OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION

Improving our future by degrees

Agenda

February 14, 2023

NOTE

This document contains recommendations and reports to the State Regents regarding items on the February 14, 2023 special meeting agenda. For additional information, please call 405-225-9116 or to get this document electronically go to **www.okhighered.org** State System.

Materials and recommendations contained in this agenda are tentative and unofficial prior to State Regents' approval or acceptance on February 14, 2023.

OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION
655 Research Parkway, Oklahoma City

A G E N D A

Tuesday, February 14, 2023 at 10 a.m.
655 Research Parkway,
PHF Conference Center 1st floor
Oklahoma City, OK
Chair Michael C. Turpen, Presiding

1. **Announcement of filing of meeting notice and posting of the agenda in accordance with the Open Meeting Act.**

2. **Call to order.** Roll call and announcement of quorum.

3. **Comments from the Chair.** A brief comment on current activities. (No Action, No Discussion.)

4. **Comments from the Chancellor.** A brief comment on current activities. (No Action, No Discussion.)

ACADEMIC

5. **New Programs.**

   a. Oklahoma State University. Approval to offer the Doctor of Philosophy in Community Health Sciences and the Bachelor of Science in Nursing in Nursing. Page 1.

   b. University of Oklahoma. Approval to offer the Master of Science in Applied Statistics, the Master of Science in Sustainability – Energy and Materials Management, the Master of Science in Engineering Leadership and Management, the Master of Science in Learning Experience Design and Technology, and the Graduate Certificate in Applied Research and Program Evaluation. Page 13.

   c. University of Central Oklahoma. Approval of a function exception request and to offer the Doctor of Science in Forensic Science. Page 37.

   d. Southwestern Oklahoma State University. Approval to offer the Certificate in Medical Coding. Page 47.

   e. Carl Albert State College. Approval to offer the Associate in Applied Science in Environmental Science Technology. Page 53.

   f. Murray State College. Approval to offer the Certificate in Child Development. Page 61.

   g. Oklahoma State University-Oklahoma City. Approval to offer the Associate in Applied Science in Biomanufacturing Technologies, the Certificate in Advanced Laboratory

Practices, the Certificate in Laboratory Practices, and the Certificate in Laboratory Quality. Page 67.

h. Tulsa Community College. Approval to offer the Associate in Applied Science in Cybersecurity. Page 79.

CONSENT DOCKET

6. **Consent Docket.** Approval/ratification of the following routine requests which are consistent with State Regents' policies and procedures or previous actions.

   a. Certificates of 15 or fewer credit hours. Northwestern Oklahoma State University. Ratification of institutional request to offer certificate of 15 or fewer credit hours. Page 85.

   b. Certificates of 15 or fewer credit hours. Redlands Community College. Ratification of institutional request to offer certificate of 15 or fewer credit hours. Page 87.

7. **Announcement of Next Regular Meeting – the next regular meetings are scheduled to be held on Wednesday, March 22, 2023 at 10:30 a.m. and Thursday, March 23, 2023 at 9 a.m. at the Oklahoma State Regents' office in Oklahoma City.**

8. **Adjournment.**

The Oklahoma State Regents for Higher Education are committed to ensuring that persons with disabilities are able to access the State Regents' public meetings. If you will need specialized assistance for an upcoming State Regents' meeting, please e-mail your request to accessibility@osrhe.edu or call 405.225.9116 at least 24 hours prior to the meeting. We will make every reasonable effort to accommodate your needs.

Meeting of the
OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION
February 14, 2023

AGENDA ITEM #5-a:

New Programs.

SUBJECT: Oklahoma State University. Approval to offer the Doctor of Philosophy in Community Health Sciences and the Bachelor of Science in Nursing in Nursing.

RECOMMENDATION:

It is recommended that the State Regents approve Oklahoma State University's requests to offer the Doctor of Philosophy in Community Health Sciences, via traditional and electronic delivery, and the Bachelor of Science in Nursing in Nursing, via traditional delivery, with the stipulation that continuation of the program will depend upon meeting the criteria established by the institution and approved by the State Regents, as described below.

- **Doctor of Philosophy in Community Health Sciences.** Continuation beyond Fall 2029 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 20 students in Fall 2028; and
  Graduates: a minimum of 5 students in 2028-2029.

- **Bachelor of Science in Nursing in Nursing.** Continuation beyond Fall 2028 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 36 students in Fall 2027; and
  Graduates: a minimum of 20 students in 2027-2028.

BACKGROUND:

Academic Plan

Institutional Academic Plans are submitted annually to the State Regents, with acknowledgment of receipt, not endorsement. Oklahoma State University's (OSU) 2022-2023 Academic Plan is available at: https://okhighered.org/complete-college-america/degree-completion-plans.shtml

APRA Implementation
In August 1991, the State Regents launched the Academic Planning/Resource Allocation (APRA) initiative, which was based on the principle that institutional officials would prioritize their programs and activities, and then fund higher priority activities at levels that ensured quality. In times of flat or declining budgets or financial constraints, institutions are expected to reallocate resources from lower priority activities to higher priority activities, rather than reducing quality by funding lower priority activities at the same rate as higher priority activities.

Since 1992, OSU has taken the following program actions in response to APRA:

2	Degree and/or certificate programs deleted
27	Degree and/or certificate programs added

Program Review
OSU offers 343 degree and/or certificate programs as follows:

92	Certificates
0	Associate in Arts or Science Degrees
0	Associate in Applied Science Degrees
114	Baccalaureate Degrees
86	Master's Degrees
51	Doctoral Degrees
0	First Professional Degrees

All of these programs were reviewed in the past five years with the exception of those programs with specialty accreditation. Programs with specialty accreditation are aligned with OSU's program review schedule as appropriate. Thus, if a professional program received a ten-year accreditation, it would not be reviewed for ten years, which is an approved exception to State Regents' policy.

Program Development Process
OSU's faculty developed the proposals, which were reviewed and approved by institutional officials. OSU's governing board approved delivery of the Doctor of Philosophy (Ph.D.) in Community Health Sciences at their March 25, 2022 meeting and the Bachelor of Science in Nursing in Nursing at their October 21, 2022 meeting. OSU is currently approved to offer 122 degree and certificate programs through electronic delivery. OSU requests authorization to offer these programs as outlined below.

POLICY ISSUES:

These actions are consistent with the Oklahoma State Regents for Higher Education's (OSRHE) Academic Program Approval and Distance Education and Traditional Off-Campus Programs policies.

ANALYSIS:

Doctor of Philosophy in Community Health Sciences

Program purpose. The proposed program will prepare advanced-level community health scholars and practitioners who will increase the quality of life for Oklahomans and beyond by utilizing evidence-based practices, social justice frameworks, and cultural competence.

Program rationale and background. The proposed stand-alone Ph.D. in Community Health Sciences currently exists as an emphasis area within the existing Ph.D. in Health, Leisure, and Human Performance (428), option in Health and Human Performance. Currently, students who wish to pursue a terminal degree in this emphasis area have to earn a Ph.D. degree with a degree name and option that does not fully or accurately describe their academic training. The lack of a stand-alone Ph.D. in Community Health Sciences program jeopardizes recruitment of outstanding students and impedes future employment prospects. The scope and practice of wellness have changed markedly in recent years, reflecting social, environmental, occupational, and scientific change. As a result of the recent changes in the field of community health, there is an increased demand for a stand-alone Ph.D. in Community Health Sciences as a distinct scholarly area.

Several trends strongly support the need for the training of additional educators, researchers, and practitioners in the area of community health. In the last 20 years, the emphasis on individual responsibility for health and intervention has shifted to a larger focus on the health and wellbeing of communities and entire populations. This shift has challenged traditional medical models in the U.S. healthcare system and has created a need for practitioners who are trained to improve the health status and quality of life for large groups of people (e.g., organizations, communities, populations). Furthermore, as the understanding of determinants of disease have increased, interventions aimed at reducing or eliminating risk factors for preventable diseases are imperative to creating improvements in community and population health.

Healthcare costs are increasing in the U.S. This trend has created political, corporate, community, and individual impetus for people to remain healthy and productive longer. Community health programs implemented at the primary and secondary levels that focus on preventing disease development or early detection of disease are key. Additionally, as communities in the U.S. become more racially/ethnically, economically, socially, and environmentally diverse, practitioners who are culturally competent to collaborate with marginalized and underserved populations are required to facilitate such programs. The graduates of this proposed Ph.D. program would be uniquely positioned to assume meaningful leadership positions in many governmental, non-profit, and academic institutions, which will be increasingly enlisted to reduce healthcare costs by focusing on the development of community health programs.

Employment opportunities. Graduates from the proposed program may serve in positions found within K-12 schools, higher education institutions, medical facilities, governmental agencies, non-profit organizations, and corporations. Oklahoma Works has identified medical and health service managers among the top critical occupations in Oklahoma for 2020-2022. The U.S. Bureau of Labor Statistics (BLS) estimates notable growth in this employment sector by 18 percent by 2028. Additionally, individuals with a Ph.D. in Community Health Sciences will be equipped to apply for supervisory positions as public health educators, which has an expected growth of 11 percent by 2028 according to the BLS.

Student demand. The proposed Ph.D. in Community Health Sciences program is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum Enrollment of majors in the program	20	Fall 2028
Minimum Graduates from the program	5	2028-2029

Duplication and impact on existing programs. There are no Ph.D. in Community Health Sciences programs in Oklahoma. A system wide letter of intent was communicated by email on January 31, 2022. None of the State System institutions notified State Regents' staff of a protest to the proposed program. Due to uniqueness of the proposed program, approval will not constitute unnecessary duplication.

