



ACADEMIC AFFAIRS

March 1, 2024

**ACADEMIC PROGRAM SUSPENSION OF ADULT EDUCATION,
GRADUATE CERTIFICATE**

REQUEST: Approval for academic program suspension for the following program: **Adult Education, Graduate Certificate.**

FACTS: The Faculty have proposed to suspend the Adult Education, Graduate Certificate due to low enrollment in the program.

BUDGETARY IMPLICATIONS: Closing this academic program to new admissions will have no impact on the University Budget because the faculty assigned to this program will continue to offer courses in the School of Leadership and Professional Studies.

RECOMMENDATION & IMPLEMENTATION DATE: President Timothy C. Caboni recommends approval of the suspension of Adult Education, Graduate Certificate to be implemented Fall 2024.

MOTION: Approval to suspend the following program: Adult Education, Graduate Certificate with implementation in Fall 2024.

ACADEMIC PROGRAM SUSPENSION OF BACHELOR OF ARTS IN CORPORATE AND ORGANIZATIONAL COMMUNICATION

REQUEST: Approval for academic program suspension for the following program: **Corporate and Organizational Communication, Bachelor of Arts.**

FACTS: The major has experienced declining enrollment and is being consolidated with the Bachelor of Arts in Communication Studies. There is considerable redundancy between the degree programs, so students should experience little disruption. Consolidating will add greater efficiency to advising, scheduling, and assessment.

BUDGETARY IMPLICATIONS: Closing this academic program to new admissions will have no impact on the University Budget because the faculty will continue to teach the Bachelor of Arts in Communication Studies.

RECOMMENDATION & IMPLEMENTATION DATE: President Timothy C. Caboni recommends approval of the suspension of the Bachelor of Arts in Corporate and Organizational Communication to be implemented Fall 2024.

MOTION: Approval to suspend the following program: Bachelor of Arts in Corporate and Organizational Communication with implementation in Fall 2024.

BACHELOR OF SCIENCE IN NEUROSCIENCE

REQUEST: Approval of Bachelor of Science in Neuroscience through the Ogden College of Science and Engineering as an interdisciplinary program.

FACTS: The subject of neuroscience - the science of nervous system and brain structure and function - is a rapidly growing science that has become established within many different scientific disciplines. The Neuroscience Major begins with a rigorous core of basic science classes and laboratories, moving on to a core of more advanced classes. All students are educated in the breadth of the subject, but will eventually choose one of three concentrations – systems, behavioral, or computational.

These three concentrations represent natural pipelines to a variety of careers and postgraduate degree options. The Systems concentration can lead to options such as in-depth graduate study in neuroscience or clinical psychopharmacology or a career in the pharmaceutical industry. The Systems concentration may also be supplemented with additional coursework as a pre-health professions option leading to a medical school application. Students in the Behavioral concentration can progress to graduate study in cognitive neuroscience or psychiatry. Those in the Computational concentration could find career options such as artificial intelligence, medical data analytics, healthcare analytics, prosthetics, or robotics. As a strong natural science degree with a large “hands-on” component, the Neuroscience Major educates students to be lifelong innovators and problem-solvers.

Western Kentucky University has strong administrative support for attracting faculty with expertise in neuroscience research. The successful hiring of WKU’s first choices in two searches for faculty members in neuroscience (one in Biology and one in Psychological Sciences) was due, in large part, to the strong neuroscience milieu of WKU (as stated by our new colleagues). We have a storied history as a pathway to opportunity for many of the most underprivileged members of Kentucky. The National Science Foundation has repeatedly cited our success in producing baccalaureate graduates who go on to success in Ph.D. programs at research universities. A large part of the reason for developing the Neuroscience Major is to augment this role. First, this generates rounded scientists who can be valuable problem-solvers for industry. Second, this program tracks graduates into medicine, and A.I., two of the most well-paying, and expanding careers in the Commonwealth. WKU will provide a unique and invaluable pathway to success through this program.

Required Courses (64-70 hours)*

Core Courses (all concentrations)	38-40 hours
Systems Concentration	29-30 hours
Behavior Concentration	26 hours
Computation Concentration	30 hours

*Complete curriculum and program requirements are in the Curriculum Program Proposal attached.

BUDGETARY IMPLICATIONS: The program is expected to attract a substantial number of students, based on estimates of demand in south central Kentucky and based on the rapid growth of other neuroscience programs in Kentucky, and as such, additional faculty capacity will be needed to adequately serve this new enrollment. The Ogden College of Science and Engineering has built a budget plan to

accommodate this new demand to offer coursework and support research opportunities for these students. Based on revenue and expense projections, this program is expected to be revenue positive.

RECOMMENDATION & IMPLEMENTATION DATE: President Timothy C. Caboni recommends approval of a Bachelor of Science in Neuroscience to be implemented Fall 2025.

MOTION: Approval to establish a Bachelor of Science in Neuroscience with implementation in Fall 2025.

: NEUROSCIENCE

In Workflow

1. 99SC Approval (cathleen.webb@wku.edu; lsr19359@wku.edu; stuart.burris@wku.edu; jennifer.anderson@wku.edu; david.brown@wku.edu)
2. SC Dean (cathleen.webb@wku.edu; stuart.burris@wku.edu; jennifer.anderson@wku.edu)
3. SC Curriculum Committee (cathleen.webb@wku.edu; stuart.burris@wku.edu; jennifer.anderson@wku.edu)
4. Undergraduate Curriculum Committee (sheila.flener@wku.edu; alexander.olson@wku.edu)
5. University Senate (susan.eagle@wku.edu)
6. Provost (beth.laves@wku.edu)
7. Board of Regents (all)
8. CPE (rheanna.plemons@wku.edu; beth.laves@wku.edu)
9. Program Inventory (jennifer.hammonds@wku.edu)

Approval Path

1. Sun, 03 Sep 2023 23:16:47 GMT
Stuart Burris (stuart.burris): Approved for 99SC Approval
2. Sun, 03 Sep 2023 23:17:21 GMT
Stuart Burris (stuart.burris): Approved for SC Dean
3. Fri, 06 Oct 2023 13:36:08 GMT
Stuart Burris (stuart.burris): Approved for SC Curriculum Committee
4. Tue, 17 Oct 2023 21:43:06 GMT
Sheila Flener (sheila.flener): Approved for Undergraduate Curriculum Committee
5. Fri, 17 Nov 2023 15:26:36 GMT
Susan Eagle (susan.eagle): Approved for University Senate
6. Fri, 17 Nov 2023 21:30:43 GMT
Robert Fischer (robert.fischer): Approved for Provost

New Program Proposal

Date Submitted: Sun, 03 Sep 2023 23:15:49 GMT

Viewing: : Neuroscience

Last edit: Thu, 26 Oct 2023 18:57:26 GMT

Changes proposed by: str18637

Proposed Action

Active

Contact Person

Name	Email	Phone
Gordon Baylis	gordon.baylis@wku.edu	2707924225

Term of Implementation

2025-2026

Academic Level

Undergraduate

Program Type

Major

Degree Types

Bachelor of Science

Department

OCSE Interdisciplinary Programs

College

Science and Engineering

Was your Notification of Intent (submitted to CPE by the Provost's Office) approved?

No

Program Name (eg. Biology)

Neuroscience

Will this program have concentrations?

Yes

Concentrations

- Systems (NSYS)
- Behavioral (NBEH)
- Computational (NCOM)

CIP Code

26.1501 - Neuroscience.

Will this program lead to teacher certification?

No

Does the proposed program contain 25% or more new content not previously taught in another course at WKU? If yes, contact the Office of the Provost for additional SACSCOC proposal requirements

No

Catalog Content**Program Overview (Catalog field: Overview tab)**

The subject of neuroscience - the science of nervous system and brain structure and function - is a rapidly-growing science that has become established within many different scientific disciplines. The Neuroscience Major begins with a rigorous core of basic science classes and laboratories, moving on to a core of more advanced classes. All students are educated in the breadth of the subject, but will eventually choose one of three concentrations – systems, behavioral, or computational.

These three concentrations represent natural pipelines to a variety of careers and postgraduate degree options. The Systems concentration can lead to options such as in-depth graduate study in neuroscience or clinical psychopharmacology or a career in the pharmaceutical industry. The Systems concentration may also be supplemented with additional coursework as a pre-health professions option leading to a medical school application. Students in the Behavioral concentration can progress to graduate study in cognitive neuroscience or psychiatry. Those in the Computational concentration could find career options such as artificial intelligence, medical data analytics, healthcare analytics, prosthetics, or robotics. As a strong natural science degree with a large “hands-on” component, the Neuroscience Major educates students to be lifelong innovators and problem-solvers.

Curriculum Requirements (Catalog field: Program Requirements)**Program Requirements (64-70 Hours)**

The Neuroscience Major begins with a rigorous core of basic science classes and laboratories, moving on to a core of more advanced classes. All students are educated in the breadth of the subject, but will eventually choose one of three concentrations - systems, behavioral, or computational.

Code	Title	Hours
Core Courses		
BIOL 120 & BIOL 121	Biological Concepts: Cells Metabolism and Genetics and Biological Concepts: Cells, Metabolism, and Genetics Lab	4
Take 3 of these 4		11-13
BIOL 122 & BIOL 123	Biological Concepts: Evolution, Diversity, and Ecology and Biological Concepts: Evolution, Diversity, and Ecology Lab	
CHEM 120 & CHEM 121	College Chemistry I and College Chemistry I Laboratory	
PSYS 160 & PSYS 161	Introduction to Biopsychology and Introduction to Biopsychology Laboratory	
CS 170 or PSYS 415	Problem Solving and Programming Programming for Social Sciences	
MATH 183 or BIOL 382 or PSYS 313	Introductory Statistics Introductory Biostatistics Statistics in Psychology	3

PSYS 210 & PSYS 211	Research Methods in Psychology and Research Methods in Psychology Laboratory	4
NEUR 175	Course NEUR 175 Not Found	1
NEUR 300	Course NEUR 300 Not Found	3
NEUR 310	Course NEUR 310 Not Found	3
NEUR 401	Course NEUR 401 Not Found	3
NEUR 402	Course NEUR 402 Not Found	3
NEUR 498	Course NEUR 498 Not Found	2
BIOL 399 or CHEM 399 or PSYS 490	Research Problems in Biology Research Problems in Chemistry Independent Study in Psychological Sciences	1

Total Hours**38-40****Systems Concentration (67-70 hours)**

Code	Title	Hours
Core Courses		38-40
BIOL 224 & BIOL 225	Animal Biology and Diversity and Animal Biology and Diversity Lab	4
BIOL 319	Introduction to Molecular and Cell Biology	3
BIOL 330	Animal Physiology	3
BIOL 464	Endocrinology	3
CHEM 222 & CHEM 223	College Chemistry II and College Chemistry II Laboratory	5
CHEM 340 & CHEM 341	Organic Chemistry I and Organic Chemistry Laboratory I	5
PSYS 360 & PSYS 365 or BIOL 335	Behavioral Neuroscience and Laboratory in Behavioral Neuroscience Neurobiology	3-4
PSYS 465	Psychopharmacology	3

Total Hours**67-70****Behavioral Concentration (64-66 hours)**

Code	Title	Hours
Core Courses		38-40
BIOL 224 & BIOL 225	Animal Biology and Diversity and Animal Biology and Diversity Lab	4
PSYS 331 or BIOL 334	Principles of Human and Animal Learning Animal Behavior	3
PSYS 333	Cognitive Psychology	3
PSYS 360 & PSYS 365	Behavioral Neuroscience and Laboratory in Behavioral Neuroscience	4
PSYS 363	Sensory and Perceptual Systems	3
PSYS 440	Abnormal Psychology	3
PSYS 462	Fundamentals of Cognitive Neuroscience	3
PSYS 465	Psychopharmacology	3

Total Hours**64-66****Computational Concentration (64-66 hours)**

Code	Title	Hours
Core Courses		38-40
CS 180	Computer Science I	4
CS 290	Computer Science II	4
CS 331	Data Structures	3
CS 339	Discrete Structures	3
CS 456	Artificial Intelligence	3
MATH 307	Introduction to Linear Algebra	3
PSYS 360 or BIOL 335	Behavioral Neuroscience Neurobiology	3

PSYS 333	Cognitive Psychology	3
Total Hours		64-66

Required Support Course for Computational Concentration (4 hours)

