the department is working on increasing the ethical awareness of all Finance students and a greater emphasis has been placed on bringing ethical examples and activities into the classroom. FIN 330 includes an ethical component in every subject module, FIN 331 explores ethical questions in various business situations in a special class session, and FIN 332 introduced Chartered Financial Analyst exam questions.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

The Finance department does not systematically gather information on graduates with finance minors, but, anecdotally, professors are aware of students with a minor in Finance working in the finance area following graduation.

Broad categories of employment for Finance graduates (including minors) are commercial loan officer, bank examiner, wealth manager, financial advisor, mortgage banker, financial manager, real estate broker, and financial analyst.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

The Finance department has an active Finance Advisory Council (FAC) made up of WKU Finance graduates and other financial professionals. The Council (and its three subcommittees—Student Engagement, Faculty Engagement, and Personal Financial Planning) meets two times each year to brainstorm, to gain insight about the program from the Finance faculty and staff, and to provide suggestions for improving student outcomes and to maintain the currency and relevancy of our curriculum offerings. Curricular changes that we have made to the Finance major, of course, have an impact on the minor as well since the minor does not have a separate list of course offerings. As an example, we recently implemented the usage of an extensive, hands-on, real-life, Financial Statement Analysis project in the Principles class (FIN 330). This change was intended

to benefit all students in that class—including the minors.

Faculty members also attend and speak at meetings of various associations for practitioners including the annual meeting of the Financial Planning Association, the Quinnipiac G.A.M.E. Forum, TD Ameritrade's LINC, and others. A majority of the Finance faculty maintain consulting roles in industry and have professional certifications that require continuing education credits demonstrating current knowledge in the field.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

The Finance minor is a low- to no-incremental cost offering that provides a valuable opportunity to business and other students to enhance their skills base. A solid foundation in business finance concepts better aligns our graduates with what employers seek, for every functional area of a business (operations, management, marketing, human resources, etc.) is impacted by financial budgeting concepts and the tracking of the use of financial resources in the business enterprise. The Finance minor provides students with additional managerial skills and analytical tools that are increasingly necessary to solve problems and to address the financial concerns of a company.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty					7	12
Number of NTE Faculty					1	4
Cost per SCHP					\$155	\$128
SCHP/FTF by Dept.	495	637	461	595	552	375
% SCH by FTF by Dept.	91.8%	97.4%	92.3%	88.9%	89.3%	75.8%
Upper Div Median Class Size	25	39	26	38	40	19
% Upper Div < 15 enrollment	12.2%	12.5%	17.4%	14.6%	7.1%	36.3%

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

{As per instructions, the table above refers to the *department* numbers. It allocates faculty FTEF across all three department programs (Major, Minor, and Certificate) and combines SCHP generated). This is done because these three programs are at the same degree level and fully share a common set of courses and faculty. The narrative below also refers to the *department*, not the minor}

A number of Finance faculty have received GFCB's AIM High Research Grants (ranging from \$5,000 - \$10,000) since the program was put in place in 2015.

The Center for Financial Success (CFS) receives ongoing external funding in the amount of \$4,500 per year. The Center has also received many non-recurring gifts. In part, these gifts have enabled us to hire 4 student financial counselors (2 other students volunteer in the Center). In Fall 2018 alone over 500 WKU students will have heard a presentation given by the CFS staff. In addition, they have conducted over 50 client meetings and are expanding their pilot program with University Experience courses. As a part of this partnership, CFS coaches give two presentations in the University Experience classes and use a hands-on budgeting assignment for students to manage their own budgets.

Over the last two years, the department has received dedicated external funding in the amount of close to \$10,000 to support student travel to conferences and competitions.

Finally, our first ever WKU Personal Financial Planning Symposium was almost exclusively funded (\$18,000+) by external sponsors. We fully expect our next Symposium (scheduled for September 2019) to be funded by external sponsors as well.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

The primary cost driver for us is faculty compensation—a variable that is solely driven by market forces. However, in terms of efficiency, our SCHP/FTF ratio in 2017-18 is almost 50% higher than the University median and has increased by 12% over the last 4 years. With the exception of FIN 161, our entire program is taught at the upper division. Yet, our median class size is in the upper 30s (40 in 2017-18) and the average enrollment (excluding the capstone class) in 2018-2019 academic year is 35! Over the last five years, our average for under-enrolled sections is 13% compared to the University average over the same period of 41%.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

Department goals, with reference to WKU's strategic plan:

- 1) Recruit, retain, and graduate high-quality students (*Preparation for the Global Stage; Completion & Success; Affordability & Accessibility*).
 - One of the largest slate of Honors offerings in GFCB.
 - Faculty mentored two Gatton Academy students in a research project resulting in a presentation and a best paper award at the Financial Education Association meeting.
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 - CFS works with several UC 175 classes to help incoming freshmen to create sustainable & realistic financial plan for their 4-year WKU journey.
 - Emphasis on experiential learning including hands-on Practicum classes, field trips and conferences, and competitions.
- 2) Improve the quality of life for our communities (A Regional Lighthouse; Quality of Life; Global Learning).
 - Representation on WKU Foundation Investment committee and leadership of the Budget Council
 - Dr. Rhoades serves as a subject matter expert regarding fiduciary duties for financial and investment advice and has served as an advocate with the US department of Labor, US Securities and Exchange Commission, and U.S. Congress on behalf of AARP, Better Markets and Save Our Retirement coalition.
- 3) Foster academic excellence through a program focused on core competencies (*Preparation for the Global Stage; Completion & Success; Continuing Education*).
 - To ensure student affordability, lowest cost alternatives for student materials have been adopted in every Finance class.
 - Flipped classrooms were implemented in the Principles of Finance and Applied Investments. Both provided good results and student satisfaction.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

Strategy 2.5: Partner with Kentucky high schools in offering a dual credit Personal Finance class. Number of sections and classes have increased at participating high schools.

Strategy 2.6: Dr. Rhoades' led the development and formation of the GFCB's Living Learning Community (commenced in Fall 2018) that facilitates the accomplishment of the goals relating to intervention strategies for incoming freshmen students who may not be college-ready.

Strategy 5.3 The Center for Financial Success offers peer counseling to students and makes presentations about personal financial topics to various groups in the university to provide advice regarding the cost of college, student debt, and loan repayments.

Strategy 7.2: Offer online courses for 2+2 students transferring from the KCTCS feeder schools so that these students can complete a BS in Management completely online as a WKU student.

Strategy 8.4 Professor Head is working on the Kentucky "Standards Revision and Writing Committee for Financial Literacy" S.B.1 (2017).

Strategy 9.1: Created a new course – Career Readiness in Finance that prioritizes career development.

Strategy 9.3: Working with Advisory Council on an active mentoring program, development of real-world case studies, job shadowing, and business tours to enhance experiential learning, externships, and clinical experiences for our students.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200

words)

Projections in the Kentucky Future Skills Future Demand, 2017-2021 provide forecasts of growth direction, the number of expected job openings, and an idea of expected pay for a number of job positions in the state. Forecasts for finance graduates are included in five jobs identified on the site: 1) Personal Financial Advisor - very fast growing, 506 positions with an average salary of \$88,363; 2) Financial Analyst – fast growing, 229 positions with salary ranging from \$66,955 to \$83,389; 3) Examiner – stable, 96 positions with salary ranging from \$47,543 to \$88,833; 4) Loan officer – fast growing, 631 positions with an average salary ranging from \$52,445 to \$84,379; and 5) Financial Specialist – fast growing, 152 positions with an average salary ranging from \$38,103 to \$61,552.

Also, as per Bureau of Labor Statistics (BLS), the job outlook for Personal Financial Advisors is projected to grow 15% from 2016 to 2026 (much faster than average), and 32% per 2016 Ernst Young study (https://www.ey.com/Publication/vwLUAssets/EY-the-next-generation-of-financial-advisors/\$FILE/EY-the-next-generation-of-financial-advisors.pdf).

The 2017 median pay for all personal financial advisors was \$90,640 per year, per BLS. Our recent graduates report starting annual salaries of \$35,000 to \$75,000, with some also receiving signing bonuses and/or annual bonuses during the first year.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

Finance faculty are very productive and contribute to the University, the Commonwealth, the Country and internationally through research and writing, committee membership and leadership, financial literacy efforts, and professional memberships. Dr. Chan was a Fulbright Scholar who taught in China in 2017. At least one member of the faculty has been nominated/won awards for excellence every year.

WKU's Personal Financial Planning (PFP) program was the first in the state that was CFP Board-Certified and has been in existence for 32 years. It is widely regarded as one of the strongest programs in the country. One of the distinctive features of our program is that it is housed in a Finance department (which is not often the case for PFP programs) in a College of Business—by far the location preferred by CFP Board as well as the employers.

The reputation of WKU's Personal Financial Planning has been enhanced via Professor Head's contribution to the Financial Planning Competency Handbook (1^{ST} and 2^{nd} editions), which serves as a vital reference tool for Program Directors and practitioners. The reputation has been further enhanced by Dr. Rhoades – who is frequently quoted in the national media, and who speaks at national conferences each year.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

In business finance, rapid technological advancements, intense global competition, and government regulation have contributed to the increased focus on the effective and efficient use of financial resources. Computing the cost of capital, valuation of the firm, and planning for the optimum acquisition of and allocation of resources have pointed to the emergence of finance as a critical business function.

As traditional pension plans have been replaced by 401(k), 403(b), IRA, and similar plans, individuals possess greater responsibility for saving and investing properly. Academic research has highlighted the need for personal financial literacy, but also the need for expert advice in financial planning and investments.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

Finance skills serve as an excellent complement to most business majors and some non-business majors, but especially:

- 1. For Marketing majors with a Sales emphasis. Having an effective and productive sales team is often where it starts at many financial services firms (for example, banks) as well as financial planning/advising firms. A finance minor would certainly give a leg up to a marketing major working in such a firm.
- 2. As technology advances, the Finance minor pairs very well with students majoring in data analytics and other information technology majors. Successful employees at financial firms will need more skills in data collecting, identifying relevant data, and presenting data in a variety of formats to "tell the relevant story" so that stakeholders can clearly understand impact of different strategies.
- 3. Health Care in 2019 and beyond is, by necessity, at the intersection of medicine and finance. With total health care expenses in the country approaching 20% of GDP, planning for health care costs has impacted both businesses and individuals.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

Graduation rates from colleges of business have been and are expected to continue to grow. The finance industry has been and is expected to continue to grow. Finance department enrollments have been and are expected to continue to grow.

Enrollment in the minor has increased 46% since 2013 and is now 2.5 times median university enrollments. The department's Student Credit Hour Production is up 77% in the minor.

Forecasts for finance graduates are: 1) Personal Financial Advisor - very fast growing, 506 positions; 2) Financial Analyst – fast growing, 229 positions; 3) Examiner – stable, 96 positions; 4) Loan officer – fast growing, 631 positions; and 5) Financial Specialist – fast growing, 152 positions.

WKU's Finance department looks forward to educating future finance professionals, including minors, to serve the needs of Kentucky and beyond.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

Prerequisite requirements were eliminated in two classes (FIN 331 and 350) giving students more flexibility and efficiency for students to complete required classes for the Certificate.

The Finance department has a listserv for current students in which job and internship opportunities, information about department events, deadlines, organizational meeting notices, etc. are shared with students. Listserv membership includes students pursuing the Certificate.

Commencing 1½ years ago, each semester Finance students are now provided with a 24-page Finance Department Career Planning Guide, containing major maps and substantial information on how to secure internships and jobs.

The Finance department possesses its own Marketing Committee, which undertook in the past three years a comprehensive recruitment plan with implementation of the following projects:

- 1. Finance Department social, held each Fall, to connect finance major and minor students with each other, faculty, FMA and FPA student chapters, and other resources;
- 2. Display case to highlight the Finance major, minors, programs, student organizations, and upcoming opportunities for students for experiential learning;
- 3. Annual newsletter, now delivered to over 1,500 alumni and supporters as well as to Finance major and minor students;
- 4. Extensive use of social media to connect with alumni, current and prospective students.

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What							
impediments currently exist? (maximum 200 words)							
In the current, tight, budgetary environment, the Finance minor is at the perfect intersection of value-add and almost zero resource needs, at its current enrollment levels. We have a highly efficient, very productive, and in-demand major (Finance). The minor does not require us to offer any additional classes. Yet, the minor helps a group of students hone a set of skills that are increasingly valued in the marketplace. The minor has seen modest to high growth over the last few years and we expect that to continue in the future.							
e. What recommendation would you put forward for the prog	gram (check one)?						
☐ Grow/Enhance (Significant strategic potential exists) ☐ Maintain (Core or important complementary program)							
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)						



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Finance
College:	Gordon Ford College of Business

Program Name:	Finance
Reference Number:	664
CIP Code:	52.0810
Degree Type (AB, BS, etc.):	B.S.
STEM+H Degree (Y/N)	N
Minimum Hours Required:	120
List Concentrations (if any):	Business Finance
	Personal Financial Planning

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The Finance department is a vibrant, productive member of the university community and beyond. While WKU, as a whole, has recently faced enrollment headwinds, enrollment in our major has increased 18.5% since 2013. In Fall, 2017, we had 263 majors— three times median University enrollment for baccalaureate programs. The same trend can be seen in our Student Credit Hour Production, which is up 44% from 2013.

Students in the major have the option of concentrating in Business Finance or Personal Financial Planning. There is no requirement for a minor.

The Finance department's Personal Finance class is an approved course under Explorations category 2, Social and Behavioral Studies, in the Colonnade program. This course sets students up for life-long financial literacy and success. The department also offers this class for dual credit at high schools in the Commonwealth and 4 different high schools participated in this program in 2017-2018.

We offer many Finance elective courses online for both Finance majors and other majors in the college. This affords students in the program flexibility in scheduling. There are enough courses offered online so that students who have completed a two-year program in the Kentucky Community and Technical College System can complete their Management degree entirely online.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	222	278	266	257	263	89
Conferrals	35	54	65	57	66	22
SCHP	1,515	2,110	1,816	2,114	2,173	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

As mentioned in the Program Summary section, our enrollments and SCHP have shown a high growth rate. Likewise, the rate of conferrals in Finance has increased 80% since 2013 and is now three times the University median.

The Principles of Finance class (FIN 330) is an integral part of business curriculum and is required for graduation for all business majors. It is populated by both business and non-business majors every semester.

Two Finance courses meet the need for electives for other majors at WKU without requiring business or finance prerequisites. The FIN 330 prerequisite for these two courses—FIN 331 Applied Investments (saving for retirement) and FIN 350 Risk Management and Insurance (preserving assets)— was dropped to provide students flexibility in their degree planning and to attract more nonbusiness students. These changes can also make a degree program less expensive. These courses offer insight to the basis for making rational decisions that impact one's quality of life and inspire lifelong learning. In the last academic year alone, 196 students completed FIN 331, which is offered every semester (including honors sections). Included in these enrollment numbers were 116 non-Finance business majors (59.1%) and thirteen non-business students (6.6%), including 3 Gatton Academy students.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

Finance faculty are extremely productive and contribute to the University, the Commonwealth, the Country and internationally through teaching, intellectual contributions, committee membership and leadership, financial literacy efforts, and policy making. As a Fulbright Scholar, Dr. Chan (he is also a University Distinguished Professor) taught in China in 2017. He has published 195 articles to date and is held in high regard nationally/internationally. Dr. Rhoades is considered a national authority on fiduciary standard and has testified a number of times in Washington D.C.