Curriculum. The proposed Ph.D. in Community Health Sciences program will consist of 60 total credit hours as shown in the following table. No new courses will be developed and the curriculum is detailed in the attachment (Attachment A).

Content Area	Credit Hours
Community Health Core	15
Statistics & Research Methods Core	12
Community Health Electives	9
Cognate Area	9
Independent Research	15
Total	**60**

External Review. Doctoral programs represent a long-term commitment for an institution. Faculty, support staff, equipment, facilities and resources are required for research and training doctoral students. This translates to considerable investments in time and funds, therefore institutions infrequently develop new doctoral programs.

For these reasons, two external reviewers, Drs. Bart Hammig and Bernard Appiah, conducted an electronic review (i.e., no site visit) of the proposed degree program. Dr. Hammig holds a Doctor of Philosophy in Community Health from the University of Kansas Medical Center. He is currently a Professor of Public Health at the University of Arkansas, having served as Department Chair from 2011-2017 in the Health, Human Performance, and Recreation Department. Dr. Appiah holds a Doctor of Philosophy in Health Promotion and Community Health Sciences from Texas A&M University. He currently serves as an assistant professor of Public Health at Syracuse University (SU), Director of the SU's Research Program on Health Communication and Public Engagement, and a member of the Program and Curriculum Committee at SU's Department of Public Health. Both reviewers have extensive experience in the academic area of community health as well as knowledge of the quality standards required for successful doctoral programs in the discipline.

The external evaluators' charge was to assess the viability and quality of the proposed degree program with specific attention to issues of duplication of programs, student demand, productivity standards and funding implications. The evaluators used the OSRHE's Academic Program Approval policy and background information on the OSRHE's Academic Planning/Resource Allocation initiative to frame the review.

The team's overall evaluation included the following findings:

The goals and outcomes of the program are clearly indicated and align with the traditional research focus of the degree outcomes. The specific measurement assessments associated with each program outcome are well devised and tied to the program objectives as well as the mission of OSU. The curriculum is well thought out and reflects on competencies associated with the proposed area of study and competencies set forth by national governing bodies of community health education. The program meets the criteria established by the Oklahoma State Regents of Higher Education.

The team's overall evaluation included the following recommendations:

- Admission criteria of 3.5 GPA on master's degree coursework and the GRE exam will help to ensure a high-quality applicant pool; however, they may also prove to be restrictive. It is recommended to align the program with Graduate School admission criterion of 3.0 GPA on graduate level coursework.
- The student recruitment or admission standards should be reviewed to make them clear to prospective students.

- Due to the program's focus on "increasing the quality of life of Oklahomans and beyond," and improving the diversity of community health professionals and the populations they serve, recruitment could also provide additional requirements for international students.
- The Community Health Core (15 credit hours) and Community Health Electives (9 credits) should be reviewed given that expertise in communication and advocacy are central to community health, and have become a recent requirement of the National Commission for Health Education Credentialing.
- Support for faculty research and development may need further strengthening given that scholarship in community health sciences is an important part of recruiting and retaining top graduate students.
- While it is appropriate that two of the six core faculty for the proposed Ph.D. program are certified community health education specialists, future hiring of faculty in the proposed program should strategically aim to increase the proportion with such certification.

In summary, the team declared support without reservation to establish the program at OSU. OSU responded satisfactorily to the team's recommendations.

Faculty and staff. Existing faculty will teach the courses in the proposed program.

Delivery method and support services. The proposed Ph.D. in Community Health Sciences will be offered traditionally and electronically through Canvas, Zoom, and face-to face course options. Faculty teach both synchronous and asynchronous courses using Zoom for synchronous coursework and Canvas for asynchronous modules. The library, facilities, and equipment are adequate for the proposed program.

Online Pedagogy and Training. Faculty who teach in online environments complete training in both the technical tools as well as pedagogical design. In addition, professional development sessions throughout the year offer faculty supplemental training on the latest online teaching techniques.

Financing. The proposed program will be offered on a self-supporting basis and the current tuition and fee structure will be sufficient to adequately fund the program. No additional funding is requested from the State Regents to support the program.

Program resource requirements. Program resource requirements for the Ph.D. in Community Health Sciences are shown in the following table.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$0	$0	$0	$0	$0
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$0	$0	$0	$0	$0
State Resources Available through Internal Allocation and Reallocation	$0	$0	$0	$0	$0
Student Tuition	$63,166	$126,332	$180,474	$180,474	$243,640
Explanation/Calculations: Calculations are based on tuition and fees from students with 5 new admits per year for the first 4 years and 10 for year 5. It is estimated students will take 21 credit hours in their first 2 years and 18 credit hours in years 3 through 5. In-state tuition is $230.45 per credit hour and					

A. Funding Sources	Year of Program 1st Year	2nd Year	3rd Year	4th Year	5th Year
college fees are $112.75 per credit hour. Out-of-state tuition is $876.40 per credit hour and college fees are $112.75 per credit hour.					
TOTAL	**$63,166**	**$126,332**	**$180,474**	**$180,474**	**$243,640**

B. Breakdown of Budget Expenses/Requirements	Year of Program 1st Year	2nd Year	3rd Year	4th Year	5th Year
Administrative/Other Professional Staff	$8,700	$17,400	$17,400	$17,400	$17,400
Explanation:1st year is based on annual salary of 1 Administrative Assistant at $30,000 per year plus 1 Assistant Director at $57,000 per year at 0.1 FTE with subsequent years at 0.2 FTE.					
Faculty	$52,000	$104,000	$104,000	$104,000	$104,000
Explanation: 1st year is based on 8 faculty (average salary of $65,000 per year) at 0.1 FTE with subsequent years at 0.2 FTE.					
Graduate Assistants	$0	$0	$0	$0	$0
Student Employees	$435	$435	$435	$435	$435
Explanation: Based on 1 student worker paid $7.25 per hour for 2 hours per week dedicated to the program.					
Equipment and Instructional Materials	$0	$0	$0	$0	$0
Library	$0	$0	$0	$0	$0
Contractual Services	$0	$0	$0	$0	$0
Other Support Services	$0	$0	$0	$0	$0
Commodities	$0	$0	$0	$0	$0
Printing	$400	$600	$600	$600	$600
Explanation: Maintenance costs and copying of assignments, tests, etc. (including duplication services, equipment leasing, purchasing of toner, etc.)					
Telecommunications	$0	$0	$0	$0	$0
Travel	$1,600	$3,200	$3,200	$3,200	$3,200
Explanation: Funds to support student travel to conferences, workshops, etc.					
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$63,135**	**$125,635**	**$125,635**	**$125,635**	**$125,635**

Bachelor of Science in Nursing in Nursing

Program purpose. The goal of the proposed Bachelor of Science in Nursing in Nursing (BSN) program is to educate graduates to be successful in the nursing field.

Program rationale and background. The field of Nursing is continually growing. The proposed program's mission and objectives reflect the professional nursing standards and guidelines of the American

Association of Colleges of Nursing (AACN). Graduates of the program will be prepared to provide patient centered care that is respectful of differences, values, and expressed needs; practice safe, caring, responsible, and accountable care in accordance with professional ethics and nursing standards; demonstrate skills of critical thinking and decision making in the use of the nursing processes; use quality improvement principles and information technology to communicate, prevent errors, and support decision making; and integrate best practices with clinical expertise and patient values for optimal care.

Employment opportunities. There is a significant need for more nurses in Oklahoma and across the United States. The offering of the proposed program in Stillwater has strong support from local health care facilities as they do not have enough nurses to staff their facilities. Stillwater Medical Center reports a loss of 25 percent of their nurses in 2021. The Oklahoma Nurses Association reported in 2018 that there were 1,150 nurses per 100,000 people nationally while in Oklahoma there were only 700 nurses per 100,000 people. Oklahoma ranks 46th per capita for the number of RN's in the nation. Also reported in 2021, 35 percent of licensed nurses in Oklahoma are at or near retirement age. The Bureau of Labor Statistics projects that the need for Registered Nurses (RNs) will grow by 276,800 between 2020 and 2030. A BSN program at OSU would help address the shortage in Oklahoma and across the country.

Student demand. The proposed program is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum enrollment of majors in the program	36	Fall 2027
Minimum graduates from the program	20	2027-2028

Duplication and impact on existing programs. The proposed program may share some similar content to the following program:

Institution	Existing Program
University of Oklahoma Health Sciences Center	Bachelor of Science in Nursing (026)
East Central University	Bachelor of Science in Nursing (034)
Langston University	Bachelor of Science in Nursing in Nursing (039)
Northeastern State University	Bachelor of Science in Nursing in Nursing (104)
Northwestern Oklahoma State University	Bachelor of Science in Nursing (047)
Oklahoma Panhandle State University	Bachelor of Science in Nursing (053)
Rogers State University	Bachelor of Science in Nursing (128)
Southwestern Oklahoma State University	Bachelor of Science in Nursing in Nursing (087)
University of Central Oklahoma	Bachelor of Science in Nursing (129)

A system wide letter of intent was communicated by email on June 20, 2022. The University of Central Oklahoma (UCO) and Tulsa Community College (TCC) requested a copy of the proposal, which was sent on October 31, 2022 and November 8, 2022 respectively. Neither UCO, TCC, nor any other State System institution notified State Regents' staff of a protest to the proposed program. Due to the high demand for nurses in Oklahoma, approval to offer the program will not constitute unnecessary duplication.