Code	Title	Hours
MATH 136	Calculus I	4
Total Hours		4

4-Year Plan

Systems Concentration

First Year		Spring	
Fall	Hours	Spring	Hours
BIOL 120		3 BIOL 122	3
BIOL 121		1 BIOL 123	1
ENG 100		3 CHEM 120	3
MATH 116		3 CHEM 121	2
NEUR 175		1 COMM 145	3
PSYS 160		3 Colonnade F-SB	3
PSYS 161		1	
		15	15
Second Year		Spring	
Fall	Hours	Spring	Hours
MATH 183		3 ENG 200	3
CHEM 222		3 NEUR 310	3
CHEM 223		2 BIOL 224	3
PSYS 210		3 BIOL 225	1
PSYS 211		1 BIOL 319	3
Colonnade E-AH		3 Colonnade E-SB	3
		15	16
Third Year		Spring	
Fall	Hours	Spring	Hours
BIOL 330		3 NEUR 300	3
CHEM 340		3 NEUR 402	3
CHEM 341		2 Colonnade K-SY	3
NEUR 401		3 Elective	3
NEUR 498		1 Elective	3
Colonnade K-LG		3	
		15	15
Fourth Year		Spring	
Fall	Hours	Spring	Hours
BIOL 335		3 Independent Study	1
BIOL 464		3 Elective	3
NEUR 498		1 Elective	3
PSYS 465		3 Elective	3
Colonnade K-SC		3 Elective	3
Elective		3	
		16	13
Total Hours 120			

Behavioral Concentration

First Year		Spring	
Fall	Hours	Spring	Hours
BIOL 120		3 BIOL 122	3
BIOL 121		1 BIOL 123	1
ENG 100		3 CHEM 120	3
MATH 116		3 CHEM 121	2
NEUR 175		1 PSYS 100	3
PSYS 160		3 Colonnade F-SB	3
PSYS 161		1	
		15	15
Second Year		Spring	
Fall	Hours	Spring	Hours
BIOL 224		3 COMM 145	3
BIOL 225		1 NEUR 310	3
ENG 200		3 PSYS 313	3

PSYS 210		3 PSYS 333	3
PSYS 211		1 Colonnade E-SB	3
Colonnade E-AH		3	
		14	15

Third Year			
Fall	Hours	Spring	Hours
NEUR 401		3 NEUR 300	3
NEUR 498		1 NEUR 402	3
PSYS 331		3 PSYS 363	3
PSYS 440		3 Colonnade K-SY	3
Colonnade K-LG		3 Elective	3
Elective		3	
		16	15

Fourth Year			
Fall	Hours	Spring	Hours
NEUR 498		1 Independent Study	1
PSYS 360		3 PSYS 462	3
PSYS 365		1 Elective	3
PSYS 465		3 Elective	3
Colonnade K-SC		3 Elective	3
Elective		3 Elective	3
		14	16

Total Hours 120

Computational Concentration

First Year			
Fall	Hours	Spring	Hours
BIOL 120		3 BIOL 122	3
BIOL 121		1 BIOL 123	1
ENG 100		3 COMM 145	3
MATH 116		3 MATH 117	3
PSYS 160		3 Colonnade F-SB	3
PSYS 161		1	
NEUR 175		1	
		15	13

Second Year			
Fall	Hours	Spring	Hours
CS 180		4 CS 290	4
MATH 136		4 ENG 200	3
PSYS 210		3 MATH 307	3
PSYS 211		1 NEUR 310	
Colonnade E-AH		3 PSYS 313	3
		PSYS 415	3
		15	16

Third Year			
Fall	Hours	Spring	Hours
CS 331		3 CS 339	3
NEUR 401		3 NEUR 300	3
NEUR 498		1 NEUR 402	3
PSYS 360		3 Colonnade E-SB	3
Colonnade K-LG		3 Colonnade K-SY	3
Elective		3	
		16	15

Fourth Year			
Fall	Hours	Spring	Hours
NEUR 498		1 Independent Study	1
CS 456		3 PSYS 333	3
Elective		3 Elective	3
Elective		3 Elective	3
Elective		3 Elective	3
Elective		3 Elective	1
		16	14

Total Hours 120

Will this program be managed or owned by more than one department?

Yes

Interdisciplinary Departments

Secondary Departments

Biology (BIOL)

Chemistry (CHEM)

Computer Science (CS)

Psychological Sciences (PSYS)

Does this program include courses from outside your department?

Yes

Outside Courses Details

Who approved including these courses?	When were they approved?
Co-chairs of PSY Dept	8/28/2023
Math	9/13/2023

Relation to Mission and Strategic Plan

Explain how the proposed program relates to the institutional mission and academic strategic plan.

The Neuroscience major speaks directly and primarily to "Our Students" and their "Preparation for the Global Stage" in Climbing to Greater Heights.

Neuroscience is a rapidly-growing field that does not have a traditional "home" department, but spans Biology, Chemistry, Psychological Science, and increasingly, Computer Science. WKU has a broad range of faculty with strong research and teaching expertise spread among these four departments. Indeed, many of the classes with the neuroscience major have been taught for many years in these departments. So, the key innovation in proposing this major is to bring together this large expertise into one interdepartmental space at a time when the science of the brain is developing worldwide at an unprecedented pace. The faculty of the different departments have thought carefully about governance, and have crafted a college-level program that is both strong, yet flexible - able to adapt to scientific change.

Explain how the proposed program addresses the state's postsecondary education strategic agenda

The Neuroscience major addresses the KY Postsecondary Education Strategic Agenda 2022-30 in the areas of Talent and Value. The new major will offer a new opportunities for greater talent development among KY students and those from surrounding states while leveraging existing faculty talent for the launch phase. Neuroscience is a rapidly growing field, and having a Neuroscience major at WKU should improve the options for career outcomes of more WKU graduates. The research expectation of all Neuroscience majors will also contribute to increasing research to support strong KY communities and economies.

The utilization of existing faculty talent also addresses the value proposition of the new major. For at least the initial phase of implementation (two years) the program will draw on largely existing capacities in the four contributing academic units to offer the coursework and support research opportunities for the students.

Program Quality and Demand

Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand; career opportunities at the regional, state, and national level; and any changes or trends in the discipline that necessitate a new program.

Please insert one Learning Outcome per box. Click green plus sign for additional LO boxes

Learning Outcomes and Measurement Plan

	List all student learning outcomes of the program.	Measurement Plan
SLO 1	Develop a working knowledge of the main content domains in neuroscience.	Assess student learning within neuroscience foundation, including content connected to cellular and molecular biology, behavioral neuroscience, neuroscience techniques and research methods, and neurological systems. Student performance on objective items will be assessed.
SLO 2	Explain the scientific method of discovery, based on testing hypotheses by collecting and analyzing data in appropriately-designed experiments.	Each academic year, a representative sample of the exam questions in PSYS 210, and NEUR 310 will be used to examine the extent to which students embrace the scientific method.

SLO 3	Propose, design, and run experiments, and analyze the data from these experiments.	This will first be tested at an elementary level by examining a random sample of student lab reports from the multiple introductory level lab classes that all students take. At an intermediate level this will be assessed by examining the reports of a sample of students in the methods (PSYS 210) and statistics classes. At the most advanced level this will be assessed by a sample of the work output from independent study classes.
SLO 4	Communicate the scientific method, and be able to explain scientific findings to experts and to lay audiences.	This will be assessed by examining a sample of student work in NEUR 300 - Writing in Neuroscience. It will also be assessed more informally - but more rigorously - by assessing the presentations of work given by students in NEUR 498.
SLO 5	Embrace problem-solving, and truly own a problem such that they can solve problems.	This will first be tested at an elementary level by examining a random sample of student lab reports from the multiple introductory level lab classes that all students take. At an intermediate level this will be assessed by examining the reports of a sample of students in the methods (PSYS210) and statistics classes. At the most advanced level this will be assessed by a sample of the work output from independent study classes and work presented in NEUR 498.

Assessment Template: https://www.wku.edu/academicaffairs/ee/assurance_learning_resources.php

Upload Assessment Plan

Neuro new_program_asl_template.docx

Change in Discipline (If the program is being proposed to meet changes in the academic discipline, please outline those changes and explain why they necessitate development of a new program.)

N/A

Specify any distinctive qualities of the program.

There are a number of prima facie similar programs in Neuroscience in The Commonwealth of Kentucky; however, closer examination shows that the proposed program at WKU is unique, distinct, and serves as a pathway to opportunity for the less advantaged, often first generation students that we serve so well.

Western Kentucky University. We have strong administrative support for attracting faculty with expertise in neuroscience research. The successful hiring of WKU's first choices in two searches for faculty members in neuroscience (one in Biology and one in Psychological Sciences) was due, in large part, to the strong neuroscience milieu of WKU (as stated by our new colleagues). We have a storied history as a pathway to opportunity for many of the most under-privileged members of our state. The National Science Foundation has repeatedly cited our success in producing baccalaureate graduates who go on to success in Ph.D. programs at research universities. A large part of the reason for developing the Neuroscience Major is to augment this role. First, this generates rounded scientists who can be valuable problem-solvers for industry. Second, this program tracks graduates into medicine, and A.I. - two of the most well-paying, and expanding careers in the Commonwealth. We provide a unique and invaluable pathway to success through this program.

University of Kentucky and University of Louisville. These are strong and rigorous programs, taught by faculty with strong research bona fides. However, for students of our region, and the demographic that we serve, they are less accessible.

Transylvania University. Again, this is a strong program with good faculty. But with a total price tag around \$50,000 per year, this is out of reach for most of the students that WKU serves.

Bellarmine University. A reasonably good program for which the \$50,000 per year price tag again renders it beyond the reach of our demographic.

Morehead University. This program can best be described as aspirational, lacking the critical mass of neuroscience-focused faculty (all from the Psychology Department) really needed to provide a well-rounded neuroscience program.

Northern Kentucky University. This program is also in its infancy and presents a more balanced cadre of contributing faculty than our other sister institution. It is difficult to judge the stage of development and particular expertise this program has or will have, as data available from Gray Associates through Spring 2020 showed fewer than 10 graduates total.

Does the proposed program differ from existing programs in terms of curriculum, focus, objectives, etc.?

No

Does the proposed program serve a different student population (i.e., students in a different geographic area, non-traditional students) from existing programs?

No

Is access to existing programs limited?

No

Describe how the proposed program will articulate with related programs in the state. It should describe the extent to which students transfer has been explored and coordinated with other institutions.

The majority of the program consists of courses that are regularly offered at WKU and other state institutions. As such, there are already transfer equivalencies established for most of these courses. A thorough analysis of the neuroscience program at UK was undertaken and all of the core courses have or will have reasonably direct transfer equivalencies. Additionally, approximately half of the upper division electives have or will have direct equivalencies.

Describe student demand data for this program.

The evidence demonstrates consistent, strong, and growing academic demand to sustain a Neuroscience major. Over the last few years, we have launched a Neuroscience Minor, as well as a Neuroscience Track in the Psychological Sciences B.S. These continue to grow, and the vast majority of students within these programs have stated that they would far rather be majoring in Neuroscience.

This major is an excellent preparation for application to Medical School, and one of the tracks has been specifically designed to cover all of the key classes required by the majority of US Medical Schools. Indeed, the inaugural director of the Neuroscience B.S. (Dr. Baylis) serves as Pre-Medical advisor for the Psychological Sciences Department. All but one of his advisees has said that they wished that a Neuroscience Major would have been available to them.

The Major also appeals to students who seek a career in Artificial Intelligence. AI is a computational approach that is inspired by, and borrows from, neuroscience. The mundane students interested in A.I. will see it as a branch of Computer Science and will likely be successful in using established algorithms. The star students, however, understand that many new approaches await discovery, and the most productive source for inspiration will be Neuroscience. Therefore, the students taking our Computation track are destined to become the true innovators in A.I.

At the most general level, it is known that degrees in the natural sciences lead to higher paying jobs than other fields. The Neuroscience BS program is a rigorous science degree that is centered on learning hands-on techniques of problem solving, data analysis, and communication of findings. As such, Neuroscience represents a paradigmatic natural science degree.

But the Neuroscience degree will be even more valuable than typical natural science degrees. Everyone agrees that, with an aging population, the health sciences will continue to be growth areas for well-paying jobs. At the same time, it is clear that Artificial Intelligence (AI) - for better or for worse - will be a growing field for the foreseeable future. AI is an approach to computational problem-solving that borrows from the design of the human brain and cognition.

So, a rigorous Neuroscience BS program prepares students for well-paying jobs in two of the most solid, expanding areas - Medicine and AI. Given that we have very strong faculty in terms of teaching and research across the breadth of Neuroscience (spread across Biology, Psychological Sciences, Chemistry, Computer Science, and Mathematics) we can be sure that the program we are crafting will be world class, and excellent preparation for a variety of needed and well-paid careers.

Gray Associates show that this program faces very modest competition (15th percentile) within the state and region, as well as high demand from students (97th percentile), and extremely high employability (89th percentile). It is almost impossible to imagine a major that is more valuable to the Commonwealth.