In non-capstone classes, last fall Finance faculty averaged 30 students in 400 level classes and averaged over 40 students in 300 level classes.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	201	l 3-14	2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	23	87.0%	27	88.9%	37	86.5%	26	88.5%	32	84.4%	2,513/69.4%
Progression			218	72.0%	230	74.8%	215	78.6%	223	77.6%	11,514/61.3%
150% Graduation Rate	37	64.9%	10	50.0%	13	61.5%	13	38.5%	21	61.9%	2,123/54.1%
Time to Degree	3.99 (N=34)	4.12 (N=53)		4.13 (N=65)		3.85 (N=56)		3.95 (N=66)		4.39

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

Department Student Learning Outcomes are based on qualities we believe are needed for a successful career in Finance. While all finance graduates are assessed in the Senior Assessment class, Personal Financial Planning students are, in addition, assessed on 72 SLOs (including subparts) in the capstone course (FIN 450). These SLOs are established by the Certified Financial Planner Board of Standards, Inc. for our Board-registered Personal Financial Planning concentration and its sister Certificate. The first two SLOs are Written Communication and Legal and Ethical Awareness. Since these skills are critical for success in the Finance profession, the department uses a scale of 4 out of 5 (using the College Rubric) for meeting expectations. This is higher than the college scale of 3 out of 5. Finance graduates exceeded expectations on both assessments with scores between 4.5 and 4.75.

Other program SLOs are:

- 1. All Finance graduates will be knowledgeable in the principles of business finance and investments.
- 2. Personal Financial Planning graduates will be knowledgeable in the principles of financial planning.

Closing the Loop: For both of these SLOs, the Department's desired outcome is that 85% of graduating seniors earn 70% or higher on the subject matter assessment. For PFP, 81% achieved the desired outcomes in the last academic year and results continue to improve over time. For principles, this objective was not met in 2013 (76.3%) or 2014 (67.5%). The 65 question assessment artifact was evaluated by Finance faculty and seven questions and one section were singled out for the observed underperformance. While these seven questions were evaluated, only one was changed for clarity. Curriculum was reviewed to ensure alignment and corrective actions were taken in Fall 2015 with additional coverage of material instituted in feeder courses. With these changes, results in 2015-2016 improved to 86% of graduating seniors earning 70% or higher on the assessment.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

The Finance department and individual faculty members are active on LinkedIn where a majority of Finance graduates maintain profiles. The department communicates through an alumni ListServ, an annual newsletter, semiannual meetings of the Finance Advisory Council, a large and active social media presence, a redesigned department website, and personal faculty contacts.

Graduates have been successful in securing careers in Finance-related fields. Using information from the Kentucky Future Skills Current Employment Outcome report from the Postsecondary Feedback Report, slightly less than 50% of graduates are employed in their area. This compares to the WKU Finance department's 69.3% (43/62) of graduates in the 2017-18 academic year who have career employment in the year following graduation. Another 4.8% (3/62) were pursuing advanced degrees. Three years after completion the Postsecondary Feedback Report indicates approximately 53% of business graduates are employed; in contrast three years after completion, 82.2% (37/45) of WKU Finance graduates are employed in Finance-related fields. Many have also obtained career-related certifications. Five years after graduation, the Postsecondary Feedback Report indicates that, in general, slightly more than 60% are employed; however, WKU's graduates have over 76% employment in the field (29/38).

Broad categories of employment for Finance graduates are commercial loan officer, bank examiner, wealth manager, financial advisor, mortgage banker, financial manager, real estate broker, and financial analyst.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

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Feedback received from practitioners, faculty at other institutions, and our FAC led to the creation of the FIN 400/401 PFP Practice Management (first offered in Fall 2018), which provides greater training in financial coaching and the use of relevant software. We also incorporated project-based learning (via major projects with real-world clients) into our FIN 444 course this year.

Employers inform us that our graduates possess (relative to graduates of other universities) the strong financial counseling and interpersonal skills that employers so strongly desire and an outstanding knowledge of investments.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

The vast majority of our students switch into our program once they have been exposed to the discipline in FIN 161 or 330. Over the 2013 – 2017 period, the average Persistence of Finance students is 87% and the average Student Progression is 76%. The corresponding university numbers are 72 and 61% respectively. The average time to complete for us is about 4 years—about 25% faster than that for the university.

Finance students receive many opportunities to tour firms, practice networking skills while attending professional conferences/symposia/events, and to undertake internships.

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a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
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- 2) Improve the quality of life for our communities (A Regional Lighthouse; Quality of Life; Global Learning).
 - Representation on WKU Foundation Investment committee and leadership of the Budget Council
 - Dr. Rhoades serves as a subject matter expert regarding fiduciary duties for financial and investment advice and has served as an advocate with the US department of Labor, US Securities and Exchange Commission, and U.S. Congress on behalf of AARP, Better Markets and Save Our Retirement coalition.
- 3) Foster academic excellence through a program focused on core competencies (*Preparation for the Global Stage; Completion & Success; Continuing Education*).
 - To ensure student affordability, lowest cost alternatives for student materials have been adopted in every Finance class.
 - Flipped classrooms were implemented in the Principles of Finance and Applied Investments. Both provided good results and student satisfaction.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

Strategy 2.5: Partner with Kentucky high schools in offering a dual credit Personal Finance class. Number of sections and classes have increased at participating high schools.

Strategy 2.6: Dr. Rhoades' led the development and formation of the GFCB's Living Learning Community (commenced in Fall 2018) that facilitates the accomplishment of the goals relating to intervention strategies for incoming freshmen students who may not be college-ready.

Strategy 5.3 The Center for Financial Success offers peer counseling to students and makes presentations about personal financial topics to various groups in the university to provide advice regarding the cost of college, student debt, and loan repayments.

Strategy 7.2: Offer online courses for 2+2 students transferring from the KCTCS feeder schools so that these students can complete a BS in Management completely online as a WKU student.

Strategy 8.4 Professor Head is working on the Kentucky "Standards Revision and Writing Committee for Financial Literacy" S.B.1 (2017).

Strategy 9.1: Created a new course - Career Readiness in Finance that prioritizes career development.

Strategy 9.3: Working with Advisory Council on an active mentoring program, development of real-world case studies, job shadowing, and business tours to enhance experiential learning, externships, and clinical experiences for our students.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

Projections in the Kentucky Future Skills Future Demand, 2017-2021 provide forecasts of growth direction, the number of expected job openings, and an idea of expected pay for a number of job positions in the state.

Forecasts for finance graduates are included in five jobs identified on the site: 1) Personal Financial Advisor - very fast growing, 506 positions with an average salary of \$88,363; 2) Financial Analyst – fast growing, 229 positions with salary ranging from \$66,955 to \$83,389; 3) Examiner – stable, 96 positions with salary ranging from \$47,543 to \$88,833; 4) Loan officer – fast growing, 631 positions with an average salary ranging from \$52,445 to \$84,379; and 5) Financial Specialist – fast growing, 152 positions with an average salary ranging from \$38,103 to \$61,552.

Also, as per Bureau of Labor Statistics (BLS), the job outlook for Personal Financial Advisors is projected to grow 15% from 2016 to 2026 (much faster than average), and 32% per 2016 Ernst Young study (https://www.ey.com/Publication/vwLUAssets/EY-the-next-generation-of-financial-advisors/\$FILE/EY-the-next-generation-of-financial-advisors.pdf).

The 2017 median pay for all personal financial advisors was \$90,640 per year, per BLS. Our recent graduates report starting annual salaries of \$35,000 to \$75,000, with some also receiving signing bonuses and/or annual bonuses during the first year. Many personal financial advisors own their own firms, and some of our graduates possess high six-figure or even seven-figure annual compensation.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

WKU's Personal Financial Planning (PFP) program was the first in the state (and part of a select few nationwide) that was CFP Board Registered and has been in existence for 32 years. It is widely regarded as one of the strongest programs in the country. One of the distinctive features of our program is that it is housed in a Finance department (which is not always the case for PFP programs) in a College of Business—by far the location preferred by CFP Board as well as the employers. This arrangement allows our students to receive a solid foundation of broader financial concepts and investments—well beyond that achieved in most other programs.

The reputation of WKU's Personal Financial Planning has been enhanced via Professor Head's contribution to the Financial Planning Competency Handbook (1ST and 2nd editions), which serves as a vital reference tool for Program Directors and practitioners (https://www.financial-planning.com/news/are-financial-planning-educators-reshaping-the-industry). The reputation has been further enhanced by Dr. Rhoades – who is frequently quoted in the national media, participates on the committees of several financial planning organizations, and who is frequently invited to speak at national conferences.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

WKU's PFP Program has almost doubled in size over the past 3 years. It attracts top students, and our ongoing efforts to network with employers are yielding dividends. In the last few semesters many of our top students have received job offers from the top employers in the field such as Dimensional Fund Advisors, Blackrock, Vanguard, etc. We have had 6 winners in the last 6 years for the prestigious TD Ameritrade Institutional NextGen Scholarship (nationwide there are only 12 winners each year). One of our graduates from 2014, Zac Ritchey, was ranked #49 in 2017 on Forbes's list of America's Top Millennial Advisors.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

In business finance, rapid technological advancements, intense global competition, and government regulation have contributed to the increased focus on the effective and efficient use of financial resources. Computing the cost of capital, valuation of the firm, and planning for the optimum acquisition of and allocation of resources have pointed to the emergence of finance as a critical business function.

Demographic and societal trends (such as the decline of pension plan offerings) are pushing the demand for Personal Financial Planning graduates to stratospheric levels. Over the last 2 - 3 years, our program has focused extensively on out-of-classroom experiential opportunities such as networking, internships, conferences, etc. and those experiences have further increased the value of our graduates. Also in the planning area, as technology advances, Finance graduates will need more skills in data collecting, identifying relevant data, and presenting data in a variety of formats to "tell the relevant story" so that stakeholders can clearly understand impact of different strategies. This requires critical thinking and in-depth knowledge of finance, good communication skills, team skills, and data visualization skills. This development opens opportunities to work with other departments, to potentially promote a minor in data analytics and to add more technical components to our Finance curriculum.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

As per the National Center for Education Statistics, the largest number of degrees, by far, are conferred in the fields of business. As referenced before (as well as below), BLS expects higher than average growth for finance graduates. Our enrollments have been growing (18.5% since 2013) and we expect that trend to continue. Our department's SCHP is up 44% and our enrollments are three times median university enrollments.

Forecasts for finance graduates are:

- 1) Personal Financial Advisor very fast growing, 506 positions;
- 2) Financial Analyst fast growing, 229 positions;
- 3) Examiner stable, 96 positions;
- 4) Loan officer fast growing, 631 positions; and
- 5) Financial Specialist fast growing, 152 positions.

The demographic trends over the next 10-20 years support increased demand for personal financial planners, nationwide, at a time when many existing financial advisors are retiring. While technological developments will foster the delivery of financial services in a more cost-effective fashion, individuals and families with higher incomes will continue to need, and desire, integrated financial planning that "connects all the dots" and addresses not only the technical aspects of planning, but also individual life coaching.

WKU's Finance department looks forward to educating future finance professionals to serve the needs of Kentucky and beyond.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

One of the biggest change that we have made over the last few years is the creation of FIN 300— Career Readiness. This class is a requirement for admission to the major and identifies career paths in finance. In addition, students learn about the profession so they can focus on personal development and be better prepared for a successful finance career while completing degree requirements. Students also learn the importance of internships, conference attendances, firm visits, and competitions. The class also developed, and is expanding, a mentorship program.

In 2017, we created a 24-page Career Planning Guide for students, containing major maps and substantial information on how to secure internships and jobs. We also created our own Marketing Committee, which has formulated a comprehensive recruitment plan and has implemented the following projects:

- 1. Finance Department social, held each Fall, to connect finance major and minor students with each other, faculty, FMA and FPA student chapters, and other resources;
- 2. Display case to highlight the Finance major, minors, programs, student organizations, and upcoming opportunities for students for experiential learning;
- 3. Annual newsletter, now delivered to over 1,500 alumni and supporters as well as to Finance major and minor students;
- 4. Extensive use of social media to connect with alumni, current and prospective students.

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)

Future growth in our program is, in large part, only limited by the resources that are available to us. Both our Business Finance graduates as well as PFP graduates are uniquely positioned to succeed. With our recent efforts to emphasize skills that go beyond classroom learning, the demand for our graduates—including demand from national firms—is increasing. However, with median <u>upper division</u> class sizes of near 40, our ability to grow any further is restricted. As the recent Financial Literacy efforts in the state show, there is an increasing awareness in the society to address these issues. We are uniquely positioned to address the booming demand but would need additional faculty.

The industry is also increasingly looking for graduates who have had hands-on training with state-of-the-art technology—our new course (FIN 400/401) is a step in that direction. We would need to have a Trading Center with terminal access for us to be able to have an impact with our other concentration as well. Finally, our Center for Financial Success has accomplished great things over the first five years of its existence. However, for the Center to keep growing, additional resources—including a full-time Director—will be needed.

ncluding a full-time Director—will be needed.							
e. What recommendation would you put forward for the prog	gram (check one)?						
☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)						
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)						



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Management
College:	Gordon Ford College of Business

Program Name:	International Business
Reference Number:	569
CIP Code:	521101
Degree Type (AB, BS, etc.):	BS
STEM+H Degree (Y/N)	N
Minimum Hours Required:	73
List Concentrations (if any):	

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The International Business major is an interdisciplinary program that provides a broad international business perspective for students who plan careers in organizations with an international presence. We realigned program requirements in 2016 in response to stakeholders' input. The International Business major requires the business core plus 73 hours of professional elective courses and leads to a Bachelor's of Science degree. Major courses build competencies in business acumen, language, geopolitical understanding, and cultural intelligence. Students choose an emphasis area of one of four tracks: (a) International Management, (b) Global Supply Chain Management, (c) Global Entrepreneurship, or (d) Global Trade and Economy. These emphasis areas were developed in concert with reported labor demands in International Business positions. A required study abroad course or international business internship further enhances the student experience and is a key part of our program model.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	90	83	88	91	88	89
Conferrals	21	33	19	19	15	22
SCHP	476	351	456	501	441	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

International business courses are electives of several programs across campus, such as Arabic for Business Concentration, Leadership, and International Affairs. The program attracts international students, with an average of 1.87% of ALL WKU international students majoring in International Business. The relevant and comprehensive curriculum design meets the needs of students with various interests and prepares them for careers in international business. We work closely with the OIP and Study Abroad program to integrate study abroad and internship program opportunities to our students.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

The program prepares graduates to succeed in the global economy, promotes diversity in people and thought, equips them to be informed, competent, knowledgeable, and engaged citizens and leaders.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14		2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	6	100%	16	56.3%	17	58.8%	25	52%	13	69.2%	69.4%
Progression	N/A	N/A	86	68.6%	74	64.9%	83	65.1%	72	68.1%	61.3%
150% Graduation Rate	N/A	N/A	1	N/A	7	85.7%	7	57.1%	5	40.%	54.1%
Time to Degree	3.	37	3.	09	3.	.72	3.	.84	3.	.72	4.39

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

Management courses are aligned with the GFCB undergraduate learning outcomes of 1. Students will be able to communicate effectively in written and oral forms 2. Students will demonstrate an awareness of legal and ethical issues in business and society 3. Students will demonstrate strategic problem-solving skills using integrated business knowledge 4. Students will be able to explain the increasingly integrated world economy and the forces behind this integration 5. Students will be able to pass an exam of discipline concepts and terms. The GFCB has in place a mechanism for assessing learning outcomes through the AOL (Assurance of Learning) process. The AOL committee is responsible for the review of the assurance of learning process and outcomes for the undergraduate degree program. The learning objectives are assessed using direct and indirect measures, which include case studies, senior exit exams, course-embedded assignments, alumni surveys, and surveys. Whenever case studies are used to measure a goal, the AOL committee re-examines the current rubric for that goal and ensures the rubric is still an appropriate measure.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

The students are required to take a Senior Assessment course in their last semester of study. Requirements for this course include completion of a comprehensive exam, program, internship, and career services feedback instruments. Items on the comprehensive exam measure business knowledge and skills attainment. The feedback instruments allow to provide feedback and recommendations for the program, internships, and career services. The comprehensive exam and feedback results are analyzed with appropriate action taken.