Curriculum. The proposed Bachelor of Science in Nursing in Nursing will consist of 121 total credit hours as shown in the following table. Two new courses will be developed and the curriculum is detailed in the attachment (Attachment B).

Content Area	Credit Hours
General Education	41
College/Departmental Requirements	18
Major Requirements	62
Total	**121**

Faculty and staff. Existing faculty will be responsible for teaching courses in the proposed program.

Delivery method and support services. The proposed Bachelor of Science in Nursing in Nursing will be offered traditionally. The libraries, online learning center services, classrooms, and equipment are adequate for the proposed program.

Financing. The proposed program will utilize reallocated funds initially but will move to a self-supporting model. The current tuition and fee structure will be sufficient to adequately fund the program.

Program resource requirements. Program resource requirements for the Bachelor of Science in Nursing in Nursing are shown in the following table.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$0	$0	$0	$0	$0
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$1,335,174	$196,779	$193,940	$143,474	$126,638
Explanation: Internal allocation of existing funds through College of Education and Human Sciences budget.					
State Resources Available through Internal Allocation and Reallocation	$1,000,000	$200,000	$200,000	$200,000	$200,000
Explanation: Internal allocation of existing funds through Center for Health Sciences budget.					
Student Tuition	$108,330	$129,996	$151,662	$173,328	$194,994
Explanation and Calculations: Calculation devised based on non-guaranteed undergraduate in-state resident tuition of $180.55 per credit hour and estimated student enrollment of 20, 24, 28, 32, and 36. OSU anticipates students completing 30 credit hours per academic year.					
TOTAL	**$2,443,504**	**$526,775**	**$545,602**	**$516,802**	**$521,632**

B. Breakdown of Budget Expenses/Requirements	Year of Program				
	1st Year	2nd Year	3rd Year	4th Year	5th Year
Administrative/Other Professional Staff	$3,000	$3,000	$3,000	$3,000	$3,000
Explanation: Annual salary of 1 Administrative Assistant at $30,000 per year at 0.1 FTE.					
Faculty	$379,250	$499,250	$499,250	$499,250	$499,250
Explanation: Year 1 – 1 tenure-track faculty (average salary $70,000), 3 teaching assistant professors (average salary $60,000), 1 program coordinator (salary: $45,000), 1 program director (salary: $78,500) at 0.5 FTE, 1 advisor (salary: $30,000), and 1 part time advisor (salary: $15,000); Years 2 through 5 – 1 tenure-track faculty (average salary $70,000), 4 teaching assistant professors (average salary $60,000), 4 adjunct professors (salary: $15,000), 1 program coordinator (salary: $45,000), 1 program director (salary: $78,500) at 0.5 FTE, 1 advisor (salary: $30,000), and 1 part time advisor (salary: $15,000).					
Graduate Assistants	$4,275	$4,275	$4,275	$4,275	$4,275
Explanation: Partial salary for 1 Graduate Teaching Assistant. Salary is calculated at 0.025 FTE at the Master's rate of $1,900 per month (at 0.5 FTE) x 9 months for 1 student who will assist the program director and BSN faculty.					
Student Employees	$0	$0	$0	$0	$0
Equipment and Instructional Materials	$1,259,979	$0	$28,800	$0	$4,830
Explanation: Skills lab equipment.					
Library	$0	$0	$0	$0	$0
Contractual Services	$0	$7,250	$2,777	$2,777	$2,777
Explanation: Year 2 – Initial CCNE accreditation costs (new program fee + on-site evaluation fee). Years 3 through 5 - Annual fee required to maintain accreditation.					
Other Support Services	$774,500	$3,500	$0	$0	$0
Explanation: Renovation of space to set up skill lab ($750,000) and office furniture and other office set up items for the new faculty, coordinator and advisors ($3,500 each).					
Commodities	$3,500	$3,500	$3,500	$3,500	$3,500
Explanation: Recruitment Materials.					
Printing	$3,000	$2,000	$2,000	$2,000	$2,000
Explanation: Marketing and promotional materials.					
Telecommunications	$14,000	$2,000	$0	$0	$0
Explanation: Computers and technology accessories for new faculty, coordinator, and advisors ($2,000 each).					
Travel	$2,000	$2,000	$2,000	$2,000	$2,000
Explanation: Recruitment travel expenses.					
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$2,443,504**	**$526,775**	**$545,602**	**$516,802**	**$521,632**

Attachments

ATTACHMENT A

OKLAHOMA STATE UNIVERSITY
DOCTOR OF PHILOSOPHY IN COMMUNITY HEALTH SCIENCES

Degree Requirements		**Credit Hours**
Community Health Core		**15**
HLTH 5653	Foundations of Public Health Education and Promotion	3
HLTH 5683	Health Behavior Theory & Practice for Public Health	3
HLTH 5973	Designing Public Health Programs	3
HLTH 5983	Implementation & Evaluation of Public Health Programs	3
HLTH 5453	Cultural Issues in Health	3
Statistics & Research Methods Core		**12**
REMS 6003	Analysis of Variance	3
REMS 6013	Multiple Regression Analysis	3
SCFD 6123	Qualitative Research I	3
XXXX 6000	Any 6000 level statistics or research methods course	3
Community Health Electives		**9**
	Select from the following:	
HLTH 5113	Psychological Aspects of Health	3
HLTH 5133	Environmental Health	3
HLTH 5323	General Epidemiology	3
HLTH 5233	Sexuality and Health	3
MPH 5103	Grant Writing in Public Health	3
MPH 5543	Leadership, Policy, and Ethics in Public Health	3
Cognate Area		**9**
Further coursework in a field of study in an area of interest. Coursework may be selected from several related disciplines or a single discipline, as approved by the student's advisory committee.		
Independent Research		**15**
HLTH 6000	Doctoral Dissertation	15
Total		**60**

ATTACHMENT B

OKLAHOMA STATE UNIVERSITY
BACHELOR OF SCIENCE IN NURSING IN NURSING

Program Requirements		**Credit Hours**
General Education		**41**
ENGL 1113 or ENGL 1313	Composition I or Critical Analysis and Writing I	3
ENGL 1213 or ENGL 1413 or ENGL 3323	Composition II or Critical Analysis Writing II or Technical Writing	3
HIST 1103 or HIST 1483 or HIST 1493	Survey of American History or American History to 1865 or American History Since 1865	3
POLS 1113	American Government	3
MATH 1513 or MATH 1483	College Algebra or	3
STAT 2013 or STAT 2023 or STAT 2053 or STAT 3023	Elementary Statistics or Elementary Statistics for Business and Economics or Elementary Statistics for the Social Sciences or Statistical Reasoning for Medical Applications	3
HUMN	Select courses with (H) designation	6
CHEM 1215 or CHEM 1314	Chemical Principles I or Chemistry I	4
BIOL 1113/1111 or BIOL 1114	Introduction to Biology and Laboratory or Introductory Biology	4
PSYC 1113	Introductory Psychology	3
PSYC 2583 or HDFS 2113	Developmental Psychology or Lifespan Human Development	3
GENERAL EDUCATION	Choose one course from areas designated with (A), (H), (N), or (S)	3
College/Departmental Requirements		**18**
EDHS 1112	First Year Seminar	2
MICR 2123 & MICR 2132	Introduction to Microbiology and Laboratory	5
NSCI 2013	Principles of Human Nutrition	3
BIOL 3204	Physiology	4
BIOL 3214	Human Anatomy	4
Major Requirements		**62**
HLTH 3723	Principles of Epidemiology	3
HLTH 4783	Health Issues in Gerontology	3

NURS 3002	Pharmacology in Nursing I	2
NURS 3013	Theoretical and Conceptual Foundations of Nursing	3
NURS 3018	Foundations of Nursing	8
*NURS 3102	Pharmacology in Nursing II	2
NURS 3118	Adult Health Nursing I	8
NURS 3223	Global and Cultural Competencies in Nursing	3
NURS 4023	Trends and Issues in Nursing	3
NURS 4043	Nursing Research and Evidence Based Practice	3
NURS 4054	Nursing Capstone and Transition to Practice	4
NURS 4116	Adult Health Nursing II	6
NURS 4136	Essentials of Nursing Leadership	6
NURS 4216	Family and Community Health Nursing	6
*NURS 4242	Nursing Informatics	2
Total		**121**

*Denotes a new course

Meeting of the
OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION
February 14, 2023

AGENDA ITEM #5-b:

New Programs.

SUBJECT: University of Oklahoma. Approval to offer the Master of Science in Applied Statistics, the Master of Science in Sustainability – Energy and Materials Management, the Master of Science in Engineering Leadership and Management, the Master of Science in Learning Experience Design and Technology, and the Graduate Certificate in Applied Research and Program Evaluation.

RECOMMENDATION:

It is recommended that the State Regents approve the University of Oklahoma's requests to offer the Master of Science in Applied Statistics, via electronic delivery, the Master of Science in Sustainability – Energy and Materials Management, via traditional and electronic delivery, the Master of Science in Engineering Leadership and Management, via traditional and electronic delivery, the Master of Science in Learning Experience Design and Technology, via traditional and electronic delivery, and the Graduate Certificate in Applied Research and Program Evaluation, via traditional delivery, with the stipulation that continuation of the programs will depend upon meeting the criteria established by the institution and approved by the State Regents, as described below.