Will this program replace or enhance any existing program(s) or concentration(s) within an existing program?

No

Program Demand Data and Support Documents

CIP 26-1501 Neuroscience Regional Scorecard for Bachelors.pdf

Delivery Mode

Is 25% or more of this program offered at a location other than main campus?

No

Enter Location(s) and Percentage of Program Offered at Location(s)

Location	Percentage
Bowling Green	100

Is 50% or more of this program offered by distance education (online asynchronous, online synchronous, connected classrooms, etc.)?

No

Do you plan to offer 100% of this program online?

No

If no, enter the percentage of the program that will be taught online.

0

Do you plan to offer 100% of this program face-to-face?

Yes

Do you plan to offer at least 25% of this program as a direct assessment competency-based educational program?

No

See the SACSCOC Policy on Direct Assessment Competency-based Educational Programs.

<https://www.sacscoc.org/pdf/081705/DirectAssessmentCompetencyBased.pdf>

Library Resources

Attach library resources

Neuro Library Resources.docx

Rationale for the program proposal?

The subject of Neuroscience - the science of nervous system and brain structure and function - is a rapidly-growing science that has become established within many different scientific disciplines. In keeping with the prominence of this interdisciplinary subject, we propose a major spanning four main science departments within Ogden College of Science and Engineering at WKU. This program will offer new opportunities for students and stands to attract additional students who would not otherwise attend WKU.

Budgetary Implications

Budget Template:

https://www.wku.edu/academicaffairs/pd/process_overview.php

CPE Proposal

WKU_CPE_Proposal_Neuroscience-BS DRAFT on 2023-10-06.pdf

Additional Attachments

WKU Neuroscience cpe-notification-of-intent-program-summary.pdf

Additional information or attachments

NOI is currently in process with WKU Academic Affairs (10/6/2023) and is attached above.

Key: 375

BACHELOR OF SCIENCE IN DATA SCIENCE

REQUEST: Approval of a Bachelor of Science in Data Science offered as an interdisciplinary program through the Gordon Ford College of Business and the Ogden College of Science and Engineering

FACTS: The Bachelor of Science in Data Science program equips students with a comprehensive understanding of the interdisciplinary field of data science. This program merges computer science, statistics, and domain-specific knowledge to harness the power of data for informed decision-making and innovative problem-solving. Through a combination of theoretical coursework, hands-on projects, and real-world applications, students will graduate with the skills necessary to excel in the rapidly evolving landscape of data-driven industries.

The new Data Science major will enhance the talent development of Kentucky students by capitalizing on the expertise of our current faculty. Introducing this major at WKU is expected to broaden career prospects for more WKU graduates, as the number of jobs in the data science field is projected to grow by 35% over the next decade, according to the Bureau of Labor Statistics. The program will offer tremendous value for our students – as of 2022, the median salary for Data Scientists is \$103,500 per year. With the increasing availability of broadband internet in Kentucky, and with greatly expanded acceptance of remote work, especially in the field of data science, this degree will offer Kentucky residents opportunities to hold high-paying jobs without having to leave the state. All Data Science majors will be expected to engage in applied interdisciplinary research, which will enhance their employability.

Required Courses (51-61 hours)*

Core Courses

BDAN 250	Introduction to Analytics (3)
BDAN 310	Business Data Analytics (3)
BDAN 350	Data Management (3)
BDAN 420	Predictive Modeling (3)
CS 180	Computer Science I (4)
DATA 301	Big Data with its Applications (3)
ECON 206	Statistics (3)
ECON 465	Regression and Econometric Analysis (3)
ECON 487	Data Methods in Economics (3)
MATH 136	Calculus I (4)
MATH 306	Applied and Computational Linear Algebra (3)
STAT 330	Introduction to Statistical Software (3)
New Course	Career Readiness (1)
New Course	Senior Seminar (3)
Block of electives leading to certificates (9-19)	

Total Hours: 51-61

*Complete curriculum and program requirements are in the Curriculum Program Proposal attached.

BUDGETARY IMPLICATIONS: Currently, there is a significant amount of expertise across various disciplines offered at WKU which allows us to build this program almost exclusively with existing resources. The Analytics and Information Systems faculty possess knowledge of data analysis, data

visualization, cyber-security, and many other applied data disciplines. The Economics faculty can offer expertise in advanced statistics with applications to business, while the Computer Science faculty can teach courses that go into significant depth in programming languages, data storage, and computer hardware. The mathematics department faculty can offer courses in not only mathematics but also statistics. Therefore, the building blocks for creating this program are already in place, including virtually all of the courses that will be offered. Thus, the impact on the cost side is minimal, while on the revenue side, it could be significant if the program attracts new students who would not have attended WKU otherwise and offers an opportunity to earn this degree within the state of Kentucky for those students who are considering similar programs out-of-state. Leveraging the skills of our existing faculty will allow WKU to offer this program in a very cost-effective manner and will lay the foundation for future growth.

RECOMMENDATION & IMPLEMENTATION DATE: President Timothy C. Caboni recommends approval of a Bachelor of Science in Data Science to be implemented Fall 2024.

MOTION: Approval to establish a Bachelor of Science in Data Science with implementation in Fall 2024.

: DATA SCIENCE

In Workflow

1. 99BU Approval (evelyn.thrasher@wku.edu; dana.cosby@wku.edu; alex.lebedinsky@wku.edu)
2. BU Dean (evelyn.thrasher@wku.edu; dana.cosby@wku.edu; alex.lebedinsky@wku.edu)
3. BU Curriculum Committee (evelyn.thrasher@wku.edu; dana.cosby@wku.edu; alex.lebedinsky@wku.edu)
4. SC Dean (cathleen.webb@wku.edu; stuart.burris@wku.edu; jennifer.anderson@wku.edu)
5. SC Curriculum Committee (cathleen.webb@wku.edu; stuart.burris@wku.edu; jennifer.anderson@wku.edu)
6. Undergraduate Curriculum Committee (sheila.flener@wku.edu; alexander.olson@wku.edu)
7. University Senate (susan.eagle@wku.edu)
8. Provost (beth.laves@wku.edu)
9. Board of Regents (all)
10. CPE (rheanna.plemons@wku.edu; beth.laves@wku.edu)
11. Program Inventory (jennifer.hammonds@wku.edu)

Approval Path

1. Sun, 01 Oct 2023 21:27:45 GMT
Evelyn Thrasher (evelyn.thrasher): Approved for 99BU Approval
2. Sun, 01 Oct 2023 21:28:13 GMT
Evelyn Thrasher (evelyn.thrasher): Approved for BU Dean
3. Wed, 25 Oct 2023 19:11:27 GMT
Alexander Lebedinsky (alex.lebedinsky): Approved for BU Curriculum Committee
4. Mon, 30 Oct 2023 14:09:23 GMT
Stuart Burris (stuart.burris): Approved for SC Dean
5. Thu, 02 Nov 2023 22:56:26 GMT
Stuart Burris (stuart.burris): Approved for SC Curriculum Committee
6. Fri, 01 Dec 2023 18:49:40 GMT
Sheila Flener (sheila.flener): Approved for Undergraduate Curriculum Committee
7. Thu, 14 Dec 2023 23:02:01 GMT
Susan Eagle (susan.eagle): Approved for University Senate
8. Fri, 15 Dec 2023 18:33:30 GMT
Robert Fischer (robert.fischer): Approved for Provost

New Program Proposal

Date Submitted: Fri, 29 Sep 2023 20:33:59 GMT

Viewing: : Data Science

Last edit: Tue, 14 Nov 2023 22:02:09 GMT

Changes proposed by: alx50504

Proposed Action

Active

Contact Person

Name	Email	Phone
Alex Lebedinsky	alex.lebedinsky@wku.edu	270-745-3150

Term of Implementation

2024-2025

Academic Level

Undergraduate

Program Type

Major

Degree Types

Bachelor of Science

Department

GFCB Interdisciplinary Programs

College

Business

Was your Notification of Intent (submitted to CPE by the Provost's Office) approved?

Yes

Program Name (eg. Biology)

Data Science

Will this program have concentrations?

No

CIP Code

30.7001 - Data Science, General.

Will this program lead to teacher certification?

No

Does the proposed program contain 25% or more new content not previously taught in another course at WKU? If yes, contact the Office of the Provost for additional SACSCOC proposal requirements

No

Catalog Content

Program Overview (Catalog field: Overview tab)

The Bachelor of Science in Data Science program equips students with a comprehensive understanding of the interdisciplinary field of data science. This program merges computer science, statistics, and domain-specific knowledge to harness the power of data for informed decision-making and innovative problem-solving. Through a combination of theoretical coursework, hands-on projects, and real-world applications, students will graduate with the skills necessary to excel in the rapidly evolving landscape of data-driven industries.

To earn the degree, the students have to complete a core set of classes and at least one certificate or a minor. The students will have an opportunity to personalize the degree by choosing one or multiple certificates that align with their interests.

Program Highlights:

- **Interdisciplinary Approach:** Our program seamlessly integrates concepts from business data analytics, economics, computer science, mathematics, and domain-specific areas, providing students with a holistic perspective on data science.
- **Strong Foundation:** Students will develop a solid foundation in programming, database management, statistical analysis, and machine learning techniques.
- **Data Visualization:** Learn to create compelling visualizations that effectively communicate complex insights to both technical and non-technical audiences.
- **Industry-Standard Tools:** Gain proficiency in popular tools and technologies used in the field, such as Python, R, SQL, and data manipulation libraries.
- **Capstone Project:** Culminate your learning journey with a capstone project where you will tackle a real-world problem using data-driven approaches under the guidance of faculty mentors.
- **Career Preparation:** Receive guidance on resume building, interview techniques, and job search strategies, and access our strong network of alumni working in various data science roles.
- **Career Opportunities:** Graduates of the program will be well-prepared for a wide range of careers in the data science field, including but not limited to:
 - Data Analyst
 - Machine Learning Analyst
 - Business Intelligence Analyst
 - Quantitative Analyst
 - Predictive Modeler
 - Market Research Analyst
 - Data Scientist

Curriculum Requirements (Catalog field: Program Requirements)

Program Requirements (51-61 hours)

Code	Title	Hours
Core Courses		42
BDAN 250	Introduction to Analytics	3
BDAN 310	Business Data Analytics	3
BDAN 350	Data Management	3
BDAN 420	Predictive Modeling	3
CS 180	Computer Science I	4
DATA 301	Big Data with its Applications	3
ECON 206	Statistics	3
ECON 465	Regression and Econometric Analysis	3
ECON 487	Data Methods in Economics	3
MATH 136	Calculus I	4
MATH 306	Applied and Computational Linear Algebra	3
STAT 330	Introduction to Statistical Software	3
DATA 399	Course DATA 399 Not Found (Career Readiness)	1
DATA 499	Course DATA 499 Not Found (Senior Seminar)	3
Select a block of electives from one of the options below		
Code	Title	Hours
Courses leading to the Applied Analytics Certificate		9
BDAN 305	Principles of MIS with Spreadsheets	3
Select two courses		6
BDAN 330	Structured Data Analysis	
BDAN 410	DSS Analysis and Design	
BDAN 430	Data Visualization	
Courses Leading to the Applied Statistics Minor		9
STAT 402	Experimental Design	3
MATH 382	Probability and Statistics I	3
MATH 482	Probability and Statistics II	3
Courses Leading to the Computer Science Minor		16
CS 290	Computer Science II	4
CS 351	Database Management Systems I	3
Three 300- or 400-level CS course not already in the program		9
Courses Leading to the Economic Data Analytics Certificate		9
ECON 307	Financial Data Modeling	3
ECON 480	Economic Forecasting	3
ECON 486	Applied Statistical Methods in Economics	3
Courses Leading to the GIS Certificate		14
GISC 316	Geographic Information Systems I	4
GISC 317	Geographic Information Systems II	4
GISC 417	GIS Analysis & Modeling	3
GISC 419	GIS Programming	3
Courses leading to the Health Informatics Certificate		18-19
BDAN 305	Principles of MIS with Spreadsheets	3
BDAN 330	Structured Data Analysis	3
HIM 230	Computer Systems and Applications in Health Information Management	3
HIM 330	Electronic Health Record Systems	3
HIM 430	Health Data Management and Analytics	3
Choose one of the following		3-4
HIM 100	Health Data Content and Structure	
HCA 340	Health Care Organization and Management	
Courses Leading to the Emergency Management Disaster Science MDS Certificate		12
EMDS 400	Emergency Management Policy and Practices	3
EMDS 401	Natural and Technological Disaster Risks	3

EMDS 402	Resiliency in Response to Terrorism and Violence	3
EMDS 403	Advanced Disaster Planning, Management, and Preparedness	3

4-Year Plan**First Year**

Fall	Hours	Spring	Hours
BDAN 250		3 CS 180	4
COMM 145		3 ECON 206	3
ENG 100		3 ENG 200 (or another approved Colonnade Course)	3
MATH 136		4 HIST 101 or HIST 102	3
Colonnade Explorations - Arts And Humanities		3 Colonnade Explorations - Social and Behavioral	3
		16	16

Second Year

Fall	Hours	Spring	Hours
BDAN 310		3 BDAN 350	3
DATA 301		3 MATH 306	3
STAT 330		3 Colonnade Explorations - Natural and Physical Sciences	3
Colonnade Explorations - Natural and Physical Sciences		3 Data Science Elective	3
Elective/Second Major/Minor/Certificate course		3 Elective/Second Major/Minor/Certificate course	3
		15	15

Third Year

Fall	Hours	Spring	Hours
ENG 300		3 DATA 399	1
ECON 465		3 ECON 487	3
Data Science Elective		3 Data Science Elective	3
Elective/Second Major/Minor/Certificate course		3 Elective/Second Major/Minor/Certificate course	3
Elective/Second Major/Minor/Certificate course		3 Elective/Second Major/Minor/Certificate course	3
		Colonnade Connections	3
		15	16

Fourth Year

Fall	Hours	Spring	Hours
BDAN 420		3 DATA 499	3
Elective/Second Major/Minor/Certificate course		3 Colonnade Connections	3
Elective/Second Major/Minor/Certificate course		3 Elective/Second Major/Minor/Certificate course	3
Colonnade Connections		3 Elective/Second Major/Minor/Certificate course	3
Elective/Second Major/Minor/Certificate course		3	
		15	12

Total Hours 120

Will this program be managed or owned by more than one department?