International Business majors have a number of professional opportunities available. Relevant positions include first line supervisors, management analysts, business operation specialists, production and planning expediters, wholesale and retail buyers, cargo and freight agents, procurement agents, international banking analysts, and international human resource practitioners.

An example of student success is Erin Asher who earned a Bachelor's degree in International Business and Economics in 2015. After graduation, she moved to the Netherlands to pursue a Masters in Spatial Economics at Vrije Universiteit Amsterdam as a Fulbright Scholar. She is currently employed as an economic analyst at Wilmot, a consulting organization that focused on sustainability-related issues. In this role she evaluates the impact public and private projects have on local economies.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

The management department advisory council provides input and feedback for our program and we make changes as needed. For example, in 2015, our stakeholders indicated a high level of demand in the area for supply chain management professionals. We collaborated with other departments across the university and crafted an area of emphasis in Supply Chain Management. Another stakeholder-prompted change is the addition of the Global Entrepreneurship area of emphasis. Kentucky is one of the fastest growing states in developing international trade (Kentucky World Trade Center, 2018).

Approximately 80% of the import/export firms are small to medium businesses. As a result, understanding the unique features of international business is key for entrepreneurs. The Global Entrepreneurship program includes coursework to prepare students for starting and/or working in small and family business firms with an international component.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

The program prepares graduates to succeed in the global economy, promotes diversity in people and thought, equips them to be informed, competent, knowledgeable, and engaged citizens and leaders.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16 2016-17		2017-18	17/18 Univ.
						Median
Number of TE Faculty					12	12
Number of NTE Faculty					3	4
Cost per SCH					\$115	\$128
SCHP/FTF by Dept.	528	500	507	602	572	375
% SCH by FTF by Dept.	83.1%	81.5%	75.7%	72.5%	67.6%	75.8%
Median Class Size by Level	27	27	29	29	30	19
% Under-Enrolled Sections	20.2%	19.5%	18.0%	15.2%	16.3%	36.3%
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

The Management Department consistently offers courses in the Winter and Summer terms. During the Winter terms a variety of at least seven different classes are offered: MGT 200 (Legal Environment of Business, MGT 210 (Organization and Management) MGT 305 (Ethics and Critical Thinking), MGT 311 (Human Resource Management), MGT 313 (Decision Modeling), MGT 314 (Operations Management) MGT 361 (Business Communication Fundamentals) and MGT 498 (Strategy and Policy). The annual total enrollment for the Winter term is an average of 104 total students with a grand total of 521 students completing classes over the past five years.

During the Summer term a variety of at least eight different classes are offered: MGT 200 (Legal Environment of Business, MGT 210 (Organization and Management) MGT 305 (Ethics and Critical Thinking), MT 311 (Human Resource Management), MGT 313 (Decision Modeling), MGT 314 (Operations Management) MGT 361 (Business Communication Fundamentals), MGT 417 (Organizational Behavior) MGT 400 (Employment Law) and MGT 498 (Strategy and Policy). The annual total enrollment for the Summer term is an average of 230 students with a grand total of 1,153 students completing classes over the past five years.

All of these courses generate revenue from DELO of which is used to partially fund the Management Department's annual budget.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

All of the Management faculty members participate in the delivery of all programs offered from the department.

As summarized above, Management Department programs are highly efficient. Our COST per SCH is over 10% lower than the University median while our SCHP/FTF is over 52% higher than the University median. Our median class size is over 57% higher than the University median. Under-Enrolled sections are over 50% lower than the University median.

According to information provided on the Academic Affairs web site for CAPE, the Management Department ranks second in undergraduate student enrollment and ranks third in SCHP per Full-Time faculty member.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

- a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)
 - (1) Diverse Body of Students Establish regional, national and international conduits for attracting graduate and undergraduate students. The International Business program attracts international students with 1.26% of international students studying IB in Fall 2018. The percentage of international students studying International Business has consistently been an average of 1.87% or greater for the past eight years.
 - (2) Regional Lighthouse Establish WKU as a regional lighthouse to provide resources, attract talent, and nurture intellectual capital in the communities we serve. Career paths for international business focus on jobs that are needed in the region and in the state, such as Global Supply Chain management. Recent DHL research indicates that demand for Global Supply Chain professionals exceeds supply by a ratio of 6:1. Our ability to produce job-ready entry level supply chain professionals will support economic development and industrial operations in the communities we serve.
 - (3) Preparation for the Global Stage Cultural competence is a learning outcome for the International Business program. We have courses that are available to students from other programs that supports the development of this competency in WKU students. Another key aspect of the program is geopolitical understanding, gained by the interdisciplinary nature of the curriculum and the focus on the interplay between cultural, economic, social, and political factors.
 - (4) Global Learning Leverage WKUs international reach to create a dynamic and diverse university community with robust global learning for every student. Students in the International Business major complete a number of courses with an international or global focus. In addition, either a study abroad or related internship are required to extend learning.
- b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

Strategy 1.1 Increase cultural competence among students, staff, and other post-secondary professionals. A major outcome of our program is cultural competence. Toward that end, our International Business courses provide a framework and experiences to develop cultural competence. We also have a Cultural Component requirement that may be met from courses offered across campus.

Strategy 9.3 Work with the employer community, foundations, and state agencies to provide work and learn opportunities including experiential or project-based learning, co-ops, internships, externships, and clinicals. International Business students are required to complete either a study abroad course or related internship. We work closely with the students, OIP, and employers to develop applicable experiences to enhance the student experience in this way. We offer extracurricular and co-curricular workshops and presentations to engage the students in study abroad and internship planning activities.

Strategy 9.5 Identify current and emerging workforce demands, entrepreneurial opportunities, and stackable credentials that can lead to additional education/training. Current and emerging workforce demands drive the alignment of the program with job opportunities for our students. The recent addition of the four tracks (International Management, Global Supply Chain Services, Global Entrepreneurship, and Global Trade and Economy) demonstrate this focus.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

Kentucky is home to 513 foreign-owned companies, employing 112,072 people (Kentucky Cabinet for Economic Development Report, December 2018). While the firms are part of a number of different sectors, the majority are manufacturing oriented. Kentucky ranks 3rd in U.S. Car/Truck production and serves as a hub in the southern automotive belt. The automotive industry employs 89,515 workers directly and supports another 50,000 workers in related businesses. In addition to the Original Equipment Manufacturers such as Toyota, General Motors, and Ford, there are hundreds of components and services suppliers. Aluminum is another core industry for Kentucky, with 45 facilities employing 10,000 employees. According to the U.S. Geological Survey, Kentucky has the greatest capacity to produce aluminum in the country. For these types of facilities,

there are administrative and management positions for which the International Business program serves as professional preparation. There is current demand and expected growth for these types of positions within the state. In particular, in the South-Central Kentucky area the number of first line supervisor positions grew by 2.8% in the past five years, with expected .2% annual growth for the next five years. For the same period and region, management analyst positions increased by 3.2%, with 1.4% expected annual growth. Production planners and expediters positions increased by 2.1%, with .7% expected annually.

The International Business program prepares students for careers requiring cultural competence and business skills locally and abroad.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

Learning to work with a diversified workforce is crucial for success in business today. Students are prepared and trained through classroom participation, group projects, extra-curricular student organizations (example Business Without Borders), study abroad courses and internships to obtain cultural proficiency.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

The program prepares graduates to succeed in the global economy, promotes diversity in people and thought, equips them to be informed, competent, knowledgeable, and engaged citizens and leaders.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

Fortune 500 companies predict the greatest revenue streams will come from emerging markets. As such, organizations need employees who can understand the needs of increasingly diverse customers and work effectively in multicultural settings. In a recent survey from the Economist Intelligence Unit, 90% of executives cite cross cultural management as their top challenge. Working across borders requires a unique set of business skills, including cultural competence. The IB program provides foundational knowledge for developing cultural competence. Because cultural competence is in demand by the business community (and others), one strategy for increasing demand is the development of a Cultural Competency Certificate. The Cultural Competency Certificate would pair with many programs across the university and add value to the student education experience.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

Growing emerging markets, demographic shifts, rapid innovation, and green-related technology trends have and will continue to drive the need for professionals with international business preparation. By aligning our curriculum with needed skills in International Management, Global Supply Chain Management, Global Entrepreneurship, and Trade and Economy, we are equipping students with the educational foundations and experiences for competitiveness in this ever-changing environment.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

In 2016, we conducted a needs assessment and realigned the International Business major to better serve students and more effectively align in the academic marketplace. We discussed needs with advisory council members and benchmarked comparable peer, aspirant, and competitive benchmark groups.

We found best practices for IB programs include (1) an emphasis on cultural competence, (2) a deeper concentration in business disciplines such as International Management, International Entrepreneurship, and Trade and Economy; and (3) the integration of global business topics such as sustainable business and global supply chain management.

We made curricular changes to create a common foundation for international business study and provide a more structured interdisciplinary academic experience than the previous design. The focused tracks better develop business and cultural competencies needed by business and industry. This approach offers better academic preparation for students with career aspirations in international business.

In 2018, we modified course sequencing to provide additional flexibility for students in program planning.

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)

The International Business major attracts international and domestic students due to the increasing interconnection of the global economy. Kentucky has seen increases in importing and exporting, with hundreds of new small businesses created. These trends provide new job opportunities for our students and exciting programming for WKU. To enhance the program and better serve students, we will evolve into an even more experiential, applied student experience.

Competition for talent is a key concern for most organizations and will continue to be as Baby Boomers retire. Simply put.

organizations must develop creative solutions to build their talent pipeline. We intend to support that effort with innovative connections with international businesses locally and abroad.							
e. What recommendation would you put forward for the program (check one)?							
☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)						
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)						



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Management
College:	Gordon Ford College of Business

Program Name:	Management
Reference Number:	723
CIP Code:	520201
Degree Type (AB, BS, etc.):	BS
STEM+H Degree (Y/N)	N
Minimum Hours Required:	73
List Concentrations (if	Business Administration
any):	Human Resources Management

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The Business Administration concentration develops student's abilities to analyze and to manage a wide range of business situations. The development occurs by building on fundamental business functions studied in the core courses. The program is for students who intend to manage an independent business or a unit of a larger organization and who want a broad curriculum.

The Human Resources Management concentration is designed to develop skills for managing an essential resource of any organization – its employees. Because of the importance of increasing human productivity, human resource management is viewed as a key contributor to organizational effectiveness and achievement of strategic goals. Human resources managers are frequently involved in top-level decision making. The Society for Human Resources Management (SHRM) acknowledges that our HR curriculum aligns with its guidelines. We are one of only a few dozen U.S. universities with this recognition.

We also offer the Plus 2 Business Administration online option to those students who wish to build on an existing associate degree or who wish to continue their university education. The program consists of coursework in accounting, computer information systems, economics, finance, management and marketing to deepen a student's understanding of the world of business and develop his or her managerial skill set.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	524	528	541	639	621	89
Conferrals	115	106	107	142	177	22
SCHP	3528	3783	4330	5323	5268	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The Management Department offers four classes in the Gordon Ford College of Business core courses. All majors within the GFCB complete the same core course requirement. These classes are MGT 200 (Legal Environment of Business) MGT 210 (Organization and Management) MGT 314 (Operations Management) and for the capstone course students may choose either MGT 498 (Strategy and Policy) or ENT 496 (Small Business Analysis and Strategy).

In addition, the Management program consistently offers classes exclusively for Honors students: MGT 210 (Organization and Management) MGT 314 (Operations Management) MGT 410 (Senior Seminar in Management) MGT 305 (Ethics and Critical Thinking). The Management program has also delivered HEECs for the Honors students: MGT 361 (Business Communication Fundamentals) MGT 498 (Strategy and Policy) MGT 313 (Decision Modeling) MGT 417 (Organizational Behavior).

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

The Management Department consistently offers the majority of classes through varied methods such as face to face and online. In addition, classes are also consistently offered throughout the week as well as during the day and evening hour in order to meet student demand and provide flexibility to students.

The Management program also offers courses to our regional campuses. Those classes are MGT 200 (Legal Environment of Business) MGT 417 (Organizational Behavior) MGT 313 (Decision Modeling) MGT 314 (Operations Management) MGT 305 (Ethics and Critical Thinking) MGT 416 (Management of Labor Relations) MGT 326 (Managing Projects in Organizations).

3. SUCCESS OF STUDENTS

a. Data Provided by IR	201	2013-14		2014-15		2015-16		2016-17		7-18	17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	47	70.2%	50	74.0%	62	77.4%	56	60.7%	103	68.0%	69.4%
Progression	N/A	N/A	429	66.0%	446	65.0%	498	63.1%	542	65.1%	61.3%
150% Graduation Rate	49	63.3%	54	46.3%	32	62.5%	34	35.3%	46	47.8%	54.1%
Time to Degree	4	.36	4	.16	4	.29	4	.04	3	.71	4.39

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

Management courses are aligned with the GFCB undergraduate learning outcomes of 1. Students will be able to communicate effectively in written and oral forms 2. Students will demonstrate an awareness of legal and ethical issues in business and society 3. Students will demonstrate strategic problem-solving skills using integrated business knowledge 4. Students will be able to explain the increasingly integrated world economy and the forces behind this integration 5. Students will be able to pass an exam of discipline concepts and terms. The GFCB has in place a mechanism for assessing learning outcomes through the AOL (Assurance of Learning) process. The AOL committee is responsible for the review of the assurance of learning process and outcomes for the undergraduate degree program. The learning objectives are assessed using direct and indirect measures, which include case studies, senior exit exams, course-embedded assignments, alumni surveys, and surveys. Whenever case studies are used to measure a goal, the AOL committee re-examines the current rubric for that goal and ensures the rubric is still an appropriate measure.

Most recent examples of program improvement: MGT 210 (Principles of Management) adopted a standardized book and coverage for all instructors, emphasizing expected coverage. MGT 200 (Legal Environment of Business) adopted a standardized book and coverage for all instructors, emphasizing expected coverage. MGT 413 (International Human Resource Management) became a newly implemented course of which the content was based on the body of knowledge used for Global Professional Human Resources certification programs. MGT 326 (Managing Projects in Organizations) was designed in response to industry demand to train students to more effectively serve the needs of organizations through enhanced project management and communication skills.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

Students are required to take a Senior Assessment course in their last semester of study. Requirements for this course include completion of a comprehensive exam, program, internship, and career services feedback instruments. Items on the comprehensive exam measure business knowledge and skills attainment. The feedback instrument allows the opportunity to incorporate feedback and make recommendations for the program, internships and career services. The comprehensive exam and feedback results are analyzed with appropriate action taken.