- **Master of Science in Applied Statistics.** Continuation beyond Fall 2026 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 109 students in Fall 2025; and
  Graduates: a minimum of 74 students in 2025-2026.

- **Master of Science in Sustainability – Energy and Materials Management.** Continuation beyond Fall 2026 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 59 students in Fall 2025; and
  Graduates: a minimum of 34 students in 2025-2026.

- **Master of Science in Engineering Leadership and Management**. Continuation beyond Fall 2026 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 59 students in Fall 2025; and
  Graduates: a minimum of 34 students in 2025-2026.

- **Master of Science in Learning Experience Design and Technology**. Continuation beyond Fall 2026 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 9 students in Fall 2025; and
  Graduates: a minimum of 3 students in 2025-2026.

- **Graduate Certificate in Applied Research and Program Evaluation**. Continuation beyond Fall 2025 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 6 students in Fall 2024; and
  Graduates: a minimum of 4 students in 2024-2025.

BACKGROUND:

Academic Plan

Institutional Academic Plans are submitted annually to the State Regents, with acknowledgment of receipt, not endorsement. The University of Oklahoma's (OU) 2022-2023 Academic Plan is available at: https://okhighered.org/complete-college-america/degree-completion-plans.shtml

APRA Implementation

In August 1991, the State Regents launched the Academic Planning/Resource Allocation (APRA); initiative, which was based on the principle that institutional officials would prioritize their programs and activities, and then fund higher priority activities at levels that ensured quality. Since implementation, the APRA has served as a framework for institutions to shift resources from low priority, low producing, and duplicate academic programs to higher priority programs that address state and local workforce needs.

As a result of the APRA process, a net of 93 academic programs have been eliminated. After 30 years of documenting institutions' successful efforts to prioritize programs through APRA, along with recommendations from the Task Force on the Future of Higher Education to expand collaboration and limit program duplication, the Net Reduction table has been reset, beginning with the 2021-2022 academic year, to monitor the next 30 years of progress on this initiative.

Since 2021, OU has taken the following program actions in response to APRA:

8	Degree and/or certificate programs deleted
11	Degree and/or certificate programs added

Program Review

OU offers 340 degree and/or certificate programs as follows:

60	Certificates
0	Associate in Arts or Science Degrees
0	Associate in Applied Science Degrees
126	Baccalaureate Degrees
97	Master's Degrees
57	Doctoral Degrees
0	First Professional Degrees

All of these programs were reviewed in the past five years with the exception of those programs with specialty accreditation. Programs with specialty accreditation are aligned with OU's program review schedule as appropriate. Thus, if a professional program received a ten-year accreditation, it would not be reviewed for ten years, which is an approved exception to State Regents' policy.

Program Development Process

OU's faculty developed the proposals, which were reviewed and approved by institutional officials. OU's governing board approved delivery of the Master of Science in Applied Statistics, the Master of Science in Sustainability – Energy and Materials Management, the Master of Science in Engineering Leadership and Management, and the Graduate Certificate of Applied Research and Program Evaluation at their November 30, 2022, meeting and the Master of Science in Learning Experience Design and Technology at their January 20, 2023, meeting. OU is currently approved to offer 71 degree and certificate programs through electronic delivery. OU requests authorization to offer these programs as outlined below.

POLICY ISSUES:

These actions are consistent with the Oklahoma State Regents for Higher Education's Academic Program Approval and Distance Education and Traditional Off-Campus Courses and Programs policies.

ANALYSIS:

Master of Science in Applied Statistics

Program purpose. The proposed new Master of Science in Applied Statistics will meet student and state needs for enhanced training in applications of statistics and data analytics. The program will provide a pathway for students with diverse disciplinary interests to develop authoritative and practical expertise in applying statistical methods to analyzing data across disciplinary boundaries.

Program rationale and background. The proposed program is designed for adult learners who may already be practicing professionals to increase their skills in applied statistics within various business and nonprofit contexts. The graduate program serves the OU mission through (1) bringing together disciplinarily diverse courses to create a community that will enhance teaching of applied statistics, (2) better preparing students with enhanced data analysis and statistical expertise to conduct data-related research and development activities, and (3) producing graduates that are better qualified to serve and meet the needs of private and public-sector employers and non-profit organizations within Oklahoma's technology and enterprise communities.

Employment opportunities. A review of the most recent data (May 2022) from Elsemere Education, Inc. (EEI) shows that business needs related to data have emerged rapidly over the past two decades, with growing needs to collect, process, filter, and predict meaningful data, specifically in healthcare, scientific research, and financial services. The U.S. Bureau of Labor Statistics (BLS) estimates growth for the fields of applied mathematics and statistics to be at a rate of 33 percent or higher with an average annual salary of $96,280. BLS also tracks the career path for Operations Research Analysts. This career path uses advanced mathematical and analytical methods to help solve complex issues. BLS projects growth in this field of 25 percent between 2020 and 2030, with an average annual salary of $82,360. Within the State of Oklahoma, the Oklahoma Employment Security Commission (OESC) projects that the two mathematical science occupations of Statisticians and Operations Research Analysts will each see employment growth of 22 to 23 percent from 2018 to 2028.

Student demand. The proposed Master of Science in Applied Statistics program is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum enrollment of majors in the program	109	Fall 2025
Minimum graduates from the program	74	2025-2026

Duplication and impact on existing programs. The proposed program may share some similar content to the following program:

Institution	Existing Program
Oklahoma State University	Master of Science in Applied Statistics (507)
University of Central Oklahoma	Master of Science in Applied Math Science – Statistics (169)

A system wide letter of intent was communicated by email on October 11, 2022. No State System institutions notified State Regents' staff of a protest to the proposed program. Due to the unique focus of the proposed program, approval will not constitute unnecessary duplication.

Curriculum. The Master of Science in Applied Statistics will consist of 30 total credit hours, as shown in the following table. Three new courses will be developed and the curriculum is detailed in the attachments (Attachment A).

Content Area	Credit Hours
Program Core	6
Program Electives	24
Total	**30**

Faculty and staff. Existing faculty will teach courses in the proposed program.

Delivery method and support services. All courses will be delivered in an electronic format using the platform Canvas. This delivery method allows students to access posted voice presentations and video, submit assignments online, receive feedback on graded work, and contact peers. Canvas can host the documents and interactive activities that will be utilized during asynchronous sessions. The library and equipment are adequate for the proposed program. The proposed program will also be supported by the OU Online department Program Manager.

Financing. The proposed program will be offered on a self-supporting basis and the current tuition and fee structure will be sufficient to adequately fund the program. No additional funding is requested from the State Regents to support the program.

Program resource requirements. Program resource requirements for the Master of Science in Applied Statistics are shown in the following table.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$0	$0	$0	$0	$0

A. Funding Sources	Year of Program 1st Year	2nd Year	3rd Year	4th Year	5th Year
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$0	$0	$0	$0	$0
State Resources Available through Internal Allocation and Reallocation	$0	$0	$0	$0	$0
Student Tuition	$1,095,098	$1,996,943	$1,996,943	$1,996,943	$1,996,943
Explanation & Calculations: The tuition estimates assume 3 starts per academic year with a Fall 2023 start. The Fall 2023 class is estimated to have 35 students, while subsequent summer, fall and spring starts will also have 35 new enrollments. Using a 70 percent retention rate (for budgeting purposes, the retention rate is applied in semester preceding the starting semester, in August for summer starts, and in January for fall starts), the headcount enrollments align with the estimated student demand reported above. Under the 15-month program, we assume 7.5 credit hours are taken per semester per matriculated student at a rate of $818 per credit hour.					
TOTAL	**$1,095,098**	**$1,996,943**	**$1,996,943**	**$1,996,943**	**$1,996,943**

B. Breakdown of Budget Expenses/Requirements	Year of Program 1st Year	2nd Year	3rd Year	4th Year	5th Year
Administrative/Other Professional Staff	$29,925	$29,925	$29,925	$29,925	$29,925
Explanation: 0.5 FTE staff position split between other online programs to provide administrative support to faculty and students enrolled in the online program.					
Faculty	$280,899.95	$340,519.90	$340,519.90	$340,519.90	$340,519.90
Explanation: Faculty will be paid $2,667 + fringe per credit hour to teach on an overload basis in the program. Some faculty costs may eventually be absorbed by full-time instructional faculty, but the total budget would remain the same. Also, includes $16,000 + fringe per year as a stipend for a faculty program coordinator and course development costs to create initial online offerings. Also, Year 1 includes $100,000 for course development.					
Graduate Assistants	$0	$0	$0	$0	$0
Student Employees	$0	$0	$0	$0	$0
Equipment and Instructional Materials	$2,500	$7,750	$7,750	$7,750	$7,750
Explanation: Estimated cost of equipment and materials for use in course preparation and delivery and research related to this program. Future year increases are based on projected enrollment increases. Costs could include classroom supplies, handouts, data sets, in-class equipment (whiteboards, projectors, etc.), etc.					
Library	$1,500	$4,650	$4,650	$4,650	$4,650
Explanation: Estimated cost of library materials for use in course preparation and delivery and research related to this program. Future year increases are based on projected enrollment increases.					
Contractual Services	$438,039	$798,777	$798,777	$798,777	$798,777
Explanation: Digital marketing costs; third-party support for student recruitment infrastructure and onboarding to OU.					
Other Support Services	$93,100	$93,100	$93,100	$93,100	$93,100

Explanation: Internal support (0.5 FTE) from the Office of Digital Learning to support the creation and maintenance of online courses and ongoing support from OU Online (0.5 FTE).					
Commodities	$0	$0	$0	$0	$0
Printing	$750	$2,325	$2,325	$2,325	$2,325
Explanation: Estimated cost of printing for use in research and class delivery for this program. Future year increases are based on projected enrollment increases.					
Telecommunications	$500	$1,550	$1,550	$1,550	$1,550
Explanation: Estimated cost of telecommunications (e.g., office telephone, internet, etc.) for this program. Future year increases are based on projected enrollment increases.					
Travel	$0	$0	$0	$0	$0
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$847,213.95**	**$1,278,596.90**	**$1,278,596.90**	**$1,278,596.90**	**$1,278,596.90**

Master of Science in Sustainability – Energy and Materials Management

Program purpose. The proposed program stems from the identification of a gap in the post-graduate offerings within the state and the nation, and intends to enable graduates from a variety of undergraduate disciplines to accelerate their careers by developing strong capabilities in identifying and implementing engineering solutions to achieve sustainable development for our society.