Yes

Interdisciplinary Departments**Secondary Departments**

Coll BU:Interdiscpl/Undeclared (99BU)

Coll SC:Interdiscpl/Undeclared (99SC)

Does this program include courses from outside your department?

Yes

Outside Courses Details

Who approved including these courses?	When were they approved?
Jan Hun-Shepherd, William Mkanta - courses for the Health Informatics Certificate, Leslie North - GIS and EMDS	09/26/2023, 10/17/2023

Relation to Mission and Strategic Plan

Explain how the proposed program relates to the institutional mission and academic strategic plan.

WKU's Strategic plan aims to "Facilitate high impact practices, immersive learning in different cultures, process-learning practices, and collaborative learning and instructional opportunities."

The interdisciplinary nature of the program is collaborative by design, and will award students with multiple opportunities for immersive learning through project work and applied learning.

Explain how the proposed program addresses the state's postsecondary education strategic agenda

The Data Science major aligns with the KY Postsecondary Education Strategic Agenda for 2022-30, focusing on Talent and Value. This new major aims to enhance the talent development of Kentucky students by capitalizing on the expertise of our current faculty. Introducing this major at WKU is expected to broaden career prospects for more WKU graduates, as number of jobs is projected to grow by 35% over the next decade, according to the Bureau of Labor Statistics. The program will offer tremendous value for our students – as of 2022, the median salary for Data Scientists is \$103,500 per year. With the increasing availability of broadband internet in Kentucky, and with greatly expanded acceptance of remote work, especially in the field of data science, this degree will offer Kentucky residents opportunities to hold high-paying jobs without having to leave the state. All Data Science majors will be expected to engage in applied interdisciplinary research, which will enhance their employability. Leveraging the skills of our existing faculty will allow WKU to offer this program in a very cost-effective manner and will lay the foundation for future growth.

Program Quality and Demand

Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand; career opportunities at the regional, state, and national level; and any changes or trends in the discipline that necessitate a new program.

Please insert one Learning Outcome per box. Click green plus sign for additional LO boxes

Learning Outcomes and Measurement Plan

	List all student learning outcomes of the program.	Measurement Plan
SLO 1	Data Manipulation and Analysis: Students will be able to effectively gather, clean, transform, and analyze diverse datasets. They will showcase the ability to employ programming languages and tools to manipulate data, extract meaningful insights, and identify trends and patterns.	DATA 499 - Senior Assessment capstone course will require students to conduct a research project where this SLO will be assessed.
SLO 2	Statistical Modeling Competence: Students will acquire a comprehensive understanding of statistical techniques. They will demonstrate the capacity to apply appropriate models, evaluate their performance, and make informed decisions about model selection and interpretation of results.	DATA 499 - Senior Assessment capstone course will require students to conduct a research project where this SLO will be assessed.
SLO 3	Data Visualization and Communication: Students will be adept at creating compelling visualizations that succinctly represent complex data-driven insights. They will effectively communicate their findings to technical and non-technical audiences, demonstrating the skill to convey the implications of their analysis.	DATA 499 - Senior Assessment capstone course will require students to conduct a research project where this SLO will be assessed.
SLO 4	Ethical and Responsible Data Practices: Students will comprehend the ethical considerations associated with data collection, storage, and usage. They will demonstrate an awareness of privacy concerns, bias mitigation, and the legal and ethical implications of their data science work.	DATA 399 - Career Readiness and DATA 301 - Big Data will cover the topics on ethical and responsible data practices. This SLO will be assessed in those two classes.
SLO 5	Interdisciplinary Problem Solving: Graduates will have the ability to apply data science techniques to tackle real-world problems using data-driven approaches. They will showcase their capacity to integrate computer science, statistics, and domain-specific knowledge to provide innovative solutions in diverse fields.	DATA 499 - Senior Assessment capstone course will require students to conduct a research project where this SLO will be assessed. Students will study a problem from one of the areas of expertise stemming from their certificate(s) and/or minor(s).

Assessment Template: https://www.wku.edu/academicaffairs/ee/assurance_learning_resources.php

Upload Assessment Plan

Curriculum map - Data Science.xlsx

data science ASL template.docx

Specify any distinctive qualities of the program.

The program is designed to be highly modifiable to allow students to stack multiple credentials. Typically, data science programs are housed in statistics and computer science departments, offering degrees that allow students to earn “deep” knowledge of the discipline. In the job market, the demands on employees with the title “data scientist” are different – they tend to be more “broad” than “deep”, and that is the niche the program aims to fill. This major will give students the essential skills expected of a data scientist, which include computer programming in multiple languages, knowledge of database languages, cloud computing, data wrangling, statistics, econometrics, as well as calculus and linear algebra. These fundamental skills will be coupled with domain knowledge from various disciplines – the students will have to complete at least one certificate or a minor that complements their degree in data science.

Does the proposed program differ from existing programs in terms of curriculum, focus, objectives, etc.?

Yes

Please explain

This is the first such program to be offered at WKU. The closest related programs are a certificate in Business Data Analytics and a Bachelor of Science in Business Data Analytics. While the programs appear similar, there are fundamental differences between the two disciplines: Data analysts examine data to spot patterns, apply predictive analytic tools, and generate visual reports that aid businesses in formulating more strategic choices. In contrast, data scientists are responsible for designing and building new tools for modeling data, developing and adjusting algorithms and predictive models

Does the proposed program serve a different student population (i.e., students in a different geographic area, non-traditional students) from existing programs?

No

Is access to existing programs limited?

No

Describe how the proposed program will articulate with related programs in the state. It should describe the extent to which students transfer has been explored and coordinated with other institutions.

Currently, there are two existing data programs in the state of Kentucky at EKU and NKU and one under development at UK. EKU’s program is housed within the Department of Mathematics and Statistics and is named Data Science and Statistics. NKU’s program is at the College of Informatics. UK’s proposed program will be housed in the College of Arts and Sciences.

WKU’s program will be a collaborative effort between the Gordon Ford College of Business and Ogden College of Science and Engineering. The intent of WKU’s proposed program is to create a truly interdisciplinary major that will prepare students for jobs in the field of data science. Data scientists occupy a variety of jobs, some of which require in-depth knowledge of a specific field such as natural language processing or artificial intelligence. Another, and possibly larger segment of the data science professionals requires individuals to be jacks-of-all-trades because their jobs require creating and maintaining databases, developing workflows for data collection and analysis, developing ad-hoc analyses for specific problems, finetuning algorithms that have been put in production, and many other tasks. These kinds of jobs rely on individuals having knowledge in all of these areas, and that’s the area WKU’s proposed program is designed to address. Additionally, by requiring courses that go hand-in-hand with data-driven disciplines such as data analytics, computer science, economics, and GIS, the students will be required to couple their knowledge of data science with at least one other discipline. This is what the data scientists refer to as “domain knowledge” – a successful data scientist is expected to be proficient in data skills and to understand the context within which data science will be used. The students will also have an opportunity to expand their domain knowledge into multiple areas by earning more than one certificate or a minor in addition to their data science major.

The key features of the existing and proposed programs are outlined in the table below. This table does not include every characteristic of each program as it is somewhat difficult to draw direct comparisons between the programs due to their design, course naming conventions, and course content.

	EKU	NKU	UK	WKU
Calculus I	X	X	X	X
Calculus II	X	X	No	No
Applied Statistics	X	X	X	X
Linear Algebra	X	X	X	X
Regression Analysis	X	Optional	X	X
Statistics with SAS	Optional	No	No	X
Data Structures and Programming	X	X	No	X
Machine Learning	X	Optional	X	X
Data Wrangling	No	X	X	X
Data Analytics and Visualization	No	X	X	X
Data Mining	No	X	No	X
Big Data	No	X	No	X
Probability and Statistics	No	X	No	Optional

The courses in the WKU's program overlap with coursework in other programs in the state, offering opportunities for students to transfer courses between institutions. The design of the program is most similar to that of NKU which has a core set of classes combined with three application areas. The distinction between the WKU's program and NKU's data science program is in the emphasis on different skill sets: While NKU's program places a strong emphasis on computer science (15 credit hours) and mathematics and statistics (18 credit hours), WKU's program is designed to provide students with the flexibility to develop either of those skills through certificates or minors. Instead of having a number of dedicated computer language classes, the students will learn how to program in R, Python, SAS, and SQL throughout the program – the computer language skills will be embedded in most of the courses in the program. The program at WKU also allows students to pursue more than one application area such as GIS, business data analytics, or economic data analytics through certificates and minors. Therefore, the students at WKU's program will have a smaller core set of classes compared to NKU and will give students an opportunity to stack multiple credentials that will complement their major.

EKU's program resides in the Department of Mathematics and Statistics. The program offers a strong emphasis on statistics and not as much emphasis on computer science as the program at NKU. The distinctive characteristics between WKU's and EKU's programs are WKU will require courses that use SAS (a statistical software used in this field) while at EKU that course is optional; WKU's program will include courses on data visualization, data wrangling, and data mining. At EKU some of these courses are not included in the program or are optional. The structure of WKU's program will be different as well – WKU's program will have a small core set of classes and will allow students to choose one or more areas of specialization that will be earned through certificates and minors.

Describe student demand data for this program.

Please see the attachment below.

Please see the attachment below.

Will this program replace or enhance any existing program(s) or concentration(s) within an existing program?

No

Program Demand Data and Support Documents

Demand Estimates.docx

Delivery Mode

Is 25% or more of this program offered at a location other than main campus?

No

Enter Location(s) and Percentage of Program Offered at Location(s)

Location	Percentage
WKU Main Campus	100

Is 50% or more of this program offered by distance education (online asynchronous, online synchronous, connected classrooms, etc.)?

No

Do you plan to offer 100% of this program online?

No

If no, enter the percentage of the program that will be taught online.

0

Do you plan to offer 100% of this program face-to-face?

Yes

Do you plan to offer at least 25% of this program as a direct assessment competency-based educational program?

No

See the SACSCOC Policy on Direct Assessment Competency-based Educational Programs.

<https://www.sacscoc.org/pdf/081705/DirectAssessmentCompetencyBased.pdf>

Library Resources

Attach library resources

Data Science Library needs.docx

Rationale for the program proposal?

Currently, there is a significant amount of expertise across various disciplines offered at WKU which allows us to build this program almost exclusively with existing resources. The Analytics and Information Systems faculty possess knowledge of data analysis,

data visualization, cyber-security, and many other applied data disciplines. The Economics faculty can offer expertise in advanced statistics with applications to business, while the Computer Science faculty can teach courses that go into significant depth in programming languages, data storage, and computer hardware. The Mathematics department faculty can offer courses in not only mathematics but also statistics. Therefore, the building blocks for creating this program are already in place, including virtually all of the courses that will be offered. Thus, the impact on the cost side is minimal, while on the revenue side, it could be significant if the program attracts new students who would not have attended WKU otherwise, and offers an opportunity to earn this degree within the state of Kentucky for those students who are considering similar programs out-of-state.