Three years after graduation, 54% of graduates are employed with 15% in the manufacturing industry and 14% in the finance and insurance industry. According to the 2017 South Central Kentucky Open Jobs Report (available from the Bowling Green Chamber of Commerce) within a 50-mile radius of the South-Central Kentucky Region, there are 50,942 open positions in six sectors: manufacturing, construction, healthcare, hospitality, professional services, transportation and logistics. In five and ten years, the open positions demand projection for the 10-county region (Warren, Simpson, Logan, Butler, Edmonson, Hart, Barren, Metcalfe, Monroe and Allen) is 22,401 and 45,509 respectively. These statistics show that there will be high demand for our graduates in our regional area. Moreover, nearly every type of organization offers positions in management and business administration. The possibilities for management graduates are far-reaching both nationally and internationally.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

The Management Advisory Board that consists of members from the business community meet with the Management faculty each semester to offer current and specific advice on our programs in order to equip graduates with the skills needed for success in today's economic and business environment. An example of improvement to the program can be demonstrated through the Board's recommendation of adopting a plan to help students earlier identify their program of interest and career opportunities. Currently the Management program offers a mandatory one- hour course for career preparation (MGT 499 – Senior Assessment). We are taking steps to move that course earlier in the curriculum so that students can take advantage of these learning opportunities before they finish their sophomore or junior year of college. Within that course we would like to arrange for peer to peer mentoring so that students can learn from each other and experience the fundamentals of leadership

and self-responsibility. In addition, we would incorporate a career exploration software product named Jobzology. Jobzology is a tool that allows students to discover their career path by taking assessments and explore different career paths that make the most of their unique interest and values. It helps students prepare for future jobs by learning what strengths they bring to the table and what type of work environment they need in order to succeed.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

We seek to produce graduates who have a strong foundation in management with the necessary analytical skills to assume leadership roles in business and society.

The vast majority of our graduates who have a concentration in Human Resource Management have a job before graduating or within a few months. An example is Hannah Saylor a May 2018 graduate who is employed as an HR Manager for Stupp Bridge Co. with a starting salary at \$55,000.

In addition, Aaron West, a recent Management graduate (Winter 2018) had both J.B. Hunt and Speedway offering him a management position and was ultimately hired by J.B. Hunt at a starting salary of \$50,000.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty					12	12
Number of NTE Faculty					3	4
Cost per SCH					\$115	\$128
SCHP/FTF by Dept.	528	500	507	602	572	375
% SCH by FTF by Dept.	83.1%	81.5%	75.7%	72.5%	67.6%	75.8%
Median Class Size by Level	27	27	29	29	30	19
% Under-Enrolled Sections	20.2%	19.5%	18.0%	15.2%	16.3%	36.3%
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

The Management Department consistently offers courses in the Winter and Summer terms. During the Winter terms a variety of at least seven different classes are offered: MGT 200 (Legal Environment of Business, MGT 210 (Organization and Management) MGT 305 (Ethics and Critical Thinking), MGT 311 (Human Resource Management), MGT 313 (Decision Modeling), MGT 314 (Operations Management) MGT 361 (Business Communication Fundamentals) and MGT 498 (Strategy and Policy). The annual total enrollment for the Winter term is an average of 104 total students with a grand total of 521 students completing classes over the past five years.

During the Summer term a variety of at least eight different classes are offered: MGT 200 (Legal Environment of Business, MGT 210 (Organization and Management) MGT 305 (Ethics and Critical Thinking), MT 311 (Human Resource Management), MGT 313 (Decision Modeling), MGT 314 (Operations Management) MGT 361 (Business Communication Fundamentals), MGT 417 (Organizational Behavior) MGT 400 (Employment Law) and MGT 498 (Strategy and Policy). The annual total enrollment for the Summer term is an average of 230 students with a grand total of 1,153 students completing classes over the past five years.

All of these courses generate revenue from DELO of which is used to partially fund the Management Department's annual budget.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

All of the Management faculty members participate in the delivery of all programs offered from the department.

As summarized above, Management Department programs are highly efficient. Our COST per SCH is over 10% lower than the University median while our SCHP/FTF is over 52% higher than the University median. Our median class size is over 57% higher than the University median. Under-Enrolled sections are over 50% lower than the University median.

According to information provided on the Academic Affairs web site for CAPE, the Management Department ranks second in undergraduate student enrollment and ranks third in SCHP per Full-Time faculty member.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

The Management program directly addresses the WKU Strategic Plan as follows:

A Diverse Body of Students:

*Recruit undergraduate students who are college-ready and who want to be members of the WKU family.

Management faculty fully participate in all recruitment efforts with active representation at all Head for the Hill and Master Plan events. Contact information is gathered from potential students in order to maintain a relationship and establish connections to our programs. In addition, faculty are also engaged in the GFCB Majors and Minors Fair that provide additional information about our programs to students.

*Engage in a comprehensive program to ensure WKU has an appropriate mix of study options and efficiently deploy scarce resources

*Completion and Success:

Develop a peer mentoring system. As advocated by our Management Advisory Council we are preparing a plan that allows undergraduates to participate in a mentoring program that allows growth for both the mentor and protégé.

*Diversity, Equity and Inclusion:

The Management Department embraces diversity. As an example: 54% of the faculty are female and 31% of the faculty represent African American, Chinese, Indian and Turkish heritage.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

The program continues to align with statewide strategic plans by elevating the level of education of the adults of the Commonwealth (Adult Education Act 2000). It also provides statewide access to baccalaureate degree of a quality at or above the national average. In addition, the program provides through its Plus 2 program, a pathway program for KCTCS graduates to earn a bachelor's degree (Objective 7 – 2016-2021 Kentucky Strategic Agenda for Postsecondary and Adult Education. All faculty are encouraged to regularly attend educational sessions sponsored by WKU CITL to meet Objective 8.2: Provide more pedagogical training and professional development opportunities for faculty members to strengthen learning and improve student success.

Internships in the Management program have grown significantly (a total of 184 completed internships) over the past five years from 11 in (2013) 24 in (2014) 21 in (2015) 32 in (2016) 56 in (2017) to 40 (2018) demonstrating a 264% increase and meets Objective 9.3: Work with the employer community, foundations, and state agencies to provide "work and learn" opportunities, including experiential or project-based learning, co-ops, internships, externships and clinical experiences.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

Management programs have consistently grown in enrollment and graduation and thereby increases the number of Kentucky residents with an undergraduate degree. College graduates earn substantially more than high-school graduates leading to a higher standard of living both individually and collectively in Kentucky. The college educated workforce is one of the primary drivers of attracting new businesses to the Commonwealth. The faculty and students' constant engagement with businesses and research is helping to modernize the workforce, produce applied research that creates jobs and power a knowledge-based society. The program prepares graduates to succeed in the global economy, promotes diversity in people and thought, equips them to be informed, competent, knowledgeable, and engaged citizens and leaders.

Kentucky Future Skills and Future Demand data (2017-2021) indicates that Management Occupations are categorized as "GROWING" in terms of Occupational Growth with an average wage of \$89,384.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

The Plus 2 program is distinctive in delivery as it allows a student with an Associate Degree to obtain a Bachelor Degree by taking online courses. Most of these individuals work and therefore the flexibility of completing their degree online is appealing. Since 2013, the program has grown from 32 students to current enrollment of 98 students. This is a 206% increase in enrollment for the Plus 2 program.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

The Business Administration major contains a concentration in Human Resource Management. The Society for Human Resources Management (SHRM) acknowledges that our HR curriculum aligns with its guidelines. We are one of only a few dozen U.S. universities with this recognition. Census data over the past five years indicates extremely healthy growth in enrollment as demonstrated by an increase to 111 students from 74 students. This means that the number of students enrolled in the Human Resource Management concentration has increased by 50% over the past five years.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

The faculty of the Management department are especially committed to recruitment of students. We have a very high level of participation in recruitment that takes place on campus. A unique opportunity for growth in programs could result from more direct recruiting from institutions like Jefferson County Community College. We believe establishing a relationship will physically bring students to the WKU campus as well as online through our Plus 2 program.

We can also strengthen our connection to the Nashville, TN community and surrounding counties due to their tremendous population growth over the past few years. Antidotal evidence from recent Management graduates indicates a large population are employed in the Nashville area. Building on relationships with WKU alumni can strengthen our ability to recruit students and welcome them to the WKU family.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

As indicated by the IES>NCES National Center for Education Statistics, 2014-2015, one of the areas with the greatest number of degrees conferred is in the fields of business. Over 19% of all bachelor degrees conferred were in the area of business. The trend of degrees conferred in business is one of the six programs in which the largest number of bachelor's degrees were conferred in 2015-2016.

Nearly every type of organization offers positions in management and business administration. The possibilities for management graduates are far-reaching both nationally and internationally.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

The Management programs have continued to grow while the number of our full-time faculty have declined. Therefore, faculty are teaching larger classes as indicated in our efficiency numbers (as shown on page 4.)

A method employed to increase productivity is the new class offering in Grise Hall auditorium of large sections for introductory classes. The MGT 210 (Organization and Management) class has had enrollment of over 200 students taught by one professor with some graduate assistant support. Most recently, we have adopted that same delivery method for the introductory course for our Human Resource Management concentration, MGT 311 (Human Resource Management) Of particular importance and as highlighted earlier in the document the Management department offers a Plus 2 completer program. The Plus 2 program is distinctive in delivery as it allows a student with an Associate Degree to obtain a Bachelor Degree by taking online courses. Most of these individuals work and therefore the flexibility of completing their degree online is appealing. Since 2013, the program has grown from 32 students to current enrollment of 98 students. This is a 206% increase in enrollment for the Plus 2 program.

The Mission Statement of the Department of Management is "Learning by Doing". It is espoused by our diverse group whose interests and responsibilities include general management, strategic management, entrepreneurship, human resource management, organizational theory and behavior, production and operations management, international business and legal environment of business.

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)

Nearly every type of organization offers positions in management and business administration. Students can find a career in a wide range of industries as well as a span of levels in the organization. We are relying more and more on part time faculty to teach classes so that we can at the minimum meet student demand. We need more full-time tenure track faculty in Human Resource Management, Entrepreneurship to at least offset the loss of full- time tenure track faculty members who are in the Transitional Retirement Program. Moreover, each semester we are experiencing a high demand for our capstone courses in Strategy (specifically MGT 498 and ENT 496) and must request overloads for our current faculty who teach these courses. In addition, faculty teaching overloads are pulled from devoting time to research and service opportunities.

We have lost 2 positions to budget reductions. Moreover, we have not been allowed to search for and replace the full-time faculty positions left vacant due to the retirement in 2016 of a Human Resources professor and an Entrepreneurship professor in 2018. Of particular importance is the maintenance of alignment of our Human Resources concentration curriculum with the Society for Human Resource Management which will undergo significant changes in 2021 and require specialized HR talent to deliver the additional classes.							
e. What recommendation would you put forward for the program (check one)?							
☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)						
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)						



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Marketing
College:	College of Business

Program Name:	Marketing
Reference Number:	720
CIP Code:	521401
Degree Type (AB, BS, etc.):	BS
STEM+H Degree (Y/N)	N
Minimum Hours Required:	73 Major/120 Degree
List Concentrations (if any):	Strategic/Social Media/Sales

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The program is focused on providing the knowledge necessary for students to meet the needs of the changing landscape of business. There are three concentrations that, based on feedback from business leaders and our analysis of industry trends, provide the foundation necessary for graduates to have employment opportunities when they complete their academic careers. All of the faculty have experience in working in the business world that is leveraged within the curriculum of the class.

The Strategic Marketing concentration develops critical thinking skills necessary to build strategy based on market knowledge. Areas of study include strategic planning; segmentation and target marketing.

The Center for Professional Selling is one of the few certified centers in the United States. This track prepares students for careers in face-paced and lucrative corporate sales positions. Tremendous networking opportunities are made through engagement with internships, guest speakers and in national sales competitions.

The Social Media concentration focuses on the strategic use of traditional, digital, and social media platforms to meet Marketing goals. Students work on social media campaigns, content marketing, Search Engine Optimization, analytics, website design and more.

The Marketing program reaches students through delivery modes such as face-to-face, online, on demand, and across regional campuses with telepresence. This insures that many of our classes are accessible across platforms. High school students are able to take advantage of dual credit availability.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	259	278	299	322	355	89
Conferrals	51	65	63	63	87	22
SCHP	2526	2850	3006	3402	3855	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs,

involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

Our classes support several majors both inside and outside the College of Business, for example, our classes are either required or electives in Sports Management, Advertising, Hospitality Management, Agribusiness, Arts Administration, and Construction Management. The Marketing faculty also teach in each of the delivery methods supporting the MBA program (online, face-to-face, and Professional MBA). Also, at the Graduate level, the Certificate in Business Sustainability and the Certificate in Business Core Competencies contain required courses in Marketing. The department also supplies a course to the JUMP program. In Marketing 220, a class that is required in programs across campus were 790 students enrolled in 2013. In 2018, we had 1026 students from disciplines across campus. Marketing majors made up only 11.5% of this group, while the other 88.5% were outside the field. Marketing is an area of study that is applicable in many majors. .MKT 325, Personal Selling

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

The faculty in the Marketing department support programs across campus. The growth in Marketing majors, and the growing interest in marketing, is resulting in larger and larger class sizes. One of our competitive advantages is our student-centered focus and smaller class sizes. Many of our classes, MKT 422, Marketing Management the senior capstone class) and MKT 322, Integrated Marketing Communications do projects for local companies and nonprofits. The effectiveness of the learning situation degrades as classes become larger than 30. Also, our sales classes use individual presentations as the focus that require a great deal of class time. These presentations are critiqued by classmates and are time consuming. This results in learning to give quality presentations and recognize issues that could be improved. Once again, we are constrained.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14		2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	47	68	37	64.9	52	69.2	48	81.3	61	75.4	69.4
Progression			235	72.3	261	75.5	270	74.1	321	73.5	61.3
150% Graduation Rate	38	44.7	34	61.8	37	64.9	33	63.6	45	46.7	54.1
Time to Degree	3.	97	4.	52	4.	05	3.	85	3.	86	4.49

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

The Department of Marketing follows the guidelines for assurance of learning assessment that the Gordon Ford College of Business have standardized to comply with AACSB accreditation. Discipline knowledge is measured through the use of a senior assessment exam given in the capstone course given in the student's final semester. The exam consists of 94 questions representing material covered in the core classes. The Assurance of Learning committee oversees the collection of data, through case studies, senior exit exams, embedded test questions, alumni surveys, student presentations, and college surveys. The results are reported back to the department chair and faculty. As a result of feedback on the AOL assessments, we met as a department and standardized the course objectives for all of our courses to insure that each section of Basic Marketing was covering the same content (in addition to using the same book). In closing the loop feedback from our Advisory council was used to revise the list of core concepts that every marketing major should walk out of here with...one way we measure it is during the senior capstone presentations where faculty attend to insure accuracy in applying the concepts.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

Alumni completed a survey with questions about their employment, salary, preparedness and the additional skills they felt were needed. Of the alumni who responded, only 7% were working outside the field of marketing. Most were in the Bowling Green, Louisville, Nashville area. The average starting salary was \$38,877. Industries represented were mainly in the service sector.

The Professional Selling Concentration, an area in which employers are begging for qualified employees, has grown from 206 majors and minors in 2013 to a total of 274 majors and minors in Fall 2018. More than 500 students from across the campus

took a sales course 2017-2018. "Employment of sales and related occupations is projected to grow 5 percent from 2014 to 2024." https://www.bls.gov/ooh/sales/home.htm

Our enrollment in our social media classes for Spring 2017/Fall 2018 was 224. We began the concentration with 21 majors in 2013. We had 55 in the Spring 2018. We were constrained by faculty resources and did not heavily promote the major. Our long, term, strategic goal is to grow this concentration as the demand for qualified employees grows. The projected growth in jobs in this area is at rate of 14% from 2010 to 2020. http://bls.gov/ooh/management/advertising-promotions-and-marketing-managers.htm.