Program rationale and background. The focus of the Master of Science in Sustainability – Energy and Materials Management leverages the current expertise within the state of Oklahoma and seeks to diversify the local economy, fulfilling socio-economic gaps identified by policymakers, and enabling under-represented minorities to successfully engage in managerial positions. The proposed program has identified objectives aligned with the United Nations Sustainable Development Goals to include (1) good quality education, (2) clean water and sanitation, (3) affordable and clean energy, (4) decent work and economic growth, (5) industry, innovation, and infrastructure, (6) responsible consumption and production, and (7) climate action.

Employment opportunities. To derive a picture of the job market for graduates of this proposed program, OU used proprietary tools to review postings that mentioned hard skills related to this program, such as material requirements planning, environmental economics, engineering management, sustainable procurement/development and sustainable materials. The labor market analyst company Emsi Burning Glass (now Lightcast) reported 274,736 postings for professionals in these areas at all education levels in March of 2021 through February 2022. The median salary postings were found to be $78,700. The job metrics also indicated a median employer-advertised the potential of a $21,500 higher salary for those with a master's degree in this area.

Student demand. The proposed program is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum enrollment of majors in the program	59	Fall 2025
Minimum graduates from the program	34	2025-2026

Duplication and impact on existing programs. The proposed Master of Science in Sustainability – Energy and Materials Management may share similar content with the following programs:

Institution	Existing Program
University of Oklahoma	Master of Arts in Geography and Environmental Sustainability (089)
University of Oklahoma	Master of Science in Geography and Environmental Sustainability (425)

A system wide letter of intent was communicated by email on August 30, 2022. No State System institutions notified State Regents' staff of a protest to the proposed program. Due to the unique focus of the proposed program, approval will not constitute unnecessary duplication.

Curriculum. The Master of Science in Sustainability – Energy and Materials Management will consist of 30 total credit hours, as shown in the following table. Ten new courses will be developed and the curriculum is detailed in the attachments (Attachment B).

Content Area	Credit Hours
Core Courses	15
Program Electives	15
Total	**30**

Faculty and staff. Existing faculty will teach courses in the proposed program.

Delivery method and support services. Courses will be delivered in both the traditional and online format. Online courses will utilize Canvas and Zoom. These delivery methods will allow students to access presentations, videos, submit assignments online, receive feedback on graded work, and contact the professor and peers. The library, classrooms, and equipment are adequate for the proposed program.

Financing. The proposed program will be offered on a self-supporting basis and the current tuition and fee structure will be sufficient to adequately fund the program. No additional funding is requested from the State Regents to support the program.

Program resource requirements. Program resource requirements for the Master of Science in Sustainability – Energy and Materials Management are shown in the following table.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$0	$0	$0	$0	$0
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$0	$0	$0	$0	$0
State Resources Available through Internal Allocation and Reallocation	$0	$0	$0	$0	$0

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Student Tuition	$197,525	$987,627	$1,245,040	$1,245,040	$1,245,040
Explanation: The tuition estimates assume two starts per academic year with a Fall 2023 start. The Fall 2023 class is estimated to have 20 students, while subsequent fall and spring starts will have 25 enrollments. Using a 70 percent retention rate, the headcount enrollments align with the estimated student demand reported. Under the 15-month program, it is assumed 2.13 credit hours are taken per month per matriculated student at a rate of $985 per credit hour.					
TOTAL	**$197,525**	**$987,627**	**$1,245,040**	**$1,245,040**	**$1,245,040**

	Year of Program				
B. Breakdown of Budget Expenses/Requirements	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Administrative/Other Professional Staff	$30,000	$30,000	$30,000	$30,000	$30,000
Explanation: 0.5 FTE staff position split between other online programs to provide administrative support to faculty and students enrolled in the online program.					
Faculty	$106,825	$256,626	$316,785	$316,785	$316,785
Explanation: Faculty will be paid $3,333 + fringe per credit hour to teach on an overload basis in the program. Some faculty costs may eventually be absorbed by full-time instructional faculty, but the total budget would remain the same. Also, includes $16,000 per year as a stipend for a faculty program coordinator and course development costs to create initial online offerings.					
Graduate Assistants	$20,000	$40,000	$40,000	$40,000	$40,000
Explanation: 0.5 FTE Graduate Assistant support to assist faculty in delivery of content and research.					
Student Employees	$0	$0	$0	$0	$0
Equipment and Instructional Materials	$2,000	$4,000	$4,000	$4,000	$4,000
Explanation: Estimated cost of computers, software, printing paper, copier usage, and other materials to support the online program.					
Library	$1,000	$2,000	$2,000	$2,000	$2,000
Explanation: Books, periodicals, and other subscriptions utilized by faculty and students in the program.					
Contractual Services	$48,394	$241,969	$305,035	$305,035	$305,035
Explanation: Third party support for student recruitment support, marketing coordination, project management, and student retention.					
Other Support Services	$0	$0	$0	$0	$0
Commodities	$0	$0	$0	$0	$0
Printing	$0	$0	$0	$0	$0
Telecommunications	$81,952	$204,880	$204,880	$204,880	$204,880
Explanation: Paid marketing (e.g., Google, LinkedIn, Facebook) to recruit students to the program.					
Travel	$0	$0	$0	$0	$0

Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$290,171**	**$779,475**	**$902,700**	**$902,700**	**$902,700**

Master of Science in Engineering Leadership and Management

Program purpose. The proposed program seeks to provide a dynamic intellectual community dedicated to teaching and learning, research, and service in their pursuit of new careers, career advancements, and other leadership positions within the field of Engineering.

Program rationale and background. The field of Engineering is continually growing across the nation. As engineers move up in rank, responsibilities increase, and they are often asked to manage teams of engineers. Engineering managers act as technical experts, mentors, coaches, cheerleaders, and managers. The Master of Science in Engineering Leadership and Management program has identified objectives for the program to include (1) the application of current management knowledge and tools for effective communication to a broad range of audiences; and understand the ethical and moral implications of their decisions in fulfilling their professional responsibilities; (2) to establish, lead, manage, and work in multidisciplinary teams to solve complex real-world problems effectively and efficiently using the core principles of Engineering Leadership and Management; and (3) to grow intellectually through practicing the skills and knowledge of Engineering Leadership and management, continue to be lifelong learners, and focus on self-improvement through professional development.

Employment opportunities. The engineering occupation is projected to grow at a faster-than-average rate of 9.1 percent from 2018 to 2028, adding 163,097 new jobs to the 1.8 million existing engineering jobs, and 131,668 replacement jobs annually, according to labor market analyst company Emsi Burning Glass (now Lightcast). Engineering Management jobs are tracked separately by the Bureau of Labor Statistics (BLS), and this field also has solid growth of 14,856 new jobs by 2028, 16,339 average annual openings (including replacement jobs), and an average annual salary of $140,707 compared to $93,229 average annual salary for all engineers. This indicates a strong return on investment for those seeking to advance their career through a managerial role.

Student demand. The proposed program is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum enrollment of majors in the program	59	Fall 2025
Minimum graduates from the program	34	2025-2026

Duplication and impact on existing programs. The proposed Master of Science in Engineering Leadership and Management may share similar content with the following programs:

Institution	Existing Program
Oklahoma State University	Master of Science in Industrial Engineering & Management (135)

A system wide letter of intent was communicated by email on November 16, 2022. The University of Central Oklahoma (UCO) requested a copy of the proposal, which was sent on January 3, 2023. Neither UCO nor any other State System institution notified State Regents' staff of a protest to the proposed program. Due to the unique focus of the proposed program, approval will not constitute unnecessary

duplication.

Curriculum. The Master of Science in Engineering Leadership and Management will consist of 30 total credit hours, as shown in the following table. Nine new courses will be developed and the curriculum is detailed in the attachments (Attachment C).

Content Area	Credit Hours
Core Courses	15
Program Electives	15
Total	**30**

Faculty and staff. Existing faculty will teach courses in the proposed program.

Delivery method and support services. Courses will be delivered in both the traditional and online format. Online courses will utilize Canvas and Zoom. These delivery methods will allow students to access presentations, videos, submit assignments online, receive feedback on graded work, and contact the professor and peers. The library, classrooms, and equipment are adequate for the proposed program.

Financing. The proposed program will be offered on a self-supporting basis and the current tuition and fee structure will be sufficient to adequately fund the program. No additional funding is requested from the State Regents to support the program.