And, while we strongly believe that this program will be successful, in the event of low enrollments, it will be easy enough to unwind, without placing a large financial burden on the university. Therefore, this program has very little downside risk, while offering a significant potential for growth.

Budgetary Implications

Budget Template:

https://www.wku.edu/academicaffairs/pd/process_overview.php

CPE Proposal

CPE Notification of Intent Form 2023 Data Science.docx

Key: 376

GRADUATE CERTIFICATE IN MARKETING AND SALES

REQUEST: Approval of a graduate certificate in Marketing and Sales through the Department of Marketing within the Gordon Ford College of Business.

FACTS: This 4-course marketing and sales MBA certificate will expose students to the necessary skills and knowledge needed to become more proficient in marketing. Students will learn key elements of marketing, market research, digital marketing along with skills needed in the sales field.

Required Courses (12 hours)*

BA 513	Contemporary Business Analytics (3)
BA 517	Advanced Marketing (3)
BA 518	Contemporary Issues in Sales (3)
BA 521	Market Research and Consumer Insights (3)
BA 596	GFCB Graduate Certificate Portfolio (0)

Total Hours: 12

*Complete curriculum and program requirements are in the Curriculum Program Proposal attached.

BUDGETARY IMPLICATIONS: The graduate certificate in Marketing and Sales will utilize existing faculty teaching in the MBA program with no additional resources needed.

RECOMMENDATION & IMPLEMENTATION DATE: President Timothy C. Caboni recommends approval of a graduate certificate in Marketing and Sales to be implemented Fall 2024.

MOTION: Approval to establish a graduate certificate in Marketing and Sales with implementation in Fall 2024.

: MARKETING AND SALES

In Workflow

1. MKT Approval (lukas.forbes@wku.edu)
2. BU Dean (evelyn.thrasher@wku.edu; dana.cosby@wku.edu; alex.lebedinsky@wku.edu)
3. BU Curriculum Committee (evelyn.thrasher@wku.edu; dana.cosby@wku.edu; alex.lebedinsky@wku.edu)
4. Graduate Curriculum Committee (whitley.stone@wku.edu)
5. Graduate Council (sarah.bonis@wku.edu)
6. University Senate (susan.eagle@wku.edu)
7. Provost (beth.laves@wku.edu)
8. Board of Regents (all)
9. CPE (rheanna.plemons@wku.edu; beth.laves@wku.edu)
10. Program Inventory (jennifer.hammonds@wku.edu)

Approval Path

1. Fri, 20 Oct 2023 16:15:40 GMT
Lukas Forbes (lukas.forbes): Approved for MKT Approval
2. Fri, 20 Oct 2023 16:18:38 GMT
Alexander Lebedinsky (alex.lebedinsky): Approved for BU Dean
3. Thu, 26 Oct 2023 14:13:22 GMT
Dana Cosby (dana.cosby): Rollback to Initiator
4. Thu, 26 Oct 2023 15:12:09 GMT
Lukas Forbes (lukas.forbes): Approved for MKT Approval
5. Thu, 26 Oct 2023 15:12:29 GMT
Dana Cosby (dana.cosby): Approved for BU Dean
6. Thu, 26 Oct 2023 15:12:48 GMT
Dana Cosby (dana.cosby): Approved for BU Curriculum Committee
7. Mon, 06 Nov 2023 13:54:39 GMT
Whitley Stone (whitley.stone): Approved for Graduate Curriculum Committee
8. Thu, 16 Nov 2023 16:55:46 GMT
Sarah Bonis (sarah.bonis): Approved for Graduate Council
9. Thu, 14 Dec 2023 23:03:15 GMT
Susan Eagle (susan.eagle): Approved for University Senate
10. Fri, 15 Dec 2023 18:33:41 GMT
Robert Fischer (robert.fischer): Approved for Provost

New Program Proposal

Date Submitted: Thu, 26 Oct 2023 15:11:25 GMT

Viewing: : Marketing and Sales

Last edit: Thu, 07 Dec 2023 21:01:11 GMT

Changes proposed by: lks68658

Proposed Action

Active

Contact Person

Name	Email	Phone
Lukas Forbes	lukas.forbes@wku.edu	2707452993

Term of Implementation

2024-2025

Academic Level

Graduate

Program Type

Certificate - Graduate

Department

Marketing

College

Business

Program Name (eg. Biology)

Marketing and Sales

CIP Code

52.1401 - Marketing/Marketing Management, General.

Will this program lead to teacher certification?

No

Catalog Content**Program Overview (Catalog field: Overview tab)**

This 4-course marketing and sales MBA certificate will expose students to the necessary skills and knowledge needed to become more proficient in marketing. Students will learn key elements of marketing, market research, digital marketing along with skills needed in the sales field.

Admission Requirements (Catalog field: Program Admission)

- Admission to WKU graduate school;
- At least 3 years experience in a professional setting;
- Background knowledge of and exposure to word processing, spreadsheets and presentations

Curriculum Requirements (Catalog field: Program Requirements)**Program Requirements (12 hours)**

Code	Title	Hours
BA 513	Contemporary Business Analytics	3
BA 517	Advanced Marketing	3
BA 518	Course BA 518 Not Found	3
BA 521	Course BA 521 Not Found	3
BA 596	GFCB Graduate Certificate Portfolio	0
Total Hours		12

Will this program be managed or owned by more than one department?

No

Does this program include courses from outside your department?

No

Relation to Mission and Strategic Plan**Explain how the proposed program relates to the institutional mission and academic strategic plan.**

This course will better prepare students for a career in business and marketing by exposing them to skills they will need in their professional careers

Explain how the proposed program addresses the state's postsecondary education strategic agenda

This program will enhance enrollment by adding a highly desired concentration to our marketing program, and will increase retention by giving students additional degree concentration options.

Program Quality and Demand

Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand; career opportunities at the regional, state, and national level; and any changes or trends in the discipline that necessitate a new program.

Please insert one Learning Outcome per box. Click green plus sign for additional LO boxes

Learning Outcomes and Measurement Plan

	List all student learning outcomes of the program.	Measurement Plan
SLO 1	Apply key marketing concepts to complete a corporate profile.	Company profile analysis
SLO 2	Apply the steps in the selling process to real world concepts	Sales plan analysis
SLO 3	Conduct marketing research using a research plan	Marketing research plan analysis

Assessment Template: https://www.wku.edu/academicaffairs/ee/assurance_learning_resources.php

Upload Assessment Plan

Executive Decision Making ASL 2023-24 Marketing.docx

Change in Discipline (If the program is being proposed to meet changes in the academic discipline, please outline those changes and explain why they necessitate development of a new program.)

None

Specify any distinctive qualities of the program.

This program will be one of the few offered in the region that will include not only marketing and market research (common graduate level topics) but also courses in sales and digital marketing

Does the proposed program differ from existing programs in terms of curriculum, focus, objectives, etc.?

Yes

Please explain

We do not currently have an MBA concentration in marketing

Does the proposed program serve a different student population (i.e., students in a different geographic area, non-traditional students) from existing programs?

No

Is access to existing programs limited?

No

Describe how the proposed program will articulate with related programs in the state. It should describe the extent to which students transfer has been explored and coordinated with other institutions.

This program will give students at WKU and across the state the ability to complete an MBA with a concentration in marketing and sales. Combined with our undergraduate Sales program, the only fully certified program in Kentucky, this program should drive additional student interest to our MBA program.

Describe student demand data for this program.

This program should increase enrollment in the MBA program by at least 10% by offering a new concentration in a desired area of study.

Students completing this program will have options in a variety of fields to include product marketing, sales, marketing research, and digital marketing areas.

Will this program replace or enhance any existing program(s) or concentration(s) within an existing program?

No

Program Demand Data and Support Documents

Demand Estimates Marketing MBA program.docx
 Benchmarking Analysis - Stackable MBA Programs - Western Kentucky University (1).pdf

Delivery Mode

Is 25% or more of this program offered at a location other than main campus?

No

Enter Location(s) and Percentage of Program Offered at Location(s)

Location	Percentage
WKU Bowling Green Online	100

Is 50% or more of this program offered by distance education (online asynchronous, online synchronous, connected classrooms, etc.)?

Yes

Do you plan to offer 100% of this program online?

Yes

Do you plan to offer 100% of this program face-to-face?

No

If no, enter the percentage of the program that is taught face-to-face

0

Do you plan to offer at least 25% of this program as a direct assessment competency-based educational program?

No

See the SACSCOC Policy on Direct Assessment Competency-based Educational Programs.
<https://www.sacscoc.org/pdf/081705/DirectAssessmentCompetencyBased.pdf>

Rationale for the program proposal?

To add a marketing concentration to our MBA program

Budgetary Implications

Budget Template:

https://www.wku.edu/academicaffairs/pd/process_overview.php

Budget Spreadsheet

certificate-budget-spreadsheet Marketing and Sales.xlsx

Reviewer Comments

Dana Cosby (dana.cosby) (Thu, 26 Oct 2023 14:13:22 GMT): Rollback: Please add topics.

Key: 385

UNDERGRADUATE CERTIFICATE IN ECONOMIC DATA ANALYTICS

REQUEST: Approval of an undergraduate certificate in Economic Data Analytics through the Department of Economics within the Gordon Ford College of Business.

FACTS: This undergraduate certificate will help prepare professionals for jobs in both the public and private sector. Students will demonstrate advanced knowledge in quantitative economics disciplines including applied economic statistics, econometrics, time series analysis, and forecasting, as well as data management skills. This program will complement the forthcoming Data Science Bachelor of Science and can serve as a block of electives for that degree program, allowing the Data Science students to earn an additional certificate while pursuing the bachelor's degree.

Required Courses (18 hours)*

ECON 206	Statistics (3)
ECON 306	Statistical Analysis (3) or ECON 307 Financial Data Modeling, BDAN 310 Business Data Analytics, or STAT 330 Introduction to Statistical Software
ECON 465	Regression and Econometric Analysis (3)
ECON 480	Economic Forecasting (3)
ECON 486	Applied Statistical Methods in Economics (3)
ECON 487	Data Methods in Economics (3)

Total Hours: 18

*Complete curriculum and program requirements are in the Curriculum Program Proposal attached.

BUDGETARY IMPLICATIONS: The undergraduate certificate in Economic Data Analytics will utilize existing faculty capacity with no additional resources needed.

RECOMMENDATION & IMPLEMENTATION DATE: President Timothy C. Caboni recommends approval of an undergraduate certificate in Economic Data Analytics to be implemented Fall 2024.

MOTION: Approval to establish an undergraduate certificate in Economic Data Analytics with implementation in Fall 2024.

: ECONOMIC DATA ANALYTICS, CERTIFICATE

In Workflow

1. ECON Approval (alex.lebedinsky@wku.edu; david.zimmer@wku.edu)
2. BU Dean (evelyn.thrasher@wku.edu; dana.cosby@wku.edu; alex.lebedinsky@wku.edu)
3. BU Curriculum Committee (evelyn.thrasher@wku.edu; dana.cosby@wku.edu; alex.lebedinsky@wku.edu)
4. Undergraduate Curriculum Committee (sheila.flener@wku.edu; alexander.olson@wku.edu)
5. University Senate (susan.eagle@wku.edu)
6. Provost (beth.laves@wku.edu)
7. Board of Regents (all)
8. CPE (rheanna.plemons@wku.edu; beth.laves@wku.edu)
9. Program Inventory (jennifer.hammonds@wku.edu)

Approval Path

1. Wed, 18 Oct 2023 20:13:15 GMT
Alexander Lebedinsky (alex.lebedinsky): Approved for ECON Approval
2. Thu, 19 Oct 2023 19:52:32 GMT
Evelyn Thrasher (evelyn.thrasher): Approved for BU Dean
3. Wed, 25 Oct 2023 19:11:30 GMT
Alexander Lebedinsky (alex.lebedinsky): Approved for BU Curriculum Committee
4. Tue, 14 Nov 2023 22:42:21 GMT
Sheila Flener (sheila.flener): Approved for Undergraduate Curriculum Committee
5. Thu, 14 Dec 2023 23:02:24 GMT
Susan Eagle (susan.eagle): Approved for University Senate
6. Fri, 15 Dec 2023 18:33:37 GMT
Robert Fischer (robert.fischer): Approved for Provost

New Program Proposal

Date Submitted: Wed, 18 Oct 2023 20:09:35 GMT

Viewing: : Economic Data Analytics, Certificate

Last edit: Thu, 07 Dec 2023 20:40:49 GMT

Changes proposed by: alx50504

Proposed Action

Active

Contact Person

Name	Email	Phone
David Zimmer	david.zimmer@wku.edu	270-745-2880

Term of Implementation

2024-2025

Academic Level

Undergraduate

Program Type

Certificate - Undergraduate

Department

Economics

College

Business

Program Name (eg. Biology)

Economic Data Analytics, Certificate

Will this program have concentrations?