A study by McKinley Marketing Partners on 2018 Marketing Hiring trends found that digital marketing was high in demand, followed by traditional marketing, marketing operations, research & analysis and relationship management. Our curriculum provides knowledge in each of these areas.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

The program utilizes several methods to gather feedback. First, our partners supporting the sales center provide valuable feedback in regards to future needs and their satisfaction with students they have hired. An advisory council consisting of area business leaders provides feedback on local business needs. Feedback from students and alumni are also collected. Information from area business leaders led to the development of the Social Media Concentration. The program utilizes several methods to gather feedback. First, our partners supporting the sales center provide valuable feedback in regards to future needs and their satisfaction with students they have hired. An advisory council consisting of area business leaders provides feedback on local business needs

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

Every year we take a group of students to compete in a national sales competition. Everyone comes back with multiple job offers.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16 2016-17		2017-18	17/18 Univ. Median
Number of TE Faculty					7	12
Number of NTE Faculty					3	4
Cost per SCH					128	128
SCHP/FTF by Dept.	472	518	511	547	537	375
% SCH by FTF by Dept.	93.2	90.3	86.8	78.4	75	75.8
Median Class Size by Level	26	28	27	29	27	19
% Under-Enrolled Sections by Level	19.6	12.2	14	16.4	11.9	58.2

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

WKU alumni Joe and Susan Walters of Campbellsville made a gift of \$1.1 million to WKU's Gordon Ford College of Business. The gift establishes the Joseph L. Walters Professorship in Marketing, according to a press release from the College of Business.

The Center for Professional Selling currently has received since January 2015 total donations of \$83,800. In addition, currently the Center has 7 sponsorships, with 3-year forecasted pledges of \$60,000 in total.

Dr. Tim Hawkins has 2 externally-funded research grants sponsored by the U.S. Navy (\$108K in 2015 and \$113K in 2018)

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

The Department of Marketing has seen steady growth in majors since the Census in 2013. At that time, we had 259 majors, currently we have 355 majors. In 2013, we had 11 full time faculty. Currently, we have 9 (including the Chair). We have 9 part-time faculty teaching 16 classes a semester.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

The Marketing program contributes to WKU's mission in any number of ways. We are working to offer additional Marketing classes for Honors students, particularly "stand-alone" classes. Our faculty is also very receptive to doing honors augmentations in their courses. These contribute the focus on being student centered. We also encourage our students to participate in study abroad classes and we teach MKT 324 (International Marketing) on a regular basis. We also include international components in most of our classes. This contributes directly to supporting and promoting global learning. Faculty are encouraged to include students in their research, seeking opportunities to apply for FUSE grants. This supports the research and creative activities aspect of WKU's strategic plan. The Marketing Department has attempted to diversify the faculty when we are filling open positions through advertisement of positions in media targeted to promoting the application of minority candidates for open positions. Our department has a major role in expanding the economic impact on the community in a number of ways. Our Center for Professional Selling maintains partnerships with several companies who not only financially support the center but also, volunteer to speak in classrooms, offer internships and hire our students. Many of our classes conduct projects with local businesses and organizations. Most of these are done for no fee, frequently allowing businesses to acquire valuable information they would not otherwise be able to obtain. Many of these projects focus on start-up and small companies, as well as regional non-profit organizations

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

The Department of Marketing regularly offers courses in online and IVS settings, increasing the reach of the program. This increases productivity and maximizes success for both traditional and nontraditional students through course redesign and alternative methods of program delivery. While at this point we are not able to offer the entire Marketing program online, it is something that is in discussion within the faculty. We also offer a wide array of classes during the Winter and Summer terms in online settings, allowing students to complete courses while not in residence at WKU. This can speed the time to graduation by allowing students to either get ahead in their studies or make up time if they have fallen behind. This support new pathways for adult learners to enroll and complete postsecondary degrees and credentials. Our courses also offer numerous student engagement opportunities through class projects done with "real world" companies and organizations. This provides students with exposure to the concepts we are teaching in a setting which prepares them for life after college. This promotes student engagement, undergraduate research, internships, and other educational opportunities that improve the quality of the student experience, develop leaders, and lead to success after graduation. We also offer a formal internship program for our students. This also allows them to see the "real world" of business and helps develop leadership skills and abilities by working in these companies/organizations. The Department of Marketing is working to expand partnerships with businesses, non-profit, and educational institutions (K -12) through our Advisory Council, class projects, and presentations to students in the K-12 system.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

First, we provide knowledgeable employees to businesses and organizations throughout Kentucky and the region. Second, since marketing is a core function in any business or organization, having a strong supply of capable marketing personnel is crucial in recruiting companies to Kentucky and our region. According to the kystats.ky.gov, sales and related occupations ranked 4th in terms of future demand. Programs offered by the Center for Professional Selling, both interact with businesses and provide a strong work force in an area of importance to any organization in need of sales professionals. The goal is to strengthen and expand partnerships with business, industry, government, non-profit, and other educational entities to meet Kentucky's workforce and community needs.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

There are a fair number of similarities between our program and curriculum and the programs and curricula at other schools in the Commonwealth, Marketing is a core business function and, as such, is found in virtually every comprehensive university across the country. We have 355 majors and 248 minors in our program. Thus, we are more than able to sustain

and justify Marketing as a "stand alone" program. Should opportunities for collaboration with other schools in the Commonwealth arise, we are more than willing to discuss such opportunities.

While much of the basic curriculum in Marketing programs across the Commonwealth is similar, there are also differences between the program at WKU and others. First, we have a much more comprehensive Sales program than do other schools in the Commonwealth. We have three concentrations within the major, a Sales minor, and a Center for Professional Selling. This is a flagship program for WKU. As of January 2018, WKU maintained its membership as one of 28 fully certified, active members in the University Sales Center Alliance. We remain the only fully certified program in Kentucky and Tennessee. None of the other Kentucky universities place this kind of emphasis on Sales. We also offer a track in Social Media Marketing, something that no other school in the Commonwealth offers. Our track was one of the first in the nation. Since this is becoming a major area of emphasis for businesses, this track should give us a competitive advantage over the other schools. This is also becoming a major hiring area for businesses, which will provide our students with more career options than schools without such a program.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

The Department of Marketing Vision and Mission Statements

Vision

Western Kentucky University's Department of Marketing will be regionally acclaimed and nationally recognized for excellence in marketing and sales education.

Mission Statement

"To offer high quality undergraduate and graduate education for our varied constituencies. Our goal is the graduate students with the knowledge and skills necessary for success and leadership in the business community. To accomplish the mission, we will use progressive teaching techniques as well as seek and apply knowledge through research. We also provide service to the university and the community using our expertise. Ultimately, we insure that students are prepared to excel in an ever changing, increasingly competitive, global environment by engaging them in the classroom and the business community."

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

The Professional Selling Concentration, an area in which employers are begging for qualified employees has grown by 16% in the last five years. The projection is that sales and related occupations will grow 5% nationally in the next 5 years. The state of Kentucky ranks it 4th in importance of occupational demand.

Our enrollment in our social media classes for Spring 2017/Fall 2018 was 224. The concentration has more than doubled in enrollment in the last 5 years. The projected growth rate is 14% nationally. Interdisciplinary connections will be required in the future as employers demand knowledge in graphic design and creative content creation.

The Strategic Marketing Concentration has grown 35% in the last 5 years. In the future, students will need experience in working with programs such as ADOBE Creative Suite.

As businesses, internationally, operate in an increasingly competitive environment, they require the skillsets provided by Marketing graduates to successfully differentiate themselves. According to the Bureau of Labor Statistics employment in Marketing will "grow 9% from 2014 to 2024, faster than the average for all occupations."

https://www.bls.gov/ooh/.../advertising-promotions-and-marketing-managers.htm

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

All of our concentrations are in areas that are predicted to be high growth areas in the next 5 to 10 years. We have consistently used feedback from business leaders and monitored demand to be proactive in developing curriculum to meet the

needs of employers. The Center for Professional Selling was the	e first development, followed by the concentration in Social
Media Marketing. The national trends report the growth in the	next five in each of the concentrations we offer.
c. What if any significant changes has your program instituted	within the past three years to increase productivity, success
of students, and/or efficiency that may not yet be evident in	the data provided? Examples might include revised course
sequencing/scheduling designed to enhance students' progre	ss towards degree, implementation of a comprehensive
recruiting and marketing plan, or reallocation of faculty resou	rces to better align with demand. (maximum 200 words)
The concentration in social media is still evolving to meet the n	eed of employers. We have added an SA qualified professor
to focus on the social media area. We are currently searching	for a faculty member to meet the needs of our students due to
retirements and growth in enrollment. We have also invested	in technology and infrastructure in modifying GH 435 to meet
the needs of the sales concentration. Students can hold mock	sales calls in closed rooms that are viewed by peers in the
outer classroom. Students also practice the techniques they le	arn with area business leaders.
d. Where do you see the program in five years? In ten years?	What would it reasonably take to get there? What
impediments currently exist? (maximum 200 words)	
The program will continue to grow as the demand for qualified	employees within the field grows. Competition and the
changing landscape of marketing requires that we have faculty	to offer courses in the subject areas to meet employer needs.
The growth in digital marketing and creative services, especially	y in the areas of graphic design and content creation are going
to require curriculum changes in the future. There is also a de	mand for executive seminars, which could be a significant
revenue stream, especially in social media and sales that we we	ould like to meet when we have the resources to do so.
e. What recommendation would you put forward for the prog	gram (check one)?
☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Department of Accounting
College:	Gordon Ford College of Business

Program Name:	Master of Accountancy (MAcc)
Reference Number:	0445
CIP Code:	520301
Degree Type (AB, BS, etc.):	Master of Accountancy
STEM+H Degree (Y/N)	No
Minimum Hours Required:	30
List Concentrations (if any):	None

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The MAcc program enables WKU accounting students to gain additional skills and competencies beyond the undergraduate level, while also providing them a path to meet the 150-hour requirement for the CPA license and certification. Teaching methods vary with a mix of lectures, case studies, special projects, and research activities. The admissions requirements include a minimum GPA of 3.25 on the last 60 hours of coursework completed and a minimum GMAT score of 500. WKU accounting majors meeting the eligibility requirements for the Accounting JUMP program (the first JUMP program at WKU) are permitted to enroll concurrently in undergraduate and graduate classes and earn both their undergraduate and graduate degrees while accumulating the 150 hours for the CPA license. Approximately 95% of the student enrollment since implementation has been through the Accounting JUMP program.

Implemented in 2013, the program is in its infancy but destined to grow. The number of MAcc graduates for fall 2018 is 13. The total enrollment in the JUMP program/MAcc program for fall 2018 is 30, and the expected spring 2019 enrollment (35) indicates the program is maturing and sustainable. The program's conferral rate is 100%. Placement rate is 100% with most students receiving job offers in their first semester and many receiving several job offers.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16 2016-17		2017-18	17/18 Univ. Median
Enrolled Students	7	11	6	7	7	19
Conferrals	9	12	6	9	11	6
SCHP	99	201	96	123	219	352

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The MAcc program is linked directly to the Accounting JUMP program. This makes our MAcc unique among our PEERs. The enrollment is growing and sustainable. In fall 2018, there are a total of 30 students in the Accounting JUMP/ MAcc program. While 13 are graduating December 2018, new JUMP students will enter the program spring 2019. The above data is somewhat confusing. The students move seamlessly through the JUMP/MAcc program into Graduate School entering at various points. For example in 2017-18, the data reflects 7 enrolled students in fall 2017 and 11 conferrals in spring 2018. Four of the JUMP students gained graduate status during their last semester (spring 2018). One hundred percent (100%) of the students admitted to the Accounting JUMP/MAcc program graduated on time.

The required 12 hours of electives support other graduate programs on WKU's campus (MBA, Leadership, Communications, and others). The placement rate is 100%. Employers are highly impressed with the quality of our MAcc graduates and continue to desire more. Firms like KPMG, PwC, Deloitte, and E&Y now employ our MAcc students. The Bureau of Labor Statistics predicts a steady 10-year growth in accounting/auditing jobs (especially applicants with a MAcc degree and/or CPA).

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

The program currently requires no marketing costs. Current students sell the program to juniors during our orientation sessions. We anticipated a 3-5 year start-up period. Now in the fifth year, the enrollment stands at 30 with 35 expected in spring 2019. We implemented the MAcc without an increase in the number of faculty. By effective scheduling, both the undergraduate and the MAcc programs are offered by 12 faculty members with no overloads. The number of conferrals for 2018-2019 [13 in fall and 10 in spring] should total 23. If the JUMP students who are enrolled in the 400-G and 500-level accounting courses were included, the SCHP would likely equal or exceed the university median.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	201	013-14 2014-15		2015-16		2016-17		2017-18		17/18 Univ.	
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	1	0.0%	3	33.33%	7	14.3%	4	0.0%	6	0.0	
Progression											
150% Graduation Rate			1	100%	3	100%	7	100%	4	100%	
Time to Degree	.7	76		.67		34	.5	59	۷.	19	2.56

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

The above data assumes all MAcc students enter Graduate School in the fall semester, but many of our students are admitted in the spring semester (JUMP Program) – the last semester of their coursework. Every student admitted to the MAcc program graduated within 1 year of beginning the program. No admitted student has dropped or been unsuccessful in completing the program. We do not admit students on a conditional basis. We monitor each student's academic progress and employment status. There are 4 major LOs for the MAcc program. Students will: 1.develop an enhanced understanding of accounting and related topics with 5 sub LOs; 2. be proficient in professional skills to provide information relevant to solving problems with 5 sub LOs; 3. enhance their professional communication skills with 3 sub LOs; and 4. gain an appreciation of the importance of ethical behavior in the workplace with 3 sub LOs. One example follows: 1. A rubric was used to assess the major learning objective on professional ethics (LO 4) with 90% expected to identify the ethical dilemmas, apply the principles in the AICPA professional code of conduct to the various ethical dilemmas, and identify the potential consequences of violations. Using a rubric for assessment, the outcomes were less than desirable. In the following semester, the instructor assigned additional cases to give students additional coverage. Then the Cardillo Travel Systems Case was assigned with 98% of the students performing at either the proficient or distinguished level. A 2nd example related to technical skills. Using a customized report developed by NASBA, MAcc students' performance on the CPA exam indicated a weakness in "professional responsibilities". The instructor assigned additional cases the following semester. We monitored the CPA results on the "professional responsibilities" sub category in subsequent testing windows for collaborative evidence and found our students performance improved substantially.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

We systematically gather evidence on the success of graduates in gaining employment. We have a 100% placement rate. The key areas of employment are: public accounting; industry and financial institutions; and government/not-for-profits. The Bureau of Labor Statistics predicts: "Employment of accountants and auditors is projected to grow 10 percent from 2016 to 2026, faster than the average for all occupations. Certification (CPA, CMA, CFE) within a specific field of accounting improves job prospects." https://www.bls.gov/ooh/business-and-financial/accountants-and-auditors.htm The profession's demand for entry level professional staff members (especially those having 150 hours) exceeds the expected number of accounting graduates. Direct feedback from the employers indicate that they recognized the quality of our graduates and their readiness to "hit-the-ground" immediately upon graduation. The MAcc program gives our graduates a "priority" status when recruiters review their resumes. In addition, the WKU MAcc and Accounting programs are 1 of only 182 AACSB separately accredited accounting programs in the world (out of approximately 12,000 business schools). The pass rate (self-reported) for MAcc graduates who take the CPA exam is 100%. The NASBA report indicates that the WKU MAcc graduates pass all 4 parts of the CPA exam within 1 year of graduation.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

We **systematically gather and incorporate feedback** regarding needs and satisfaction of employers in an effort to ensure the curriculum is aligned with the necessary employability skills. We utilize an active professional advisory council, personal meetings with employers, annual survey of alum, meetings with employers at our annual "meet the firms" event, and interaction with firm representatives visiting campus to make weekly presentations to our students. The most significant

feedback relates to the firms' policy of not hiring students unless they have completed 150 hours. This feedback led to the development and implementation of the MAcc program. Another feedback item relates to oral presentation skills. Based on feedback, the instructor revised ACCT 540 to require each student to develop a case based on an SEC Administrative Proceeding and make an in-class presentation. The students used appropriate technology to accompany their oral presentation. Using a prepared rubric, the entire class assessed each other's presentation. This unique experience of assessing other students' work helps prepare students because they will soon be in a position of having to assess and provide feedback on newer staff as they progress in their professional career. Additionally based on employers' feedback, the faculty are currently exploring opportunities to include data analytics in the graduate curriculum.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

In addition to gaining enhanced technical knowledge and skills, our graduates deliver meaningful oral presentations, complete research on complex accounting and auditing topics, and write reports in clear and concise language. For the past three years, WKU MAcc Students have scored the highest score in the Commonwealth of Kentucky on sections of the CPA exam. Additionally a number of MAcc students have collaborated with faculty members on presentations at international and national research conferences and **co-authored works published in leading applied journals**. The MAcc provides upward mobility. Some of our graduates are now in middle to upper management positions at their respective firms.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	14-15 2015-16 2016		2017-18	17/18 Univ. Median
Number of TE Faculty					11	12
Number of NTE Faculty					2	4
Cost per SCH					\$206	\$128
SCHP/FTF by Dept.	481	498	501	483	496	375
% SCH by FTF by Dept.	91.5%	91.6%	94.3%	96.7%	97.7%	75.8
Median Class Size by Level	7	12	8	9	18	8
% Under-Enrolled Sections by Level	77.8%	11.1%	66.7%	75.%	0.0%	58.2

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

As the above data indicates, the MAcc is a maturing, but growing program. The above data may be somewhat misleading. There are a number of accounting JUMP students in the 400-G accounting classes and the 500-level graduate classes not included in the above data because they are classified as "undergraduates". This distorts the true picture. For example, in the ACCT 540 class in fall 2018, there were a total of 24 students. Only 13 of those were classified as "graduate". Twelve were JUMP students and thus "undergraduate status".