Program resource requirements. Program resource requirements for the Master of Science in Engineering Leadership and Management are shown in the following table.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$0	$0	$0	$0	$0
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$0	$0	$0	$0	$0
State Resources Available through Internal Allocation and Reallocation	$0	$0	$0	$0	$0
Student Tuition	$197,525	$987,627	$1,245,040	$1,245,040	$1,245,040
Explanation: The tuition estimates assume two starts per academic year with a Fall 2023 start. The Fall 2023 class is estimated to have 20 students, while subsequent fall and spring starts will have 25 enrollments. Using a 70 percent retention rate, the headcount enrollments align with the estimated student demand reported. Under the 15-month program, it is assumed 2.13 credit hours are taken per month per matriculated student at a rate of $985 per credit hour.					
TOTAL	**$197,525**	**$987,627**	**$1,245,040**	**$1,245,040**	**$1,245,040**

B. Breakdown of Budget Expenses/Requirements	Year of Program 1st Year	2nd Year	3rd Year	4th Year	5th Year
Administrative/Other Professional Staff	$30,000	$30,000	$30,000	$30,000	$30,000
Explanation: 0.5 FTE staff position split between other online programs to provide administrative support to faculty and students enrolled in the online program.					
Faculty	$106,825	$256,626	$316,785	$316,785	$316,785
Explanation: Faculty will be paid $3,333 + fringe per credit hour to teach on an overload basis in the program. Some faculty costs may eventually be absorbed by full-time instructional faculty, but the total budget would remain the same. Also, includes $16,000 per year as a stipend for a faculty program coordinator and course development costs to create initial online offerings.					
Graduate Assistants	$20,000	$40,000	$40,000	$40,000	$40,000
Explanation: 0.5 FTE Graduate Assistant support to assist faculty in delivery of content and research.					
Student Employees	$0	$0	$0	$0	$0
Equipment and Instructional Materials	$2,000	$4,000	$4,000	$4,000	$4,000
Explanation: Estimated cost of computers, software, printing paper, copier usage, and other materials to support the online program.					
Library	$1,000	$2,000	$2,000	$2,000	$2,000
Explanation: Books, periodicals, and other subscriptions utilized by faculty and students in the program.					
Contractual Services	$48,394	$241,969	$305,035	$305,035	$305,035
Explanation: Third party support for student recruitment support, marketing coordination, project management, and student retention.					
Other Support Services	$0	$0	$0	$0	$0
Commodities	$0	$0	$0	$0	$0
Printing	$0	$0	$0	$0	$0
Telecommunications	$81,952	$204,880	$204,880	$204,880	$204,880
Explanation: Paid marketing (e.g., Google, LinkedIn, Facebook) to recruit students to the program.					
Travel	$0	$0	$0	$0	$0
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$290,171**	**$779,475**	**$902,700**	**$902,700**	**$902,700**

Master of Science in Learning Experience Design and Technology

Program purpose. The proposed Master of Science in Learning Experience Design and Technology prepares students to be leaders in the field of learning design and technology in this digital age.

Program rationale and background. The proposed program will help students develop and acquire knowledge and skill sets to succeed in an instructional design job. Graduates from this program will play various roles in various contexts, such as K-12 schools, higher education institutions, business, industry, healthcare, government, and military. Students within the proposed program will apply the latest

developments in research and best practices grounded in the learning sciences, foundations of instructional design and technology, critical theories, and learner/user experience. This knowledge will assist students to: 1) develop an understanding of learning and motivation theories, development, and responsibilities in the field; 2) conduct front-end needs analysis; 3) integrate the latest technologies to design and create formal and informal learning environments in various formats; 4) apply authoring tools to design and develop materials; 5) develop cultural competence and equity literacy and apply these competences; 6) develop design thinking and design-based research to evaluate the effectiveness of the learning material and environments; and 7) develop real-world experiences in needs analysis, instructional design, development, assessment, and evaluation through internship experience.

Employment opportunities. The U.S. Bureau of Labor Statistics predicts an 11 percent increase in the job outlook for instructional design between 2020 and 2030. They project about 35,200 openings over the decade. They report the 2019 median annual salary for instructional coordinators was $66,290 and those in the top 10 percent earn more than $103,790. In Oklahoma, the average income for an instructional designer is $60,000, compared with the median household income in Oklahoma of $50,000.

Student demand. The proposed Master of Science in Learning Experience Design and Technology program is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum enrollment of majors in the program	9	Fall 2025
Minimum graduates from the program	3	2025-2026

Duplication and impact on existing programs. The proposed program may share some similar content to the following program:

Institution	Existing Program
East Central University	Master of Education in Instructional Design & Technology (104)

A system wide letter of intent was communicated by email on November 16, 2022. No State System institutions notified State Regents' staff of a protest to the proposed program. Due to the unique focus of the proposed program, approval will not constitute unnecessary duplication.

Curriculum. The Master of Science in Learning Experience Design and Technology will consist of 36 total credit hours, as shown in the following table. Four new courses will be developed and the curriculum is detailed in the attachments (Attachment D).

Content Area	Credit Hours
Program Core	24
Development Core	6
Program Electives	6
Total	**36**

Faculty and staff. Existing faculty will teach courses in the proposed program.

Delivery method and support services. Courses will be delivered in the traditional and electronic format. Canvas will be utilized as the platform for electronic delivery. This delivery method allows students to access posted voice presentations and video, submit assignments online, receive feedback on graded work, and contact peers. Canvas can host the documents and interactive activities that will be utilized during asynchronous sessions. The library and equipment are adequate for the proposed program. The proposed program will also be supported by the OU Online department Program Manager.

Financing. The proposed program will be offered on a self-supporting basis and the current tuition and fee structure will be sufficient to adequately fund the program. No additional funding is requested from the State Regents to support the program.

Program resource requirements. Program resource requirements for the Master of Science in Learning Experience Design and Technology are shown in the following table.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$0	$0	$0	$0	$0
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$45,000	$45,000	$45,000	$45,000	$45,000
Explanation: Represents the portion of existing faculty salaries that will continue to support this program.					
State Resources Available through Internal Allocation and Reallocation	$0	$0	$0	$0	$0
Student Tuition	$17,815	$35,630	$53,444	$71,259	$89,074
Explanation & Calculations: Enrollments of 3, 6, 9, 12, and 15 are expected for Years 1 through 5. Tuition estimate assumes 18 credit hours taken per academic year and a 63/37 percent split between residents and non-residents. The tuition and mandatory fee rate is $367.25 per credit hour for residents and $1,025 for non-residents. College-level academic service fees total $122.35 per credit hour.					
TOTAL	**$62,815**	**$80,630**	**$98,444**	**$116,259**	**$134,074**

	Year of Program				
B. Breakdown of Budget Expenses/Requirements	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Administrative/Other Professional Staff	$1,287	$2,539	$3,757	$4,943	$6,098
Explanation: Amounts represent the proportion of a staff member's time allocable to this program.					
Faculty	$19,558	$38,586	$57,104	$75,132	$92,690
Explanation: Amounts represent the proportion of a faculty member's time allocable to this program.					
Graduate Assistants	$4,890	$9,646	$14,276	$18,783	$23,172
Explanation: Amounts represent the proportion of a Graduate Assistant's time allocable to this program.					
Student Employees	$0	$0	$0	$0	$0
Equipment and Instructional	$257	$507	$750	$986	$1,21

Materials					
Explanation: Amount represents estimated cost on materials and equipment for classroom instruction.					
Library	$100	$200	$300	$400	$500
Explanation: Amounts represent estimated cost for library books, periodicals, and other licenses for instructional support.					
Contractual Services	$79	$155	$230	$302	$373
Explanation: Amount represents the proportion of department spend for contractual services (e.g., memberships, service contracts, etc.) allocable to this program.					
Other Support Services	$7	$13	$20	$26	$32
Explanation: Amount represents estimated proportion of digital services spent allocable to the program.					
Commodities	$0	$0	$0	$0	$0
Printing	$0	$0	$0	$0	$0
Telecommunications	$2	$4	$7	$9	$11
Explanation: Amount represents estimated proportion of telecommunications spent allocable to the program.					
Travel	$0	$0	$0	$0	$0
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$26,180**	**$51,650**	**$76,444**	**$100,581**	**$122,876**

Graduate Certificate in Applied Research and Program Evaluation

Program purpose. The proposed certificate will provide research methods training to students so they will be able to apply this knowledge and gain program evaluation expertise.

Program rationale and background. The Graduate Certificate in Applied Research and Program Evaluation will build on existing social science research methods currently being taught across graduate departments and will be enhanced with a traditional graduate course on program evaluation and a program evaluation practicum that is a service-learning course. The expertise will come from both course work and placement within a local non-profit or government organization to apply these skills to meet the organization's evaluation needs and goals in a direct service capacity.

Employment opportunities. There is a significant demand for Applied Research and Program Evaluation jobs in government, non-profit, and private sectors. Data is a new form of currency, and applied research tools allow students to harness this currency to make informed decisions. New government policies toward accountability and data-informed decision making are pushing these trends, along with social impact bonds and philanthropy's increasing emphasis on evaluation. Linkedin.com currently lists more than 46,000 jobs for "Program Evaluation". CNN and US News and World Report both list Program Evaluators as one of the best-kept-secret careers. Occupations include data managers, program evaluators, policy analysts, research managers, research directors, and project managers.