No

CIP Code

45.0603 - Econometrics and Quantitative Economics.

Will this program lead to teacher certification?

No

Does the proposed program contain 25% or more new content not previously taught in another course at WKU? If yes, contact the Office of the Provost for additional SACSCOC proposal requirements

No

Catalog Content**Program Overview (Catalog field: Overview tab)**

This undergraduate certificate will help prepare professionals for jobs in both public and private sector. Students will demonstrate advanced knowledge in quantitative economics disciplines including applied economic statistics, econometrics, time series analysis, and forecasting, as well as data management skills.

Curriculum Requirements (Catalog field: Program Requirements)**Program Requirements (18 hours)**

Code	Title	Hours
ECON 206	Statistics	3
ECON 306	Statistical Analysis	3
or ECON 307	Financial Data Modeling	
or BDAN 310	Business Data Analytics	
or STAT 330	Introduction to Statistical Software	
ECON 465	Regression and Econometric Analysis	3
ECON 480	Economic Forecasting	3
ECON 486	Applied Statistical Methods in Economics	3
ECON 487	Data Methods in Economics	3
Total Hours		18

Will this program be managed or owned by more than one department?

No

Does this program include courses from outside your department?

Yes

Outside Courses Details

Who approved including these courses?	When were they approved?
Dr. Ray Blankenship, Kanita DuClox	October 13, 2023

Relation to Mission and Strategic Plan**Explain how the proposed program relates to the institutional mission and academic strategic plan.**

WKU's Strategic plan aims to "Facilitate high impact practices, immersive learning in different cultures, process-learning practices, and collaborative learning and instructional opportunities."

This certificate will give students an opportunity to learn advanced quantitative skills that can be used in economics and beyond. The skills taught in this program are in high demand by employers.

Explain how the proposed program addresses the state's postsecondary education strategic agenda

This certificate aligns with the KY Postsecondary Education Strategic Agenda for 2022-30, focusing on Talent and Value. This program aims to enhance the talent development of Kentucky students by capitalizing on the expertise of our current faculty. Introducing this major at WKU is expected to broaden career prospects for more WKU graduates. According to the Bureau of Labor Statistics, the median pay for economists is \$113,940 per year, and the number of jobs is expected to continue to grow over the next decade.

Program Quality and Demand

Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand; career opportunities at the regional, state, and national level; and any changes or trends in the discipline that necessitate a new program.

Please insert one Learning Outcome per box. Click green plus sign for additional LO boxes

Learning Outcomes and Measurement Plan

	List all student learning outcomes of the program.	Measurement Plan
SLO 1	Data Manipulation and Analysis: Students will be able to effectively gather, clean, transform, and analyze diverse datasets. They will showcase the ability to employ programming languages and tools to manipulate data, extract meaningful insights, and identify trends and patterns.	This set of skills will be assessed in the ECON 487 class. Targeted assignments will assess students' ability to perform the tasks described in this learning outcome. Data will be gathered to measure students' outcomes in each of the skills
SLO 2	Statistical Modeling Competence: Students will acquire a comprehensive understanding of statistical techniques. They will demonstrate the capacity to apply appropriate models, evaluate their performance, and make informed decisions about model selection and interpretation of results.	This set of skills will be assessed in the ECON 486 class. Students will complete a research project in which they will have to select a statistical model, evaluate its performance, and describe the results of their estimations.

Assessment Template: https://www.wku.edu/academicaffairs/ee/assurance_learning_resources.php

Upload Assessment Plan

economic data analytics ASL template.docx

Specify any distinctive qualities of the program.

The program builds on the offerings of data-oriented courses offered in the Economics Department and packages them into a certificate. The skills taught in these courses proved to be some of the most valuable skills for our students in the job market.

Does the proposed program differ from existing programs in terms of curriculum, focus, objectives, etc.?

Yes

Please explain

The closest related existing program at WKU is the Applied Data Analytics certificate. While there is some overlap between the two programs, they are rather distinct in nature. The field of data analytics, especially business data analytics, focuses more on organizing data to make it more accessible and usable within the business context in order to understand general trends in the data, provide meaningful insights, and generate actionable intelligence.

The focus of the Economic Data Analytics certificate is on teaching statistical techniques as they are used in economics which are collectively referred to as "econometrics". These techniques are most suited for economic policy analysis rather than predicting individual behaviors and outcomes, which is the focus of data analytics and data science.

Does the proposed program serve a different student population (i.e., students in a different geographic area, non-traditional students) from existing programs?

No

Is access to existing programs limited?

No

Describe how the proposed program will articulate with related programs in the state. It should describe the extent to which students transfer has been explored and coordinated with other institutions.

ECON 206, ECON 306, ECON 465, and ECON 480 are rather standard courses in Statistics, Intermediate Statistics, Econometrics, and Forecasting, respectively, and can be transferred to and from other institutions that offer such courses.

Describe student demand data for this program.

This certificated could serve as an "add-on" to several programs at WKU, including

- BA in Economics
- BS in Business Economics
- BS in Mathematical Economics
- BS in Data Science (forthcoming).

Currently, there are 207 students enrolled across various economics programs, so if 10-15% of the students opt to earn this certificate, we can expect enrollments of 20-30 students.

The program has the potential to attract students from other majors, so the estimate above is likely on the lower end.

Historically, the graduates of the economics programs who had a skillset similar to what will be offered in this certificate were able to find jobs as economists, statisticians, data scientists, and data analysts.

According to the Bureau of Labor Statistics, the following is the outlook in these professions:

Economists: 17,600 jobs in 2022; 6% projected growth over 2022-2023; median pay \$113,940 per year

Statistician: 35,600 jobs in 2022; 30% projected growth over 2022-2023; median pay \$99,960 per year

Data Scientists: 168,900 jobs in 2022, 35% projected growth over 2020-2023, median pay \$103,500 per year.

Will this program replace or enhance any existing program(s) or concentration(s) within an existing program?

No

Program Demand Data and Support Documents

program demand estimates.docx

Delivery Mode

Is 25% or more of this program offered at a location other than main campus?

No

Enter Location(s) and Percentage of Program Offered at Location(s)

Location	Percentage
WKU - Main Campus	100%

Is 50% or more of this program offered by distance education (online asynchronous, online synchronous, connected classrooms, etc.)?

No

Do you plan to offer 100% of this program online?

No

If no, enter the percentage of the program that will be taught online.

0

Do you plan to offer 100% of this program face-to-face?

Yes

Do you plan to offer at least 25% of this program as a direct assessment competency-based educational program?

No

See the SACSCOC Policy on Direct Assessment Competency-based Educational Programs.

<https://www.sacscoc.org/pdf/081705/DirectAssessmentCompetencyBased.pdf>

Rationale for the program proposal?

The rationale for proposing this program is two-fold:

1) Over the years, the department accumulated enough expertise to be able to offer a wide collection of data-oriented courses. Within the last few years, the portfolio of these courses became large enough to be packaged into a stand-alone certificate. This program collects some of the "hard" and most marketable skills offered in our department into one certificate, which should ultimately help with students' employability.

2) This certificate will complement the forthcoming Data Science program, which is currently in the proposal stage.

3) The program is based entirely on existing courses, and, therefore, it will not require additional resources.

Budgetary Implications

Budget Template:

https://www.wku.edu/academicaffairs/pd/process_overview.php

Budget Spreadsheet

Economics Data Analytics certificate-budget-spreadsheet-11-21-2023.xlsx

Key: 387

GRADUATE CERTIFICATE IN TRAUMA AND RESILIENCE

REQUEST: Approval of a graduate certificate in Trauma and Resilience through the Department of Social Work within the College of Health and Human Services.

FACTS: This graduate certificate prepares students to practice in a variety of settings with increased knowledge in how trauma affects functioning at the individual, family, and societal levels. Participants in the graduate certificate will learn about the latest research on trauma, the impact of trauma on victims, how to assess the effects of trauma, and gain skills in trauma-informed care. The certificate will prepare students for work with individuals, families, and communities experiencing trauma in a wide range of professions, including social work, psychological sciences and psychology majors, criminal justice personnel, healthcare professionals, educators, and many other professional domains.

There is an increased demand for professionals in areas including mental health, child welfare, education, among others, to have knowledge of the effects of trauma on all levels of client systems and to be trained in trauma-informed approaches (Hanover, 2022). According to the Occupational Outlook 2021, jobs for social workers are expected to increase by 9% from 2021-2031. The average number of projected openings annually is 74,000. From the commissioned Hanover study:

"Occupations requiring trauma informed care experience in Kentucky are predominantly in clinical care and welfare care. Of 706 job postings in Kentucky in the last six months, the majority are for social workers, therapists, counselors, and clinicians. Some of the most common job titles include "case workers" and "counselors" which require an educational background in social work, counseling, or psychology, and licenses like Licensed Clinical Social Worker (or Licensed Professional Counselor). Degrees or experience in social work are the most common prerequisites for employers seeking applicants with TIC training. Job postings reveal that employers prefer applicants with degrees in social work (28.8 percent of job postings), counseling (14.8 percent), psychology (13.1 percent), and human services (16.8 percent) with skills and experience to enter practical roles as therapists or counselors."

Required Courses (12 hours)*

SWRK 572 Interpersonal Violence: Social Work Practice (3)

SWRK 681 Trauma and Stressor Related Disorders (3)

Graduate level electives from a program approved list (6)

Total Hours: 12

*Complete curriculum and program requirements are in the Curriculum Program Proposal attached.

BUDGETARY IMPLICATIONS: This certificate will utilize existing faculty capacity with no additional resources needed.

RECOMMENDATION & IMPLEMENTATION DATE: President Timothy C. Caboni recommends approval of a graduate certificate in Trauma and Resilience to be implemented Fall 2024.

MOTION: Approval to establish a graduate certificate in Trauma and Resilience with implementation in Fall 2024.

: TRAUMA AND RESILIENCE

In Workflow

1. SWRK Approval (patricia.desrosiers@wku.edu)
2. HH Dean (tania.basta@wku.edu; danita.kelley@wku.edu)
3. HH Curriculum Committee (danita.kelley@wku.edu;judy.english@wku.edu)
4. Graduate Curriculum Committee (whitley.stone@wku.edu)
5. Graduate Council (sarah.bonis@wku.edu)
6. University Senate (susan.eagle@wku.edu)
7. Provost (beth.laves@wku.edu)
8. Board of Regents (all)
9. SACSCOC (beth.laves@wku.edu)
10. CPE (rheanna.plemons@wku.edu; beth.laves@wku.edu)
11. Program Inventory (jennifer.hammonds@wku.edu)

Approval Path

1. Thu, 13 Apr 2023 13:50:03 GMT
Patricia Desrosiers (patricia.desrosiers): Approved for SWRK Approval
2. Tue, 19 Sep 2023 21:07:58 GMT
Danita Kelley (danita.kelley): Approved for HH Dean
3. Thu, 28 Sep 2023 16:38:07 GMT
Danita Kelley (danita.kelley): Approved for HH Curriculum Committee
4. Thu, 05 Oct 2023 19:35:22 GMT
Whitley Stone (whitley.stone): Approved for Graduate Curriculum Committee
5. Thu, 12 Oct 2023 20:13:32 GMT
Sarah Bonis (sarah.bonis): Approved for Graduate Council
6. Fri, 17 Nov 2023 15:26:44 GMT
Susan Eagle (susan.eagle): Approved for University Senate
7. Fri, 17 Nov 2023 21:30:46 GMT
Robert Fischer (robert.fischer): Approved for Provost

New Program Proposal

Date Submitted: Thu, 13 Apr 2023 13:41:22 GMT

Viewing: : Trauma and Resilience

Last edit: Fri, 08 Dec 2023 14:47:20 GMT

Changes proposed by: dnj86513

Proposed Action

Active

Contact Person

Name	Email	Phone
Dana Sullivan	dana.sullivan@wku.edu	270-745-5313

Term of Implementation

2024-2025

Academic Level

Graduate

Program Type

Certificate - Graduate

Department

Social Work

College

Health and Human Services

Program Name (eg. Biology)

Trauma and Resilience

CIP Code

44.0701 - Social Work.

Will this program lead to teacher certification?

No

Does the proposed program contain 25% or more new content not previously taught in another course at WKU? If yes, contact the Office of the Provost for additional SACSCOC proposal requirements

No

Catalog Content**Program Overview (Catalog field: Overview tab)**

This graduate certificate prepares students to practice in a variety of settings with increased knowledge in how trauma affects functioning at the individual, family, and societal levels. Participants in the graduate certificate will learn about the latest research on trauma, the impact of trauma on victims, how to assess the effects of trauma, and gain skills in trauma-informed care. The graduate certificate in trauma and resiliency is housed in the College of Health and Human Services, Department of Social Work.