The Review Committees should exercise caution when making decisions based on static data (i.e., fall semester) because it may not present a true picture. Additionally the system used to generate the data does not adequately present the true data about class enrollment and %SCH for graduate classes that include both students admitted to graduate school and students in the JUMP program.

Anecdotal evidence suggests that accounting graduates in general have a higher percentage rate of "giving back" and providing financial support than other academic majors.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words) Many peer institutions with AACSB accredited accounting graduate programs have named schools of accountancy within their college of business. The MAcc at WKU presents a capital campaign opportunity to seek a donor for a named school of accountancy at WKU.

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

The MAcc program directly addresses multiple components of the WKU Strategic plan. However, the program's most powerful impact is on *Our Students* through *Completion & Success* and *Preparation for the Global Stage*.

- 1. Graduates of the MAcc program are work-ready and fully prepared to pursue meaningful careers and lives.
- 2. The MAcc program bolsters the statute and WKU's Graduate School, and strengthen its external reputation.
- 3. The MAcc program schedules course offerings to maximize student progression and completion.
- 4. The MAcc program has a 100% completion rate of conferrals.
- 5. The MAcc program has a 100% placement rate.
- 6. The MAcc program led to the first JUMP program on the WKU campus and provided the template/framework for other graduate programs on campus.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

The WKU Master of Accountancy program (MAcc) aligns closely with Policy Objective 7 through strategy 7.1. It also aligns closely with Policy Objective 8 through strategy 8.3. CPE Policy Objective 7: MAcc graduates are very successful in passing the CPA exam and entering the accounting profession and industry. The placement rate of MAcc graduates is 100%, and the CPA exam passage rate is much higher than the national average. Supported by the first JUMP program at WKU (CPE Policy Objective 8), this program fosters an innovative culture within the education community and provides students with the skills and competencies to enter the accounting profession – a profession that is an integral part of economic development and growth of the Commonwealth. An essential component of the free flow of capital necessary for economic development and growth is credible information for investors, creditors, and governmental regulators. Economic development and growth in WKU's service area involves economic decisions based on reliable financial information. There is a growing need for accounting professionals to assist in the preparation and attestation to relevant and reliable financial information for decision-making. The successful completion of the program enhances the professional and technical competencies essential for entry-level positions in the accounting profession, industry, governmental agencies, and not-for-profit organizations.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

The MAcc program is a high quality program that graduates highly qualified entrants into the accounting profession. Economic growth requires a highly skilled and competent workforce. In addition to the availability of a highly trainable workforce, decision makers require reliable financial information on which to base their decisions. Economic development and growth in WKU's service area involves economic decisions based on reliable financial information. There is a growing need for accounting professionals to assist in the preparation and attestation to relevant and reliable financial information for decision-making. The successful completion of the program enhances the professional and technical competencies essential for entry-level positions in the accounting profession, industry, governmental agencies, and not-for-profit organizations.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

The uniqueness of the WKU Master of Accountancy lies with the Accounting JUMP program. We are the only program in the Commonwealth and in the region with a JUMP program that allows students to enroll concurrently in both undergraduate and graduate courses to earn both the B.S. degree and the MAcc degree while also earning 150 hours necessary for the CPA license and certification. One significant indicator of the reputation lies with the MAcc students who have received the KyCPA Awards for the highest scores on sections of the CPA exam. Employers who attend the Awards banquet recognize the quality of the MAcc program and are actively seeking to employ the MAcc graduates. MAcc students are receiving scholarships from

the KyCPA based on the quality of their applications. Additionally one MAcc student was recognized by the Public Companies Accounting Oversight Board (PCAOB), a sub-division of the Securities Exchange Commission, and received a \$10,000 scholarship. The WKU MAcc program is gaining a national reputation of producing high quality graduates who are career-ready and who have enhanced skills for upward mobility in their respective organizations.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

WKU's MAcc program is distinct from other MAcc programs because of the Accounting JUMP program. The recent AACSB CIR (Continuous Improvement Review) team that reviewed the accounting programs noted this distinctiveness in their report. The team leader, the Director of a school of accounting at a research one institution, indicated a strong interest in duplicating WKU's Accounting JUMP program as part of the accounting program at his institution.

The JUMP program provides opportunity for students to obtain some of their graduate coursework at undergraduate tuition rates. The families of prospective students recognize and appreciate this unique opportunity for their child to obtain both the undergraduate degree and the MAcc degree. They especially appreciate the lower tuition aspect of the JUMP program. In addition to obtaining both degrees, their son or daughter, upon graduation, is prepared to enter a notable profession that will provide a high standard of living for the student and their family, hold important positions in civic and not-for-profit organizations, and make a significant positive contribution to their respective communities.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

As indicated by the Bureau of Labor Statistics, and supported by research conducted by the AICPA, the demand for accountants/auditors will increase significantly over the next 10 years. As the U.S. economy continues to grow, and with the emphasis on economic development in Bowling Green and the southcentral region of the Commonwealth, the need for entrants into the profession is great. This applies to local school districts, municipalities, counties, and not-for-profits as well as to business organizations. WKU's MAcc program is gaining a reputation for providing high quality graduates who are not only making a positive contribution to their employers but also to the broader business and civic communities.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

The MAcc program is well aligned with national trends. The State Boards of Public Accountancy in all states now require 150 hours of academic coursework for the CPA license and certification. The development and implementation of the MAcc program at WKU was driven in great part by the demand of employers for accounting graduates who met these requirements before joining the workforce.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

The MAcc program is relatively young, but feedback is annually sought from employers and alum as to needed changes in the curriculum. Currently the faculty is considering ways to address employer's needs for members of their accounting/auditing staffs to have strong data analytics skills. The MAcc program schedules classes on a two-day schedule so students can hold internships and engage in career-learning opportunities while completing their graduate program. Efforts have been made to establish relationships with other four-year colleges in the region so that their accounting majors can pursue their MAcc at WKU. These efforts have brought several outstanding students to the MAcc program.

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)

The program has the potential for significant growth. Fall 2018 enrollment and expected spring 2019 provide clear evidence the program is maturing. With the demand for entry-level positions increasing in the next ten years (especially for applicants with 150 hours), WKU students who desire to enter a highly respected profession and have a good standard of living for their

family have a high quality MAcc program to choose for their career path.								
The major impediment for the WKU MAcc program is the availability of faculty resources necessary to continue offering								
two quality programs (an undergraduate program and a MAcc program) due to retirements. Three faculty members are retiring spring 2019 with one additional faculty retirement likely in spring 2020. The department is currently offering two high quality programs and providing highly employable graduates. An attempt to continue both with insufficient faculty resources could result in the detriment of 2 high quality programs and also in the loss of the separate AACSB accounting accreditation.								
e. What recommendation would you put forward for the prog	gram (check one)?							
☐ Maintain (Core or important complementary program)								
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)							



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	GFCB
College:	GFCB

Program Name:	MBA
Reference Number:	057
CIP Code:	520201
Degree Type (AB, BS, etc.):	MBA
STEM+H Degree (Y/N)	
Minimum Hours Required:	30
List Concentrations (if any):	None

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The MBA program is 30 credit hours, comprised of 7 core courses and 3 electives. Efforts over the past 12 years have led to increased flexibility of delivery options. Students may enroll in one of 3 delivery modes: Online, Full-Time (accelerated, one-year, on campus), or Professional (PMBA, 5 semesters, Saturdays in executive format).

Students with a recent business undergraduate degree from an AACSB-accredited program may enter without further preparation. Students who lack such a degree must complete MBA Foundation Modules, a 4.5 credit hour course offered On-Demand, prior to enrolling. Admission to the Online and Full-Time deliveries are based upon specified GMAT and UG GPA scores. Admission to the PMBA is based upon specified work experience.

The Full-Time and PMBA options are cohort/team-based programs, while the Online is flexible and allows students to proceed at their own pace (1-5 years to completion).

Two graduate certificates are available to students, whether or not they are MBA students: 1) Business Sustainability and 2) Business Core Competencies. Both are comprised completely of MBA classes, some of which can be used as MBA electives (Sustainability) or core MBA courses (Competencies). Some students add a certificate to the MBA, while others complete a certificate independently.

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16 2016-17		2017-18	17/18 Univ.
						Median
Enrolled Students	106	110	117	110	87	19
Conferrals	43	50	36	43	65	6
SCHP	1,235	1,181	1,379	1,442	1,224	212

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

The MBA is a popular graduate program at WKU. FY 18 saw the largest number of MBA graduates in memory (65). This partially explains the slightly lower number of *remaining* enrolled students that year.

FY 17 had the highest SCHP.

The MBA is a "generalist" interdisciplinary business degree building upon any major in the GFCB. There is one MBA course in every functional area of business (accounting, economics, finance, etc.). GFCB graduates can "stay" one more year (FTMBA), or study online, and earn an MBA.

The quantitative breakdown for FY 19 is:

26 students entered the FTMBA as a cohort (up from 16 in FY 18),

16 enrolled in PMBA (down from 22 in FY 18),

45+ FTE in Online MBA (where most students are part time and are more difficult to compare).

An MBA JUMP program was approved for FY 18, so enrollment has just begun with 3 students. The MBA JUMP course options are limited to electives offered each semester since it primarily encourages FTMBA enrollment – which is a cohort-based program. Further, UG students are unlikely to have met all the prerequisites of the core MBA courses at the start of their JUMP enrollment.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

There are pressures that impact MBA enrollments from a variety of sources. NKU has started (FY 18) an online MBA that is far below market prices (as much as \$6k) in Kentucky. Online students are thought to be more price sensitive than others. On the other hand, in recent years the MBA became the largest master degree in terms of enrollment in the US. Full employment generally lowers the number of college students and the current unemployment rate is very low. In FY 19 the online rotation was simplified to one course offering per year.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	2013-14		2014-15		2015-16		2016-17		2017-18		17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	22	86.4	28	96.4	31	87.1	40	75.0	36	75.0	595/82.2%
Progression	-	-	-	-	-	-	-	-	-	-	-
150% Graduation Rate	23	87.0	22	81.8	28	78.6	31	77.4	40	70.0	505/73.3%
Time to Degree	2.	58	2.	35	2.	31	2.	02	1.	93	2.56

- b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)
- a. Full Time program is one academic year nearly 100% graduation.
- b. We use direct (rubrics for cases/tests) and indirect indicators (surveys) for our MBA SLOs. GFCB's Assurance of Learning (AOL) committee oversees assessment. AACSB accreditation demands AOL.

MBA Graduates will:

- 1. (**Discipline Knowledge**) ...have a solid understanding of the knowledge in the relevant business disciplines Assessment: Annual Major Fields Test MBA standardized ETS MBA test.
- 2. (Qualitative Reasoning) ...demonstrate the skill of integrating discipline knowledge to ... analyze ... business problems Assessment: Business case(s) rubric in capstone BA590 includes standardized scoring from national "strategy game".
- 3. (Quantitative Reasoning) ...apply quantitative modeling and data analysis techniques that can solve real world business problems...

Assessment: Business case(s) rubric in capstone BA590 - includes standardized scoring from national "strategy game".

4. (**Teamwork/Communication**) ...have the communication, collaboration, and team skills necessary to successfully complete a (work) project.

Assessment: Rubric analysis of peer evaluations related to team assignments.

* Additional PMBA SLO: (Global Awareness) PMBA students will demonstrate an understanding of business and intercultural similarities and differences between the US and other nations which impact business.

Assessment: Student paper rubric in the international elective.

RECENT CLOSING THE LOOP.

SLO 1

Our overall ETS MFT score is sometimes in the top 10%, but our lowest score was repeatedly in Finance - high, but lower than other disciplines. The Finance faculty compared questions on the MFT to outlines of the MBA Finance course and discovered 2 areas on the MFT not included in our course: Dividend Policy and Investments. This drove discussions within the Finance department – a) add these 2 topics to the course or b) more carefully interpret the annual Finance score on the MFT. The faculty chose option b; so we now have a deeper understanding of the ETS, particularly, the Finance score.

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

The MBA is a terminal degree and not required for a PhD. However, Full Time MBA students are often admitted to excellent PhD programs. About 3 per 100 FTMBA students pursue a PhD. Recently, our FTMBAs have been admitted to PhD programs at Florida Atlantic, Cincinnati, Binghamton, and Memphis. We later hired the Cincinnati graduate. In our class of 26 (FY 19) we are likely to have 2 PhD admissions (Memphis and another).

MBA students complete a national standardized exit exam (ETS). During AACSB accreditation we reported that Online MBAs scored, as a group, very high (by year) - top 25, 20, 22, 7, and 10%. PMBA students also scored high - top 4, 25, and 5%. Full Time MBAs scored in the top 52, 61, and 18%. We examined the lower FTMBA scores and found international students accounted for most of the lower scores.

We have a MBA Alumni Association to maintain contact. PMBA graduates often move to another employer or gain an excellent promotion within 2 years of graduation. However, we would like to have better information about the success of our graduates but lack the staff for follow-up. Our advisor was cut due to budget.

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

We use several feedback opportunities. We survey our students near their graduation to ask about their education-job fit. We talk with our college Business Executive Advisory Council (BEAC) about their perceived needs. The MBA program works with 9 Chambers of Commerce on projects and seeks their input. Our faculty also bring ideas to the MBA Committee – a standing committee in the GFCB. We also follow current news items about education changes in MBA and business programs.