Student demand. The proposed certificate is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum enrollment of majors in the program	6	Fall 2024
Minimum graduates from the program	4	2024-2025

Duplication and impact on existing programs. The proposed Graduate Certificate in Applied Research and Program Evaluation may share similar content with the following program:

Institution	Existing Program
Oklahoma State University	Graduate Certificate in Program Evaluation (538)

A system wide letter of intent was communicated by email on April 7, 2022. No State System institutions notified State Regents' staff of a protest to the proposed certificate. Due to the unique focus of the proposed certificate, approval will not constitute unnecessary duplication.

Curriculum. The Graduate Certificate in Applied Research and Program Evaluation will consist of 15 total credit hours, as shown in the following table. The curriculum is detailed in the attachments (Attachment E).

Content Area	Credit Hours
Required Courses	6
Electives	9
Total	**15**

Faculty and staff. Existing faculty will teach courses in the proposed certificate.

Delivery method and support services. Courses will be delivered in the traditional format. The library, classrooms, and equipment are adequate for the proposed certificate.

Financing. The proposed certificate will be offered on a self-supporting basis and the current tuition and fee structure will be sufficient to adequately fund the program. No additional funding is requested from the State Regents to support the certificate.

Program resource requirements. Program resource requirements for the Graduate Certificate in Applied Research and Program Evaluation are shown in the following table.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$0	$0	$0	$0	$0
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$0	$0	$0	$0	$0
State Resources Available through Internal Allocation and Reallocation	$0	$0	$0	$0	$0

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Student Tuition	$23,890.50	$23,890.50	$31,854	$39,818	$47,781
Explanation: The tuition calculation based on headcount enrollment of 6, 6, 8, 10, and 12. It is assumed 6 credit hours of enrollment per academic year and tuition rates of $992.50 and $2,334.75 per credit hour for resident and nonresident, respectively.					
TOTAL	**$23,890.50**	**$23,890.50**	**$31,854**	**$39,818**	**$47,781**

	Year of Program				
B. Breakdown of Budget Expenses/Requirements	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Administrative/Other Professional Staff	$2,000	$2,000	$2,000	$2,000	$2,000
Explanation: Advising-overload for Sociology advisor to advise these graduate students.					
Faculty	$12,888	$12,888	$12,888	$12,888	$12,888
Explanation: This graduate certificate plans to pay a practicum faculty member one summer month of salary. This takes into account the proportional cost of teaching 8 students recruited from the 14 students enrolled in the Program Evaluation course in the fall term and the fixed cost of managing the practicum (or internship) placements. This faculty will also manage and coordinate the graduate certificate program within the unit.					
Graduate Assistants	$0	$0	$0	$0	$0
Student Employees	$0	$0	$0	$0	$0
Equipment and Instructional Materials	$0	$0	$0	$0	$0
Library	$0	$0	$0	$0	$0
Contractual Services	$0	$0	$0	$0	$0
Other Support Services	$500	$500	$500	$500	$500
Explanation: Promotional and community development and outreach to facilitate practicum placements.					
Commodities	$0	$0	$0	$0	$0
Printing	$200	$200	$250	$250	$250
Explanation: Printing and promotional items. Future year increases are based upon projected enrollment.					
Telecommunications	$0	$0	$0	$0	$0
Travel	$1,500	$1,500	$1,500	$1,500	$1,500
Explanation: The practicum director will be allowed $1,500 to attend the national professional conference.					
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$17,088**	**$17,088**	**$17,138**	**$17,138**	**$17,138**

Attachments

ATTACHMENT A

UNIVERSITY OF OKLAHOMA
MASTER OF SCIENCE IN APPLIED STATISTICS

Program Requirements		**Credit Hours**
Program Core		**6**
*DSP 5773	Ethics in Statistical Practice	3
*DSP 5873	Statistical Consulting and Communication	3
Program Electives		**24**
MATH 5743	Introduction to Mathematical Statistics	3
MATH 4753	Applied Statistical Methods (counts for graduate credit)	3
MATH 5773	Applied Regression Analysis	3
MATH 5793	Advanced Applied Statistics	3
DSA 5403	Bayesian Statistics	3
*DSP 5673	Introduction to Scientific Computing	3
LIS 5623	Advanced Data Analytics	3
LIS 5683	Database Design for Informational Organizations	3
Total		**30**

*Denotes new course

ATTACHMENT B

UNIVERSITY OF OKLAHOMA
MASTER OF SCIENCE IN SUSTAINABILITY – ENERGY AND MATERIALS MANAGEMENT

Degree Requirements		**Credit Hours**
Core Courses		**15**
*CH E 5323	Sustainable Engineering Principles	3
*CH E 5333	Sustainable Polymer Manufacturing	3
*CH E 5343	Sustainable Process Design	3
*CH E 5353	Emerging Technologies toward Water Sustainability	3
*CH E 5023	Challenges – Group Project	3
Program Electives		**15**
*CH E 5003	Project Management and Leadership	3
*CH E 5013	Decision and Risk Analysis	3
*CH E 5033	Environmental Separations	3
*CH E 5053	Carbon Capture and Utilization	3
*CH E 5043	Business Sustainability	3
Total		**30**

*Denotes new course

ATTACHMENT C

UNIVERSITY OF OKLAHOMA
MASTER OF SCIENCE IN ENGINEERING LEADERSHIP AND MANAGEMENT

Degree Requirements		**Credit Hours**
Core Courses		**15**
ENGR 4013	Leadership and Management for Engineers	3
*ELM 5123	Strategic Communication for Engineering Leaders	3
*ELM 5213	Data Science and Analytics for Engineering Management	3
*ELM 5543	Decision Analysis	3
*ELM 5523	Project Capstone	3
Program Electives		**15**
*ELM 5323	Leading Creative Teams	3
*ELM 5773	System Requirements and Architecting	3
*ELM 5423	Negotiating Skills for Technical Leaders	3
*ELM 5293	Cost Engineering	3
*ELM 5313	Systems Thinking	3
Total		**30**

*Denotes new course

ATTACHMENT D

UNIVERSITY OF OKLAHOMA
MASTER OF SCIENCE IN LEARNING EXPERIENCE DESIGN AND TECHNOLOGY

Degree Requirements		**Credit Hours**
Program Core		**24**
EIPT 5533	Foundations of Learning Sciences	3
EIPT 6523	Visual Lit & Digital Development for Learning	3
EIPT 6143	Instructional Development	3
EIPT 6343	Design of Learning Environments	3
EIPT 5693	Critical Literacy	3
EIPT 5970	Educational Design-based Research	3
EIPT 6533	Development for Learning with Digital Technologies	3
EIPT 5920	Internship	3
Development Core		**6**
	Select 6 credit hours from the following	
EIPT 6313	Multimedia Design & Development for Learning	3
*EIPT 6323	Game-based Learning: Design, Development, & Integration	3
*EIPT 5333	Introduction to Extended Reality for Education	3
*EIPT 6423	Digital Audio & Video for Learning & Instruction	3
EIPT 6503	Messaging & Layout for Learning	3
EIPT 5683	Technology-Enhanced Problem-Based Learning	3
EIPT 6433	Theories, Pedagogies & Tools for Online Learning	3
*ELM 5313	Systems Thinking	3
Program Electives		**6**
	Select 6 credit hours from the following	
EIPT 6313	Multimedia Design & Development for Learning	3
EIPT 6323	Game-Based Learning: Design, Development, & Integration	3
EIPT 5333	Introduction to Extended Reality for Education	3
EIPT 6423	Digital Audio & Video for Learning & Instruction	3
EIPT 6503	Messaging & Layout for Learning	3
EIPT 5683	Technology-Enhanced Problem-Based Learning	3
EIPT 6433	Theories, Pedagogies & Tools for Online Learning	3
EDAH 5513	Management & Admin of the Training Function	3
EDAH 5163	Diversity Issues in Higher Education	3

EDAH 5033	Critical Literature of Adult/Higher Education	3
EDAH 5473	Race, Class, Gender in Education	3
EIPT 5183	Learning & Motivation	3
EIPT 6183	Cognition & Instruction	3
Total		**36**

*Denotes new course

ATTACHMENT E

UNIVERSITY OF OKLAHOMA
GRADUATE CERTIFICATE IN APPLIED RESEARCH AND PROGRAM EVALUATION

Degree Requirements		**Credit Hours**
Required Courses		**6**
SOC 5143	Program Evaluation	3
SOC 5713	Evaluation Practicum	3
Electives		**9**
	Select 9 credit hours from the following list	
ANTH 5083	Quantitative Methods in Anthropology	3
ANTH 5153	Ethnography of Communication	3
ANTH 5213	Ethnographic Methods	3
ANTH 5543	Research Design	3
ANTH 5593	Spatial Methods and Technologies in Anthropology	3
COMM 5003	Quantitative Research Methods	3
COMM 5023	Introduction to Quantitative Research Methods	3
COMM 5033	Advanced Statistics	3
COMM 5053	Introduction to Qualitative Research Methods	3
COMM 5313	Qualitative Research Methods	3
COMM 5323	Advanced Qualitative Methods	3
EIPT 5023	Quantitative Analysis I	3
EIPT 5033	Introduction to Research and Evaluation in Education	3
EIPT 5653	Disseminating and Representing Data	3
EIPT 6023	Instrument Development	3
EIPT 6043	Qualitative Research Methods I	3
EIPT 6063	Applied Multivariate Statistics in Educational Research	3
EIPT 6073	Program Evaluation	3
P SC 5143	Program Evaluation and Applied Policy Analysis	3
P SC 5913	Introduction to Analysis of Political and Administrative Data I	3
P SC 5923	Introduction to Analysis of Political and Administrative Data II	3
P SC 5933	Intermediate Analysis of Political Data	3
P SC 5950	Research Problems	3
PSY 5003	Psychological Statistics I	3
PSY 5013	Psychological Statistics II	3

PSY 6013	Factor Analysis and Structural Equation Models	3
PSY 6023	Statistical Models of Tests Scores	3
PSY 6063	Seminar in Quantitative Psychology	3
PSY 6073	Experimental Design for Psychology	3
PSY 6223	Quantitative Models in Cognition	3
SOC 5283	Fundamental Social Statistics	3
SOC 5293	Advanced Methods of Social Research	3
SOC 5313	Mixed Methods	3
SOC 5323	Qualitative Methods	3
SOC 5483	Advanced Regression Analysis	3
SOC 5683	Categorical, Panel, and Advanced Social Statistics	3
Other relevant social science, policy science, behavioral science courses in research methods and statistics. The student must get approval for courses other than those listed above.		
Total		**15**

Meeting of the
OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION
February 14, 2023

AGENDA ITEM #5-c:

New Programs.