Admission Requirements (Catalog field: Program Admission)

Please refer to the admission section (<http://catalog.wku.edu/graduate/admission/>) of this catalog for Graduate School admission requirements.

Curriculum Requirements (Catalog field: Program Requirements)**Program Requirements (12 hours)**

Code	Title	Hours
Required Courses		
SWRK 572	Interpersonal Violence: Social Work Practice	3
SWRK 681	Trauma and Stressor Related Disorders	3
Electives		
Select 6 hours of the following: ¹		6
SWRK 672	Child Sexual Abuse	
SWRK 673	Grief and Loss: Issues and Interventions	
SWRK 676	Social Work with Migrants	
SWRK 682	Suicide Assessment and Intervention for Social Work	
SWRK 685	Human Trafficking: Theories, Policies, & Intervention	
SWRK 675	Expressive Therapies in Social Work Practice	
CNS 568	Counseling Children and Adolescents	
CNS 592	Crisis, Trauma and Violence Counseling	
CNS/SWRK 637	Theories of Addiction	
CNS 647	Addictions: Assessment, Diagnosis and Treatment Planning	
CNS 667	Counseling Substance and Process Addictions	
CNS 677	Eating Disorders in Counseling	
PH 548	Community Organizing in Public Health	
PH 564	Public Health Issues in Women's Health	
PH 576	Public Health Education and Communication Techniques	
PH 578	Health Inequities	
PH 580	Public Health Foundations and Practice	
EMDS 502	Terrorism, Violence, Resiliency, and Response	

Total Hours**12**

¹ Other electives may be selected with advisor approval.

Will this program be managed or owned by more than one department?

No

Does this program include courses from outside your department?

Yes

Outside Courses Details

Who approved including these courses?	When were they approved?
Marilyn Gardner, Public Health	August 1, 2022
Jill Duba Sauerheber & Cre Dye, Counseling and Student Affairs	September 12, 2022
Josh Durkee, Earth, Environmental & Atmospheric Sciences	March 14, 2023

Relation to Mission and Strategic Plan

Explain how the proposed program relates to the institutional mission and academic strategic plan.

The proposed program is congruent with WKU's mission to prepare students to be productive, engaged, and socially responsible citizen-leaders, enriching the quality of life for those within our reach. Specifically, the certificate will provide students with the knowledge and skills to effectively provide services in a way that supports resilience, prevention, treatment, and recovery. The proposed certificate is also congruent with the academic strategic plan to fully prepare our students to enter the workplace.

Explain how the proposed program addresses the state's postsecondary education strategic agenda

The proposed program is consistent with the state's postsecondary education strategic agenda. The overarching goal of the state's strategic plan is "Kentucky will ensure all students have equitable access to postsecondary education and the necessary tools to complete their programs prepared for life and work". The proposed certificate prepares students for work with individuals, families, and communities experiencing trauma in a wide-range of professions, including social work, psychological sciences and psychology majors, criminal justice personnel, healthcare professionals, educators, and many other professional domains. This also fits with the state's objective #7 (Ensure academic offerings are high-quality, relevant, and inclusive) and #8 (Improve the career outcomes of postsecondary graduates).

Program Quality and Demand

Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand; career opportunities at the regional, state, and national level; and any changes or trends in the discipline that necessitate a new program.

Please insert one Learning Outcome per box. Click green plus sign for additional LO boxes

Learning Outcomes and Measurement Plan

	List all student learning outcomes of the program.	Measurement Plan
SLO 1	Gain knowledge of the effects of trauma on all levels of client systems.	artifact from SWRK 681-uploaded to Anthology e-portfolio, scored with rubric
SLO 2	Assess the impact of trauma on client systems.	artifact from SWRK 681-uploaded to Anthology e-portfolio, scored with rubric
SLO 3	Evaluate evidence-based practices used to promote resilience in response to trauma.	artifact from SWRK 572-uploaded to Anthology e-portfolio, scored with rubric

Assessment Template: https://www.wku.edu/academicaffairs/ee/assurance_learning_resources.php

Upload Assessment Plan

Trauma and Resilience Graduate Certificate Assessment Plan.docx

Change in Discipline (If the program is being proposed to meet changes in the academic discipline, please outline those changes and explain why they necessitate development of a new program.)

N/A

Specify any distinctive qualities of the program.

The proposed graduate certificate will teach graduate students about the impact of trauma on client systems and teach practice skills to intervene to promote client resilience.

Does the proposed program differ from existing programs in terms of curriculum, focus, objectives, etc.?

No

Does the proposed program serve a different student population (i.e., students in a different geographic area, non-traditional students) from existing programs?

No

Is access to existing programs limited?

No

Describe how the proposed program will articulate with related programs in the state. It should describe the extent to which students transfer has been explored and coordinated with other institutions.

If a student transfers to WKU and wants to enroll in the program, the coordinator will review their transcript to see if any of their previous coursework is equivalent to required courses and electives. The Council on Social Work Education allows programs to review incoming coursework from other accredited schools and determine equivalent courses.

Describe student demand data for this program.

A special topics course on trauma was developed in the MSW Program. High demand for the course led to the development of a permanent course on trauma, SWRK 681 Trauma and Stressor Related Disorders. The demand for the course, along with data suggesting workforce needs, led to the development of a course on Interpersonal Violence (SWRK 572). and this proposed certificate. Additionally, an analysis of regional searches (Kentucky and contiguous states) for "trauma informed certificate" and "trauma informed care certification" completed in March, 2023, indicated that over the prior year, there was a combined average of 1,000 monthly search; over the year the searches for those two items increased by 900%. National search information lends to a higher number of average searches.

According to the Occupational Outlook 2021, jobs for social workers are expected to increase by 9% from 2021-2031. The average number of projected openings annually is 74,000.

From the commissioned Hanover study:

"Occupations requiring trauma informed care experience in Kentucky are predominantly in clinical care and welfare care. Of 706 job postings in Kentucky in the last six months, the majority are for social workers, therapists, counselors, and clinicians. Some of the most common job titles include "case workers" and "counselors" which require an educational background in social work, counseling, or psychology, and licenses like Licensed Clinical Social Worker (or Licensed Professional Counselor). Degrees or experience in social work are the most common prerequisites for employers seeking applicants with TIC training. Job postings reveal that employers prefer applicants with degrees in social work (28.8 percent of job postings), counseling (14.8 percent), psychology (13.1 percent), and human services (16.8 percent) with skills and experience to enter practical roles as therapists or counselors."

Will this program replace or enhance any existing program(s) or concentration(s) within an existing program?

No

Program Demand Data and Support Documents

Benchmarking - Trauma Informed Care Certificate - WKU CHHS.pdf
Regional web searches, related to trauma informed certificate.pdf
National search data, trauma informed certificate.pdf

Delivery Mode

Is 25% or more of this program offered at a location other than main campus?

Yes

Enter Location(s) and Percentage of Program Offered at Location(s)

Location	Percentage
asynchronous/online	75-100%

Is 50% or more of this program offered by distance education (online asynchronous, online synchronous, connected classrooms, etc.)?

Yes

Do you plan to offer 100% of this program online?

Yes

Do you plan to offer 100% of this program face-to-face?

No

If no, enter the percentage of the program that is taught face-to-face

0-25%

Do you plan to offer at least 25% of this program as a direct assessment competency-based educational program?

No

See the SACSCOC Policy on Direct Assessment Competency-based Educational Programs.
<https://www.sacscoc.org/pdf/081705/DirectAssessmentCompetencyBased.pdf>

Rationale for the program proposal?

There is an increased demand for professionals in areas including mental health, child welfare, education, among others, to have knowledge of the effects of trauma on all levels of clients systems and to be trained in trauma-informed approaches (Hanover, 2022). This certificate program will meet a need to train graduate students in trauma-informed care and interventions to promote resilience. The demand for social workers in the workforce continues to grow, particularly as society continues to recover from the COVID pandemic, which increased incidents of trauma-related disorder (Ertl et al. 2022).

Budgetary Implications

Budget Template:

https://www.wku.edu/academicaffairs/pd/process_overview.php

Budget Spreadsheet

certificate-budget-spreadsheet Grad Trauma Cert 092023.xlsx

Key: 374

UNDERGRADUATE CERTIFICATE IN FOOD SERVICE DESIGN

REQUEST: Approval of an undergraduate certificate in Food Service Design through the Department of Applied Human Sciences within the College of Health and Human Services.

FACTS: At this time, there are no tailored program offerings that target the field of foodservice consulting in the U.S. Foodservice consulting goes beyond restaurants and includes designing foodservice for schools, prisons, stadiums, universities, hospitals, entertainment venues, and more. Additionally, the growing demand to re-design and/or design with sustainability, efficiency, and safety as priorities has created a high demand for foodservice consultants. There are between 60-100 jobs listed on LinkedIn searching the job title of "Foodservice Consultant." Those cities seeing the largest population growth, particularly in the southeast, have shown an increased demand for foodservice consultants. The program worked with the Foodservice Consultants Society International (FCSI) to develop the certificate. FCSI is a professional organization offering design and management consulting services, specializing in the foodservice and hospitality industry.

The certificate in Food Service Design provides preparation in concept development, management, marketing, menu engineering, operations, and facility design for restaurants, schools, prisons, stadiums, universities, hospitals, and entertainment venues. The Food Service Design certificate along with experience in the field and passing the qualifying exam after graduation can lead to a consulting credential through Food Service Consultants Society International.

Required Courses (16 hours)*

- HMD 152 Food Service Sanitation (1)
- IDFM 243 Materials and Finishes for Interior Design (3)
- HMD 251 Commercial Foods (3)
- IDFM 344 Digital Rendering for Interiors (3)
- IDFM 345 Commercial Kitchen Design (3)
- HMD 353 Menu and Supply Chain Management (3)

Total Hours: 16

*Complete curriculum and program requirements are in the Curriculum Program Proposal attached.

BUDGETARY IMPLICATIONS: The undergraduate certificate in Food Service Design will utilize existing faculty capacity with no additional resources needed.

RECOMMENDATION & IMPLEMENTATION DATE: President Timothy C. Caboni recommends approval of an undergraduate certificate in Food Service Design to be implemented in Fall 2024.

MOTION: Approval to establish an undergraduate certificate in Food Service Design with implementation in Fall 2024.

: FOOD SERVICE DESIGN

In Workflow

1. CFS Approval (travis.wilson1@wku.edu)
2. HH Dean (tania.basta@wku.edu; danita.kelley@wku.edu)
3. HH Curriculum Committee (danita.kelley@wku.edu;judy.english@wku.edu)
4. Undergraduate Curriculum Committee (sheila.flener@wku.edu; alexander.olson@wku.edu)
5. University Senate (susan.eagle@wku.edu)
6. Provost (beth.laves@wku.edu)
7. Board of Regents (all)
8. SACSCOC (beth.laves@wku.edu)
9. CPE (rheanna.plemons@wku.edu; beth.laves@wku.edu)
10. Program Inventory (jennifer.hammonds@wku.edu)

Approval Path

1. Tue, 29 Aug 2023 20:09:17 GMT
Travis Wilson (travis.wilson1): Rollback to Initiator
2. Tue, 29 Aug 2023 20:55:07 GMT
Travis Wilson (travis.wilson1): Approved for CFS Approval
3. Mon, 25 Sep 2023 21:25:03 GMT
Danita Kelley (danita.kelley): Approved for HH Dean
4. Fri, 29 Sep 2023 21:31:10 GMT
Danita Kelley (danita.kelley): Approved for HH Curriculum Committee
5. Tue, 17 Oct 2023 21:43:04 GMT
Sheila Flener (sheila.flener): Approved for Undergraduate Curriculum Committee
6. Fri, 17 Nov 2023 15:26:23 GMT
Susan Eagle (susan.eagle): Approved for University Senate
7. Fri, 17 Nov 2023 21:30:38 GMT
Robert Fischer (robert.fischer): Approved for Provost

New Program Proposal

Date Submitted: Tue, 29 Aug 2023 20:50:25 GMT

Viewing: : Food Service Design

Last edit: Tue, 17 Oct 2023 20:27:44 GMT

Changes proposed by: shl20947

Proposed Action

Active

Contact Person

Name	Email	Phone
Sheila Flener	sheila.flener@wku.edu	270-745-4105
Travis Wilson	travis.wilson1@wku.edu	270-745-5915
Ann Embry	ann.embry@wku.edu	270-745-4031

Term of Implementation

2023-2024

Academic Level

Undergraduate

Program Type

Certificate - Undergraduate

Department

Applied Human Sciences

College

Health and Human Services

Program Name (eg. Biology)

Food Service Design

Will this program have concentrations?