Two years ago the MBA program changed its curriculum to reflect the input it had received. The most common suggestion was the inclusion of "data analytics" in the curriculum. Certificates, programs, and courses are proliferating. Our curriculum outcome was to rebuild a class in Information Systems (the home of the Business Data Analytics in the college) to become "Information Technology & Data Analytics". Drs. Atkinson and Coleman now teach a cutting edge class where students graduate with the analytic background employers are now seeking.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

We are proud that our students score so well on the ETS test compared to other schools. We believe our "recipe" of admissions, curriculum, faculty, and administration has created a nationally recognized program. Our graduates have become bank presidents, lawyers, business owners, professors, managers, MDs, and other important positions in our communities and beyond.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty						12
Number of NTE Faculty						4
Cost per SCH						128
SCHP/FTF by Dept.	60	64	71	81	74	375
% SCH by FTF by Dept.	56.3	58.7	50.3	48.7	49.4	75.8
Median Class Size by Level	18	18	19	20	18	8
% Under-Enrolled Sections by Level	25.0%	16.0%	8.0%	0.0%	3.8%	58.2

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

The MBA is an interdisciplinary degree and requires faculty support from all six GFCB departments. Each of the three delivery modes (Full Time, Online, and Professional) includes at least one course per business discipline.

- The Full Time MBA (FTMBA) is staffed in-load through the 6 GFCB departments. No separate budget is required.
- The Online MBA is staffed outside of effort, and faculty are paid through course fees managed by DELO. Faculty receive \$325 per student enrolled in his/her course.
- The Professional MBA (PMBA) provides classes on Saturdays and staffs those classes outside of effort. The budget comes from differential tuition charged to PMBA students (DELO). The PMBA tuition creates a budget which includes PMBA faculty pay and ½ of the only Office Associate assigned to the MBA programs.
- Faculty from each department contribute to the course content for the MBA Foundation Modules. The development work for those modules is paid through DELO course development funds.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

The MBA program lost the funding for its only admissions and academic advisor in FY 18 (April Schleig).

5. PROGRAM ALIGNMENT AND DISTINCTIVENESS

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

"Enroll a diverse body of regional and global undergraduate, graduate, and nontraditional Students." The Online MBA reaches beyond our region with students from diverse locations.

As a "Regional Lighthouse", FTMBA teams have (since 2011) assisted regional entities on organizational problems, 4 each fall (activity list under part b).

"Facilitate high impact practices, immersive learning in different cultures, process-learning practices, and collaborative learning and instructional opportunities." The PMBA scholarships and arranges a "cohort study-abroad" with a focus on culture and business. Immersive international activities include: collaborating on Amnesty International cases with graduate business students from Lyon, France; going "inside" a medical practice/hospital in Thessalonica, Greece; and studying olives from farming to processing/testing in Seville, Spain. Immersive video technology was previously used in the "teleconferencing" center (CRD) to create an interactive classroom for Owensboro and Bowling Green students.

"Bolster the stature and fiscal support of WKU's Graduate School, and strengthen its external reputation." In the past 5 years the Online MBA has gained national attention with improved rankings, moving up 6 universities (#72 to #66) in the latest US News report – top ranking program in Kentucky. Top 5-20% scores on the national ETS MBA test are also well-known across the region.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

Objective 8: Promote academic excellence through improvements in teaching and learning.

8.a. Academic Quality

Study Abroad/Study Away - Participation in a study abroad experience results in course credit for MBA students. This has been particularly effective in the PMBA program, where scholarships help offset the costs of travel and registration.

Service Learning/Community Outreach - The FTMBA performs impactful service cases/projects for the region, which have included: Simpson County/Franklin (Work Readiness), Vitale Clinical Education Complex, Engineering-Manufacturing Commercialization Center (Submersible Vehicle), Glasgow-Barren Country Chamber (Tourism), Commonwealth Health (Telehealth and Strokes), HOSPARUS Barren River (Service Penetration), Bingocize, WKU-Glasgow (Learn and Earn), Hart County Chamber (Housing), Bowling Green Housing Authority (Food Truck), and Bowling Green Area Chamber of Commerce (Technology).

Objective 11: Expand regional partnerships, outreach and public service that improve the health and quality of life of Kentucky communities.

11.a. Regional Partnerships, Stewardship, and Public Service.

As demonstrated in Community Outreach above, The FTMBA has developed a partnership with the 9 Chambers of Commerce in our region. The FTMBA rotates through projects serving individual Chambers. The relationship is mutually beneficial for the Chambers and the students, where our students serve and are served by the collaborations with area businesses and economic development.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

According to the December, 2018, Report of the Kentucky Business-Education Roundtable, "Immediate steps to begin meeting today's needs: - ... Provide flexible programming/scheduling and academic programs (including stackable credentials and prior learning credit) for prospective adult students." All 3 MBA delivery modes provide flexibility and stackability. The

largest delivery mode is the Online MBA, which regionally pioneered a degree built on 7-week courses that offers the flexibility for completion (as of 2018) in 1 to 5 years, based upon student needs. The Professional MBA was developed 10 years ago to serve the needs of mid-career individuals and has flexibility in admission standards (specified experience) and class times (every other Saturday). The Full Time MBA was modified 10 years ago to be "accelerated" and completed in one year. This helped international students on visas and employees who had been laid off and wanted to reenter the workforce with a graduate degree. Two allied certificates (Business Sustainability and Business Core Competencies) are completely comprised of MBA courses. The Foundation Modules, an innovative MBA prerequisite course offered On-Demand, increases workforce skills as a standalone course or can be stacked with additional coursework to complete a Certificate and/or MBA.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

WKU's unique innovation of developing BA502 (MBA Foundation Modules) provides a very efficient pathway into the regular MBA courses for non-business majors seeking to enroll. The old approach was the requirement of up to 8 prerequisite courses.

We know of no MBA programs in KY with ETS scores as high as many of WKU's (top 10%). Other national rankings (US News and others) generally rank WKU above any other MBA in KY.

Our flexibility of offering completely online, 1-year accelerated, and weekend executive delivery options provides the fullest set of choices in KY.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

The MBA market is very competitive and we strive to provide options that are competitive based upon quality and flexibility. We saw this need earlier and made huge delivery changes and schedules about 10 years ago.

6. PROSPECTUS

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

Since Kentucky is below national means on both undergraduate and graduate degree completions, future increases in both provide the potential for the growth of our MBA program options.

A greater number of FTMBA students are coming from our own undergraduate WKU student population, which may indicate that the MBA is now seen as a distinctive advantage over a growing population of undergraduate degrees.

The flexibility and reach of the Online MBA makes it an attractive option for students who are geographically dispersed, work in a wide range of industries, and who are serving in our military, as it supports course completion regardless of travel, reassignment, or deployment.

Efforts are currently underway with other programs, such as the Bowling Green campus of the UK Medical School, to enable students in other programs to add on the MBA while completing another graduate or terminal degree.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

Growth in MBA programs nationally is occurring in online and other flexible delivery method programs. In the past 5 years the MBA has become the largest master degree in enrollment in the US. FY 18 saw a decline in the US in applications to (not necessarily enrollment in) traditional 2-year "full time" MBA programs. WKU's 1-year full time program, online program, and professional program are well-aligned with these national trends.

In addition, the creation of an MBA JUMP program now offers our undergraduate students a lower cost, accelerated path to an MBA upon completion of their WKU undergraduate degree. With the growing concern regarding the cost of higher education, the JUMP program is in line with efforts nationally to reduce those costs while still providing students with high quality degrees.

The number of international students in the WKU MBA has declined dramatically in the past 5 years. VISA and other issues have limited our success in directly enrolling MBA students. We feel this is beyond the control of the program.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

Last year:

- The PMBA combined course offerings so 2 cohorts now take most classes together on a 2-year rotation. This
 alleviated potential issues with enrollment numbers in small cohort years. This also created efficiencies for program
 costs and increased potential for student networking across cohorts, an important element in an MBA program.
 Faculty and students have indicated an improved experience since this change.
- The Online MBA changed the course sequence so students can reliably graduate in 12-15 months. This created staffing efficiency through fewer (larger) classes, while also providing a more reliable, efficient program plan for students.
- The electives (also part of the Sustainability certificate) were moved from an 18-month online rotation to On-Demand so students can graduate with the certificate in 2 semesters AND so the number of possible electives will increase for Online MBA students.

e. What recommendation would you put forward for the program (check one)?
The Professional MBA (PMBA) is a program that will likely continue stable enrollment, in the new sequencing/scheduling plan, between 12-24 students each year. This program is an on-site program dependent upon population needs in the immediate area.
The Full Time MBA (FTMBA) showed growth in FY 19 by attracting more domestic WKU students through the 3.5 GMAT waiver (announced in FY 18). We can reasonably expect 22-30 FTMBAs enrolled in upcoming years based upon the upgrades in the program (adding a data analytics course), the need to differentiate from other undergraduate degrees, the addition of the JUMP program, and admission.
The biggest opportunity for growth is in the Online MBA. We counted 91 unique individuals in Online MBA classes during Fall 2018. That number would likely increase the most IF we: a) Had marketing money necessary to compete regionally or nationally with the 300 other online programs; and b) Lowered the price of the program to match NKU's successful new online MBA program (about \$6,000).
d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words) WKU's 3 MBA options are based upon flexibility and quality. They match successful national MBA growth strategies.
Two GMAT waivers were introduced in FY18. The waiver for WKU (and other AACSB) business graduates with a 3.5 undergraduate GPA has attracted more FTMBA students in the past year than in the prior 3. In addition, a waiver for Beta Gamma Sigma members was enacted in December, 2018. The impact will not be recognized until at least Fall 2019.

 \square Maintain (Core or important complementary program)

 \square Suspend (Teach-out may be required)

☐ Grow/Enhance (Significant strategic potential exists)

 \square Transform (Redesign/combine/reorient)



COMPREHENSIVE ACADEMIC PROGRAM EVALUATION PROGRAM SELF-STUDY WORKSHEET 19 October 2018

Department/School:	Accounting
College:	Gordon Ford College of Business

Program Name:	Undergraduate
Reference Number:	602
CIP Code:	520301
Degree Type (AB, BS, etc.):	BS
STEM+H Degree (Y/N)	N
Minimum Hours Required:	120
List Concentrations (if any):	Accounting

1. PROGRAM SUMMARY

a. Please provide a brief summary of your program to assist evaluators. Include factors such as delivery mode(s), whether an accompanying program is required (e.g., second major, minor, or certificate), supporting course requirements, and/or criteria for selective admission. (maximum 200 words)

The accounting program is separately accredited by the AACSB, as well as the GFCB, which makes our college one of approximately 185 programs in the world with dual accreditation. Upon completion of the 120-hour undergraduate program, students are prepared for careers in public accounting, private industry, government, and not-for-profit organizations.

The primary mode of instruction delivery is face-to-face classroom lectures.

The mission of the accounting program is to provide a quality <u>applied</u> accounting education, which prepares students for taking certification examinations (e.g., CPA, CMA, CIA, etc.), shortly after graduation.

To gain admission to the accounting program, students must have:

- 1. earned a minimum of 60 credit hours;
- 2. completed ACCT 200, ACCT 201, CIS 141, ECON 202, ECON 203, ECON 206, MATH 123, and COMM 145 with a minimum GPA of 2.5 in the courses listed above; and
- 3. a minimum overall GPA of 2.5.

All students must complete the following courses to major in accounting:

ACCT 200, ACCT 201, ACCT 300, ACCT 301, ACCT 303, ACCT 310, ACCT 312, ACCT 430, ACCT 450, ACCT 499, and six hours of approved accounting electives.

Our accounting program also offers the Accounting Joint Undergraduate and Master Program (JUMP).

2. PROGRAM PRODUCTIVITY

a. Data Provided by IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Enrolled Students	335	347	349	319	323	89
Conferrals	41	50	43	64	55	22
SCHP	2,256	2,644	2,858	2,829	3,108	991

b. In what ways does the program contribute to other programs or areas of the departmental/college/university mission and priorities? For example, you might consider factors such as courses delivered in support of other major programs, involvement in a JUMP program, and interaction between undergraduate and graduate programs. Provide a brief summary and quantitative breakdown to the extent possible. (maximum 200 words)

Our accounting program provides GFCB-required service courses (e.g., ACCT 200 and ACCT 201) for all business majors and minors, and for majors and minors in other programs (e.g., sports management, recreation administration, health care administration, hospitality management, and paralegal studies (AA degree). Accounting courses are also listed as electives by several programs outside of the business college (e.g., manufacturing engineering technology and those listed above). Approximately, seventy-five percent of ACCT 200 and ACCT 201 students are non-accounting majors.

c. What else should evaluators know about this program's productivity? (optional, maximum 100 words)

There is sufficient demand from the business college, departments outside of the business college, student-athletes, study-abroad students, and students who have taken a semester off for an internship to offer ACCT 200 and ACCT 201. Upper-level accounting courses (i.e., ACCT 300, ACCT 301, ACCT 401) fill quickly during the summer, which eases the high demand for these upper-level courses during the Fall and Spring semesters.

3. SUCCESS OF STUDENTS

a. Data Provided by IR	201	l 3-14	201	4-15	201	5-16	201	6-17	201	7-18	17/18 Univ.
	N	%	N	%	N	%	N	%	N	%	Values
First-Year Retention Rate	62	71.0%	59	78.0%	74	79.7%	59	79.7%	68	72.1%	69.4%
Progression			251	66.1%	277	71.1%	246	69.9%	249	71.1%	61.3%
150% Graduation Rate	47	57.4%	56	53.6%	37	45.9%	47	46.8%	61	59.0%	54.1%
Time to Degree	4	.49	5.	.18	5.	27	4.	51	4.	.38	4.39

b. List program student learning outcomes and means of assessment. Minors and certificates may or may not have SLOs that differ from those of a major; if they do not, use the SLOs for the major. Describe one best example of how findings from a recent round of assessment were used to improve the program (i.e., closing-the-loop). (maximum 300 words)

Student Learning Objectives: In addition to the Gordon Ford College of Business learning objectives, graduates from the accounting program should be able to:

- 1. Demonstrate an understanding of the basic technical skills and knowledge necessary perform well in an entry level accounting position. Our graduates should demonstrate an understanding of:
 - a. basic functions of financial statements.
 - b. required different levels of authoritative literature.
 - c. accrual basis of accounting.
 - d. difference between revenues, operating income, net income, and cash flows.
 - e. different systems used to obtain accounting information.
 - f. management accountant's use of accounting information.
 - g. tax laws and sources of tax law that relate to individuals, corporations, and not-for-profit organizations.
 - h. basic cost concepts.
 - i. audit processes and other attestation engagements requirements.
 - j. an accounting cycle.
- 2. Demonstrate the ability to communicate effectively in an oral professional interview.
- 3. Demonstrate the ability to prepare a professionally written communique.
- 4. Identify ethical dilemmas and demonstrate an understanding of professional responsibilities.
- 5. Conduct research using authoritative accounting literature and resources.
- 6. Demonstrate a (an):
 - a. knowledge of business statistical techniques.
 - b. understanding of analytics related to data modeling, data management, predictive analytics, enterprise risk management, and social mining.
 - c. comprehension of basic information management related to relational databases.

Example of how findings were used to improve our program: Results from senior assessment tests (see 3.d below) indicated that students were having problems remembering and/or comprehending the accrual basis of accounting (see LO 1.c above). The faculty changed the prerequisite for ACCT 300 (Intermediate Accounting I) to allow students to take ACCT 300 immediately after ACCT 200 and expanded intermediate accounting from two courses to three courses. These changes improved student knowledge retention and allow ACCT 300 to put greater emphasis on critical criteria necessary for CPA examination success

c. In what ways does the program try to systematically gather and incorporate feedback on the success of graduates in gaining employment and/or progressing onto graduate/professional school (e.g., pass rates on national exams, alumni feedback, graduate/professional school acceptances)? What are the key areas of professional opportunity for students graduating from the program? Reference relevant employment statistics and/or provide supplemental data to the extent possible. (maximum 200 words)

<u>Feedback Collection:</u> Our program systematically gathers and incorporates feedback on the success of graduates in gaining employment or progressing onto graduate school by doing the following:

- 1. Each senior completes a questionnaire, which asks about anticipated job offers, received job offers, and/or graduate education plans.
- 2. The department chair holds face-to-face conversations with employers from private, public, not-for-profit, and government.
- 3. Alumni graduating as far back as ten years are surveyed. The survey instrument asks for date of graduation, employment status, and more.
- 4. An accounting advisory council meets semiannually.