No

CIP Code

50.0408 - Interior Design.

Will this program lead to teacher certification?

No

Does the proposed program contain 25% or more new content not previously taught in another course at WKU? If yes, contact the Office of the Provost for additional SACSCOC proposal requirements

No

Catalog Content**Program Overview (Catalog field: Overview tab)**

The certificate in Food Service Design provides preparation in concept development, management, marketing, menu engineering, operations, and facility design for restaurants, schools, prisons, stadiums, universities, hospitals, and entertainment venues. The Food Service Design certificate along with experience in the field and passing the qualifying exam after graduation can lead to a consulting credential through Food Service Consultants Society International (FCSI).

Curriculum Requirements (Catalog field: Program Requirements)**Program Requirements (16 hours)**

Code	Title	Hours
HMD 152	Food Service Sanitation	1
IDFM 243	Materials and Finishes for Interior Design	3
HMD 251	Commercial Foods	3
IDFM 344	Digital Rendering for Interiors	3
IDFM 345	Commercial Kitchen Design	3
HMD 353	Menu and Supply Chain Management	3
Total Hours		16

Will this program be managed or owned by more than one department?

No

Does this program include courses from outside your department?

No

Relation to Mission and Strategic Plan**Explain how the proposed program relates to the institutional mission and academic strategic plan.**

WKU Strategic Plan: Engage with the communities we serve to be a resource and partner in finding innovative solutions to social, economic, and other challenges.

While the foodservice industry experienced some difficulty throughout the COVID pandemic, the industry is positioned to see nearly 5% growth in 2022.[1] In addition, COVID has changed customer habits and expectation for foodservice providers, and they will need to reconsider their approach to foodservice. Given the scale of the shift, foodservice consulting services are projected to be in demand. Throughout the United States, there are a wide range of hospitality programs. At this time, there are not tailored program offerings that target the field of foodservice consulting. Foodservice consulting goes beyond restaurants and includes designing foodservice for schools, prisons, stadiums, universities, hospitals, entertainment venues, and more. Add in the growing demand to re-design and/or design with sustainability, efficiency, and safety as priorities, there is a high demand for foodservice consultants.

Explain how the proposed program addresses the state's postsecondary education strategic agenda

Kentucky Council on Postsecondary Education, Strategic Agenda: Strategic Objective 8: Improve the career outcomes of postsecondary graduates, 8a. Work with campuses to include a work-based learning or other career-relevant experience in all undergraduate programs.

On any given day, there are between 60-100 jobs listed on LinkedIn searching the job title of "Foodservice Consultant." Those cities seeing largest population growth, such as what is being seen in the southeast, have an increased demand for foodservice consultants. Cities such as Bowling Green, KY who have a large food service industry could benefit from graduates with food service consulting certification.

Program Quality and Demand

Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand; career opportunities at the regional, state, and national level; and any changes or trends in the discipline that necessitate a new program.

Please insert one Learning Outcome per box. Click green plus sign for additional LO boxes

Learning Outcomes and Measurement Plan

	List all student learning outcomes of the program.	Measurement Plan
SLO 1	Effectively implement safe, effective practices in a food service areas.	Students will be assessed via assignments, papers, and / or projects in required courses.
SLO 2	Design best practices in terms of financial management (i.e. building cost-effective menus, analyze purchasing, and inventory control).	Students will be assessed via assignments, papers, and / or projects in required courses.
SLO 3	Produce a food service design using the principles of kitchen design, appropriate cooking equipment using Revit or current industry software.	Students will be assessed via assignments, papers, and / or projects in required courses.

Assessment Template: https://www.wku.edu/academicaffairs/ee/assurance_learning_resources.php

Upload Assessment Plan

Food Service Design ASL.docx

Change in Discipline (If the program is being proposed to meet changes in the academic discipline, please outline those changes and explain why they necessitate development of a new program.)

At this time, there are not tailored program offerings that target the field of foodservice consulting. Foodservice consulting goes beyond restaurants and includes designing foodservice for schools, prisons, stadiums, universities, hospitals, entertainment venues, and more. Add in the growing demand to re-design and/or design with sustainability, efficiency, and safety as priorities, there is a high demand for foodservice consultants. On any given day, there are between 60-100 jobs listed on LinkedIn searching the job title of "Foodservice Consultant." Those cities seeing largest population growth, such as what is being seen in the southeast, have an increased demand for foodservice consultants.

Specify any distinctive qualities of the program.

WKU will be the first higher education institution to offer this program of study.

Does the proposed program differ from existing programs in terms of curriculum, focus, objectives, etc.?

Yes

Please explain

This certificate program is focused on consulting with owners of food service operations and combines courses of Interior Design and Hospitality Management

Does the proposed program serve a different student population (i.e., students in a different geographic area, non-traditional students) from existing programs?

No

Is access to existing programs limited?

No

Describe how the proposed program will articulate with related programs in the state. It should describe the extent to which students transfer has been explored and coordinated with other institutions.

The proposed certificate at WKU will be the only certificate offered in Foodservice consulting in the US. University of Louisville, University of Kentucky, Murray State University, Eastern Kentucky University all offer programs in Hospitality Management where students in those programs could benefit from this certificate at WKU.

Describe student demand data for this program.

On any given day, there are between 60-100 jobs listed on LinkedIn searching the job title of "Foodservice Consultant." Those cities seeing largest population growth, such as what is being seen in the southeast, have an increased demand for foodservice consultants.

Foodservice consulting integrates foodservice design and management. In 2022, the Occupational Outlook Handbook indicated that "Employment of food service managers is projected to grow 10 percent from 2021 to 2031, faster than the average for all occupations."^[2]

1. International Foodservice Manufacturers Association (IFMA). (2021, August 3). IFMA publishes 2022 foodservice industry forecasts, projecting 4.9% growth in next calendar year. CISION PR Newswire. Retrieved November 16, 2021, from <https://www.prnewswire.com/news-releases/ifma-publishes-2022-foodservice-industry-forecasts-projecting-4-9-growth-in-next-calendar-year-301347333.html>.

2. US Bureau of Labor Statistics. Food Service Managers. Occupational Outlook Handbook. Retrieved from <https://www.bls.gov/ooh/management/food-service-managers.htm>

Will this program replace or enhance any existing program(s) or concentration(s) within an existing program?

No

Program Demand Data and Support Documents

Food Service Managers-Occupational-Outlook-US.pdf

Delivery Mode

Is 25% or more of this program offered at a location other than main campus?

No

Is 50% or more of this program offered by distance education (online asynchronous, online synchronous, connected classrooms, etc.)?

No

Do you plan to offer 100% of this program online?

No

If no, enter the percentage of the program that will be taught online.

0

Do you plan to offer 100% of this program face-to-face?

Yes

Do you plan to offer at least 25% of this program as a direct assessment competency-based educational program?

No

See the SACSCOC Policy on Direct Assessment Competency-based Educational Programs. <https://www.sacscoc.org/pdf/081705/DirectAssessmentCompetencyBased.pdf>

Rationale for the program proposal?

We are creating this program to meet a demand in the industry for professional to have knowledge in the food service industry. Food service design is not taught in the interior design curriculum. This will be a cutting-edge certificate program.

Budgetary Implications

Budget Template: https://www.wku.edu/academicaffairs/pd/process_overview.php

Additional Attachments

certificate-budget-spreadsheet-01-20-2023, Food Service Design.xlsx
FCSI 2023 Compensation & Benefits Report.pdf
Food Service Design Interior Design.xlsx

Additional information or attachments

Additional employer and industry demand is supported in the FCSI compensation and benefits report.

An analysis of google searches for "restaurant design," "restaurant interior design," and "commercial kitchen design" completed in August, 2023, indicated that over the prior year, there was an average of 5,000 monthly searches for each phrase; over the last three months of that period, searches for "commercial kitchen design" increased by 900%.

Reviewer Comments

Travis Wilson (travis.wilson1) (Tue, 29 Aug 2023 20:09:17 GMT): Rollback: Just because

Key: 372

SABBATICAL LEAVES

REQUEST:

Approval of sabbatical leaves for faculty listed below.

FACTS:

Listed below are faculty members who have been recommended for sabbatical leave by the department chair/director, College Sabbatical Advisory Committee, college dean, and the provost. As of academic year 2024-2025, each will have served the university for at least six continuous full academic years, hold the rank of assistant professor or above, and have submitted a compelling sabbatical application for the purpose of professional academic enrichment.

College of Education and Behavioral Sciences

<u>Name</u>	<u>Department</u>	<u>Period of Leave</u>
Dr. Jill Duba Sauerheber	Counseling & Student Affairs	Fall 2024
Dr. Loretta Dye	Counseling & Student Affairs	Spring 2025

College of Health and Human Services

<u>Name</u>	<u>Department</u>	<u>Period of Leave</u>
Dr. Jason Crandall	Kinesiology, Rec, & Sport	Fall 2024
Dr. Soyeon Kim	Applied Human Sciences	Fall 2024

Gordon Ford College of Business

<u>Name</u>	<u>Department</u>	<u>Period of Leave</u>
Dr. J. Sebastian Leguizamon	Economics	Fall 2024
Dr. Stephen Locke	Economics	Spring 2025
Dr. Ismail Civelek	Management	Fall 2024

Ogden College of Science and Engineering

<u>Name</u>	<u>Department</u>	<u>Period of Leave</u>
Dr. Noah Ashley	Biology	Fall 2024
Dr. Scott Grubbs	Biology	Spring 2025

Potter College of Arts and Letters

<u>Name</u>	<u>Department</u>	<u>Period of Leave</u>
Professor Joon Sung	Art & Design	Fall 2024
Professor Natalie Tyree	Art & Design	Spring 2025

Potter College of Arts and Letters (cont.)

<u>Name</u>	<u>Department</u>	<u>Period of Leave</u>
Dr. Nikolai Endres	English	AY 2024-2025
Dr. Gillian Knoll	English	Fall 2024
Dr. Dorothea Browder	History	Fall 2024
Dr. Marc Eagle	History	AY 2024-2025
Dr. Jie-Young Kong	Media & Communication	Spring 2025

BUDGETARY IMPLICATIONS:

No additional resources are necessary to accommodate the sabbatical leaves. Courses usually taught by these faculty will be reassigned to other faculty members by each respective department chair.

RECOMMENDATION:

President Timothy C. Caboni recommends awarding the above individuals sabbatical leave for the terms indicated.

MOTION: Approval of faculty sabbatical leaves for the above recommended individuals for the terms indicated.

**UNIVERSITY DISTINGUISHED PROFESSOR
APPOINTMENT**

REQUEST: Approval of University Distinguished Professor appointments for Dr. Gordon Emslie, Professor of Physics & Astronomy, and Dr. David Zimmer, Professor of Economics, effective July 1, 2024.

FACT: Following a review of nominations, below are faculty members who have been recommended by the University Distinguished Professorship Selection Committee and the Provost to be awarded University Distinguished Professor status effective July 1, 2024.

Dr. Gordon Emslie has brought distinction to the university through his teaching, research, and public service. He is a scientist who is committed to making science more accessible to broader audiences. He is best known for his research on solar flares, work that has earned him an international reputation with more than 200 peer reviewed articles and three co-authored/authored books. He has secured over \$5 million in funding for his work, principally from NASA, the National Science Foundation, and the Department of Defense. Dr. Emslie's contributions and the depth of his commitment to student achievement, WKU, professional growth as an educator, and to our community are remarkable.

Dr. David Zimmer has brought distinction to the university as a scholar who uses his expertise to inform his students, colleagues, and the campus community. He is ambitious and innovative and the impact he's made for WKU is overwhelmingly positive. He has published over sixty peer reviewed articles and an academic book. Dr. Zimmer's book on copulas, entitled "Copula Modeling: An Introduction for Practitioners," is a standard graduate-level reference. His research focuses on using statistical copula functions to model microeconomic phenomena and is cited in the most widely used PhD-level econometrics textbooks. His work on education reform has been profiled in the Milwaukee Journal Sentinel. He has served as a consultant for the British National Institute for Health and Care Excellence (NICE). He currently serves as the Interim Chair of the Economics Department and is ranked among the top 23% of economists in the U.S. Prior to joining the WKU faculty in 2007, he worked as a staff economist at the U.S. Federal Trade Commission in one of its antitrust enforcement units.

RECOMMENDATION: President Timothy C. Caboni recommends the appointments of Dr. Gordon Emslie and Dr. David Zimmer as University Distinguished Professor of effective July 1, 2024.

MOTION: Approval of Dr. Gordon Emslie as University Distinguished Professor of Physics & Astronomy and Dr. David Zimmer as University Distinguished Professor of Economics effective July 1, 2024.