Key Areas of professional opportunities: Accounting majors are employed by public accounting firms, investment firms, public and private corporations, governments (city, county, state, and federal), and not-for-profit organizations. In several cases, our students receive multiple offers from potential employers before graduation.

Relevant employment statistics:

A number of the Department's graduating seniors have jobs, job offers, or have been accepted into graduate programs before they graduate. Of the students, who chose employment after graduation, the vast majority are employed full-time six months after graduation. For Fall 2019 approximately thirteen seniors will move into our Master of Accountancy program as a result of their participation in the accounting's JUMP program.

WKU undergraduates have positions in the following areas:

	Average Wages	Unemployment
		Rate
Accountants & Auditors	\$ 60,700	2.7%
Tax Examiners & Revenue Agents	46,900	3.1%
Financial Analysts	68,800	2.4%
Budget Analysts	50,700	3.6%
Financial Examiners	57,800	3.8%

Source: JobsEQ. Data as of 2017Q1 for South Central Kentucky (Bowling Green Chamber of Commerce)

d. In what ways does the program try to systematically gather and incorporate feedback regarding needs and/or satisfaction of employers in order to ensure the curriculum is aligned with the necessary employability skills (e.g., employer surveys, advisory boards, national data)? Provide one best example where the information gained was used to improve the program. (maximum 200 words)

A critical element in our assessment process is the Senior Assessment Examination, which is administered in ACCT 499 (Senior Assessment). The exam consists of multiple choice questions specifically designed to assess the extent to which graduating students have achieved the accounting program's stated technical skills learning objectives. To pass the assessment examination, seniors are required to achieve a minimum score of 70 percent. Students are assigned a final grade based on the number of attempts required to pass the examination and examination scores.

The AOL process includes efforts to assess written and oral communication skills. The assessment of communication skills is part of the senior assessment course. Written and oral communication skills are assessed using a different assessment process. Students enrolled in the senior assessment course are required to submit examples of written and oral communication. These examples are evaluated by the faculty using rubrics approved by the Department.

The Department instituted a new learning objective for assessing data analytics. A case study is evaluated using a rubric specifically designed to assess the student's mastery of data analytics.

e. What else should evaluators know about the success of students in this program? (optional, maximum 100 words)

Excellence in instruction, advising, curriculum, and student success is documented by our exceptional performance report for our AACSB Continuous Improvement Review (January 2018). The faculty is concerned about being able to recruit appropriately credentialed new faculty to replace retiring faculty.

Our students perform very well on the CPA examination because of the training received from a very qualified credentialed faculty. See the table below for pass rate comparisons.

Twelve faculty members of thirteen faculty members have at least one professional certification. Several faculty members have multiple certifications.

CPA Examination Pass Rate: 2012-2015

	AUDITING	BUSINESS ENVIROMENT	FINANCIAL ACCOUNTING	REGULATION
U.S. average	47.3%	55.5%	46.8%	49.4%
pass rate				
WKU pass rate	53.4%	62.0%	70.0%	60.9%

Note: Statistics taken from NASBA customized report prepared for WKU in 2016.

4. COSTS, REVENUE AND EFFICIENCY

a. Data Provided by AA/IR	2013-14	2014-15	2015-16	2016-17	2017-18	17/18 Univ. Median
Number of TE Faculty					11	12
Number of NTE Faculty					2	4
Cost per SCH					\$206	\$128
SCHP/FTF by Dept.	481	498	501	483	496	375
% SCH by FTF by Dept.	91.5%	91.6%	94.3%	96.7%	97.7%	75.8%
Median Class Size by Level	24	23	27	29	28	19
% Under-Enrolled Sections	19.4%	18.5%	14.8%	4.0%	10.7%	36.3%
by Level						

b. What external revenue streams are directly associated with the program? For example, consider research grants that require/engage program students and/or provide faculty buy-out time, philanthropic potential, DELO revenue, corporate-university partnerships, and economic development relationships with communities that generate additional support for the program, department, college, and/or university. (maximum 200 words)

External revenue streams directly associated with the undergraduate and graduate programs are indistinguishable. Revenues earned by the following foundation accounts are used to fund student activities, faculty professional dues, endowed professorships, and micro-grants to faculty, when funds are available: (1) Accounting for Excellence Endowment, (2) Mary R. Nixon Professor of Accounting, (3) Harry & Jean Peart Endowment for Accounting, and (4) Meany-Holland Memorial Fund.

c. What else should evaluators know about program costs, revenue, and efficiency? For example, if the data provided for the department as a whole differ substantially from that of the program, please address. (optional, maximum 100 words)

The accounting department is constantly seeking opportunities to motivate alumni to contribute to its foundation accounts.

Faculty compensation is significantly below market. Anecdotal evidence based on conversations with department chairs at benchmark universities suggests that assistant professors will be hired for the 2019/2020 academic year at 125% of the accounting department's average overall department salary. This salary inversion situation will pose a substantial obstacle to future hiring of qualified AACSB scholarly academic faculty.

The faculty is aware of the likelihood of increases in class sizes, a need for additional teaching resources, salary inversion situation, and the need to identify areas for cost reductions and efficiency increases.

a. What aspects of <u>WKU's strategic plan</u> are directly addressed by this program? Reference specific goals, objectives, strategies and metrics. (maximum 200 words)

Prepare students for careers and life in a global context: The accounting degree program provides students problem-solving opportunities using qualitative and quantitative questions, problems, and rigorous case studies covering national and international real world situations.

Enact and practice all aspects of WKU's DEI plan: Asians, Blacks, and Hispanics compose 3%, 3%, and 4%, respectively, of accounting majors. Approximately, 52% of accounting majors is female. The accounting faculty consists of two asians, one black, and 10 whites.

Incentivize and support research and creative activities that promote student learning, expand university outreach and service, and bolster the regional economy: Peer-reviewed and non-peer-reviewed publications have resulted from honors these projects. Faculty members are active in several local business, civic, religious, and government organizations.

Establish WKU as a regional lighthouse to provide resources,...: An accounting advisory council (AAC), high school visits, Continuing Professional Education Day, and numerous speakers from business, healthcare, not-for-profit, and government are examples of how the accounting program engages with local and regional communities served by WKU.

Leverage WKU's international reach to create a dynamic and diverse university community with robust global learning for every student: Accounting majors are encouraged by faculty to fit an internship into his or her academic career. Most internships with local, regional, or national organizations.

b. What aspects of the <u>statewide strategic agenda</u> are directly addressed by the program? Reference specific goals, policy objectives, strategies, and metrics. (maximum 200 words)

How can Kentucky encourage more people to take advantage of postsecondary opportunities?) Objective 1.4: The Accounting Department Chair is African-American. This circumstance has provided a unique opportunity to have a person of color in front of the classroom. The GFCB has been a sponsor of the PhD Project for more than ten years.

How can Kentucky increase degree and certificate completion, fill workforce shortages, and guide more graduates to a career path?)

Objective 8.1: The Department's AOL processes and assessment devices were used to evaluate student learning and provide data to inform pedagogy and curriculum review. Based on results of senior assessment tests, the intermediate accounting curriculum changed from a two-course sequence to a three-course sequence. Another major change was to put greater emphasis of the use of the case method. A significant change was allowing freshmen to take principles of financial accounting during the first semester of their freshman year. This one change has decreased the time for accounting degree completion.

How can Kentucky's postsecondary system economic growth and development and make our state more prosperous?)

Objective 11.2: The Accounting Department strengthens communication and planning between higher education and regional/community leaders to identify priorities and challenges and align resources and programs through the establishment of its Accounting Advisory Council. The council is compose of local

and regional business and city executives, who have vested interest in the education of potential employees. The council suggests curriculum modifications and pinpoints employment skills graduates will need on day-one.

c. How and to what extent does the program directly address workforce needs in Kentucky and/or demand in the profession? Reference relevant workforce and/or provide supplemental data to the extent possible. (maximum 200 words)

The undergraduate accounting program directly addresses Kentucky's workforce needs and demand for accounting and finance specialists. The low unemployment percentages for accounting graduates suggest a high demand for job titles such as accountants, auditors, budget analysts, compensation and benefits managers, credit analysts, financial analysts, financial examiners, loan officers, personal financial advisors, and tax preparers.

The following table, which complements the table in Question 3.c, lists job descriptions and areas in which WKU undergraduates hold positions:

Job Title	Average Wages	Unemployment Rate
Financial Managers	\$107,500	2.6%
Personal Financial Advisors	69,400	1.3%
Compensation & Benefits Manager	96,200	n/a
Credit Analysts	64,500	1.9%
Loan Officers	63,400	2.8%
Financial Specialists-All other	50,900	5.1%

Source: JobsEQ. Data as of 2017Q1 for South Central Kentucky (Bowling Green Chamber of Commerce)

The most recent alumni survey (April 2018) showed employment in the following key areas:

Area	Percentage of survey respondents
Big Four public accounting	14%
National, regional, and local firms	14%
Corporate accounting	7%
Government and Not-for-Profit	7%
Service industries	29%
Business (not directly accounting)	29%

CPA Examination Pass Rate: 2012-2015

	AUDITING	BUSINESS ENVIROMENT	FINANCIAL ACCOUNTING	REGULATION
U.S. average	47.3%	55.5%	46.8%	49.4%
pass rate				
WKU pass rate	53.4%	62.0%	70.0%	60.9%

Note: Statistics taken from NASBA customized report prepared for WKU in 2016.

d. In what ways is the program distinctive in design/delivery, reputation, and impact? Reference unique aspects of the program relative to similar programs, and point to indicators of reputation in Kentucky and/or the nation. Discuss contribution to student/faculty/staff diversity, DELO cohort component, regional campus impact, and other factors as appropriate. (maximum 200 words)

Program distinctions:

- One of the best CPA examination pass rates for schools in Kentucky and surrounding states.
- Both the Department of Accounting and the GFCB are accredited by the AACSB-International. Of the 12,000 collegiate schools of business world-wide, approximately 185 have separate AACSB accreditation for both business and accounting.
- Accounting faculty hold multiple professional certifications (CPA, CMA, CIA, CGFM, and CFE).
- Accounting faculty have relevant real-world experience in public, private, government, or not-forprofit organizations.
- Department pioneered acceptance of the High School Accounting Pilot Project (i.e., advanced placement (AP) course).
- Department of Accounting is the only accounting program in Kentucky, north-central Tennessee, and southern Indiana to conduct multiple continuing professional education programs accredited by the American Institute of CPAs.
- Accounting faculty teaches courses for the Master of Accountancy program and for the Master of Business Administration program.
- The campus faculty coordinates teaching requirements for the Glasgow, and at one time, the Owensboro campuses.

e. What else do evaluators need to know about the program's strategic alignment and distinctiveness? (optional, maximum 100 words)

The department's strategic mission is to provide quality accounting education and prepare students for a successful and rewarding career in accounting and business. To that end, the faculty of the accounting department is uniquely involved in community service and student mentoring. Several faculty members hold advisory positions on boards of financial institutions, municipal organizations, religious groups, and secondary school councils. These organizations provide faculty with opportunities to maintain their professional proficiency and competence, as well as, extend the outreach of the department.

a. What opportunities do you see for the program going forward? For example, where are potential new markets for students, how might the program be revised to take advantage of emerging trends in the discipline, how could new interdisciplinary connections be made to increase the demand and quality of the program? (maximum 200 words)

Opportunities:

- Creating a school of accountancy that will put greater emphasis on research on business-relevant issues in accounting that will have major impact on practice in the short- and long-term. This opportunity would require department, college, and university advancement efforts to identify and approach a sponsor.
- Creating an ESOP (Employee Stock Option Purchase) Center of Excellence. Mr. Richard Callahan (Executive-in-Residence) assisted Houchens Industries in creating their ESOP program (the largest in the United States). His expertise would be invaluable in the pursue of this venture.

New Markets:

• Not so much a new market, as a new field of study in accounting – data analytics. AACSB made including data analytics in the curriculum a highly regarded expectation. There is a strong market for a specialized accounting major with an emphasis in data analytics. To pursue this market, at least one PhD faculty member with this specialized training is required.

b. How do program trends align with national trends over the last 5-10 years? (maximum 200 words)

Our program has aligned well with national trends over the last 5-10 years. For example, our program has incorporated aggressive student recruiting techniques (e.g., accepting accounting AP courses for credit); (2) modified our accounting systems course to include data analytics exposure; and (3) satisfactorily completed AACSB reaccreditation in order to remain ahead of other non-accredited schools in terms of professional and academic reputation of other schools our size.

The national trend of increasing salaries caused by a severe shortage of accounting PhDs has overtaken us. Current faculty salaries levels are significantly inverted. New assistant professors are being hired at 125% of average current departmental salaries.

In order to be competitive with benchmark universities, we will have to offer between 130% and 135% of our current average departmental salary hire a new accounting PhD (scholarly academic level) for academic year 2019/2020.

c. What if any significant changes has your program instituted within the past three years to increase productivity, success of students, and/or efficiency that may not yet be evident in the data provided? Examples might include revised course sequencing/scheduling designed to enhance students' progress towards degree, implementation of a comprehensive recruiting and marketing plan, or reallocation of faculty resources to better align with demand. (maximum 200 words)

Changes to increase productivity:

- 1) Increased undergraduate and graduate class sizes.
- 2) Created and grow the Master of Accountancy program.
- 3) Created the pedagogical assistant professor position to combat rising research assistant professor salaries.
- 4) Created an instructor position to release SA faculty to research and publish.
- 5) Used graduate assistants to open up time for faculty to give adequate time to research projects.
- 6) Visited high schools to educate high school students, counselors, and parent on the benefits and opportunities in the accounting profession.
- 7) Started departmental discussions regarding online accounting principle courses.
- 8) Reluctantly made master of accountancy governmental and not-for-profit course (ACCT 550) an elective course because PhD faculty resources might not be available.

Revised curriculum to allow freshmen to take accounting principle courses earlier in their academic career. This one change allowed students to complete their accounting courses one semester to one year earlier than in the past.

d. Where do you see the program in five years? In ten years? What would it reasonably take to get there? What impediments currently exist? (maximum 200 words)

Program in five years:

- 1) Younger faculty will bring new research ideas, teaching techniques, topics of study, scheduling changes, and resource challenges. In five years, class sizes will probably be larger because of budget restrictions on faculty headcount and salaries.
- 2) The number of accounting majors will be increase, if new topics (e.g., data analytics, corporate governance, international financial reporting, and income tax and tax reform, to name a few) are financially supported with new faculty resources.
- 3) Online accounting courses taught by campus faculty.

Program in ten years:

1) Accounting programs will be around, but ten years is too far to project in what form. New financial technologies are changing the way in which financial information is collected, sorted, summarized, and reported.

Impediments:

- 1) Salary inversion. At current salary levels for assistant, associate, and full professor, recruiting and retention will be extremely difficult. Until this issue is adequately addressed, the accounting department will be at a disadvantage to maintain teaching and research faculty AND recruit the level of faculty required to maintain accreditation.

2) Our classrooms are too small to meet the expected request to increase class sizes.	
e. What recommendation would you put forward for the program (check one)?	
☐ Grow/Enhance (Significant strategic potential exists)	☐ Maintain (Core or important complementary program)
☐ Transform (Redesign/combine/reorient)	☐ Suspend (Teach-out may be required)