SUBJECT: University of Central Oklahoma. Approval of a function exception request and to offer the Doctor of Science in Forensic Science.

RECOMMENDATION:

It is recommended that the State Regents approve the University of Central Oklahoma's request for a function exception to offer the Doctor of Science in Forensic Science, via traditional delivery, with the stipulation that continuation of the program will depend upon meeting the criteria established by the institution and approved by the State Regents, as described below.

- **Doctor of Science in Forensic Science.** Continuation beyond 2026 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 8 students in Fall 2025; and
  Graduates: a minimum of 5 students in 2025-2026.

BACKGROUND:

Academic Plan

Institutional Academic Plans are submitted annually to the State Regents, with acknowledgment of receipt, not endorsement. The University of Central Oklahoma's (UCO) 2022-2023 Academic Plan is available at: https://okhighered.org/complete-college-america/degree-completion-plans.shtml

APRA Implementation
In August 1991, the State Regents launched the Academic Planning/Resource Allocation (APRA) initiative, which was based on the principle that institutional officials would prioritize their programs and activities, and then fund higher priority activities at levels that ensured quality. In times of flat or declining budgets or financial constraints, institutions are expected to reallocate resources from lower priority activities to higher priority activities, rather than reducing quality by funding lower priority activities at the same rate as higher priority activities.

Since 1992, UCO has taken the following program actions in response to APRA:

1	Degree and/or certificate programs deleted
7	Degree and/or certificate programs added

Program Review
UCO offers 139 degree and/or certificate programs as follows:

13	Certificates
0	Associate in Arts or Science Degrees
3	Associate in Applied Science Degrees
73	Baccalaureate Degrees
50	Master's Degrees
0	Doctoral Degrees
0	First Professional Degrees

All of these programs were reviewed in the past five years with the exception of those programs with specialty accreditation. Programs with specialty accreditation are aligned with UCO's program review schedule as appropriate. Thus, if a professional program received a ten-year accreditation, it would not be reviewed for ten years, which is an approved exception to State Regents' policy.

Program Development Process
UCO's faculty developed the proposal, which was reviewed and approved by institutional officials. UCO's governing board approved delivery of the Doctor of Science (D.Sc.) in Forensic Science at their February 26, 2021 meeting. UCO requests authorization to offer this program as outlined below.

POLICY ISSUES:

This action is consistent with the Oklahoma State Regents for Higher Education's (OSRHE) Academic Program Approval policy.

ANALYSIS:

Doctor of Science in Forensic Science

Program purpose. The proposed program will prepare students for immediate entry into the nation's professional workforce in forensic science.

Program rationale and background. The proposed D.Sc. in Forensic Science program will help provide quality graduates with advanced knowledge in forensic science that are of critical importance and great demand to the citizens of Oklahoma, the nation, and the world. The program will produce graduates prepared to enter the forensic science workforce with knowledge of critical technical skills and experience in science and management. Unlike the research doctorate, which typically prepares students for an academic career, the professional doctorate demands a primary role of delivering graduates with sophisticated skills, hands-on experience, and ethical decision-making to the workplace. The proposed program is an interdisciplinary applied science degree that is designed to provide students with the ethical thinking ability, problem-solving skills, and advanced discipline-specific knowledge to allow them to advance into leadership positions. These skills will be acquired by demonstrating the ability to independently perform original research, successfully complete multidisciplinary academic coursework, gain hands-on experience in the laboratory, and effectively collaborate with accredited forensic laboratories, institutes, and partners.

The creation of an applied doctoral program with relevance to the heart of Oklahoma City is consistent with nearly a decade in planning at UCO, as well as the recent designation of an innovation district. UCO

believes that the development of the proposed D.Sc. in Forensic Science will attract and stimulate economic growth within the broader Oklahoma City Metropolitan Area.

As Oklahoma's only metropolitan university, UCO is also one of 82 institutional members of the Coalition of Urban and Metropolitan Universities (CUMU). Over 80 percent of the CUMU institutional members offer doctoral degrees. At this time, UCO is one of the largest CUMU members without a doctoral degree. The proposed D.Sc. in Forensic Science program will align UCO with a majority of CUMU members in serving their metropolitan university mission.

Employment opportunities. The extreme undersupply of doctoral degrees in forensic science is cause for concern. As the field of forensic science continues to advance, crime laboratory managers and supervisors will to need broad and detailed scientific knowledge and management skills. According to the latest data from the 2014 Census of Publicly Funded Forensic Crime Laboratories conducted by the Bureau of Justice Statistics, a total of 409 publicly funded crime laboratories in the nation employ 14,300 full-time employees. On average these labs perform 5 different functions, with the most common functions including performing analyses of controlled substances, latent prints, biological samples, firearms or tool marks, and crime scenes. In Oklahoma, 9 publicly funded crime labs employ 3,881 individuals at their facilities. There are also 4 private forensic science labs in the state, which employ over 150 individuals. Thus, there is a need for trained managerial and technical leaders with a holistic understanding of forensic science disciplines in the state and across the nation.

Student demand. The proposed D.Sc. in Forensic Science program is expected to meet the enrollment and graduate standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum Enrollment of majors in the program	8	Fall 2025
Minimum Graduates from the program	5	2025-2026

Duplication and impact on existing programs. There are no D.Sc. in Forensic Science programs in Oklahoma; however, the proposed program may share some similar content to the following programs:

Institution	Existing Program
Oklahoma State University Center for Health Sciences	Doctor of Forensic Sciences in Forensic Sciences (017)

A system wide letter of intent was communicated by email on October 26, 2021. Oklahoma State University requested a copy of the proposal, which was sent on December 20, 2021. Neither OSU nor any other State System institutions notified State Regents' staff of a protest to the proposed program. Due to uniqueness of the proposed program, approval will not constitute unnecessary duplication.

Curriculum. The proposed D.Sc. in Forensic Science program will consist of 60 total credit hours as shown in the following table. Eight new courses will be developed and the curriculum is detailed in the attachment (Attachment A).

Content Area	Credit Hours
Program Core	30
Thesis/Dissertation	15
Program Electives	15
Total	**60**

External Review. Doctoral programs represent a long-term commitment for an institution. Faculty, support staff, equipment, facilities and resources are required for research and training doctoral students. This translates to considerable investments in time and funds, therefore institutions infrequently develop new doctoral programs.

For these reasons, two external reviewers, Drs. Sarah Seashols-Williams and Albert Karl Larsen, conducted an electronic review (i.e., no site visit) of the proposed degree program. Dr. Seashols-Williams holds a Ph.D. in Biochemistry and Molecular Biology from Virginia Commonwealth University (VCU). She is currently a Research Assistant Professor in Forensic Science at VCU, teaching several of the forensic biology track upper-level and graduate courses. Dr. Larsen holds a Doctorate in Pharmacodynamics from the University of Illinois (UI) at Chicago in the College of Pharmacy. He currently serves as the Director of Graduate Studies for the Master of Science in Forensic Science for UI. Both reviewers have extensive experience in the academic area of forensic science as well as knowledge of the quality standards required for successful doctoral programs in the discipline.

The external evaluators' charge was to assess the viability and quality of the proposed degree program with specific attention to issues of duplication of programs, student demand, productivity standards and funding implications. The evaluators used the OSRHE's Academic Program Approval policy and background information on the OSRHE's Academic Planning/Resource Allocation initiative to frame the review.

The team's overall evaluation included the following findings:

Dr. Seashols-Williams and Dr. Larsen agree that the proposed D.Sc. program should be approved. The depth of experience of the current faculty is extraordinary, and they are well-placed to mentor students. The presence of such a distinguished and broadly qualified faculty allows for a diverse student experience, and adds immense depth to the curriculum. The coursework component is proposed in such a way that the forensic science industry will be able to benefit from the graduates of this program. Coursework will be offered in a schedule which is intended to be flexible enough to allow students to take part in the program who are presently working in the forensic science field. The facilities available to the students who will enter this program are exceptional and capable of absorbing the expected student increase. Instrumentation and other resources available for the program are current to the field and easily accessible. This program should easily be able to attract sufficient students to be viable now and into the future. The need for doctoral level forensic scientists is already high and climbing. This program will assist in supplying these needed personnel not only for Oklahoma, but to the nation.

The team's overall evaluation included the following recommendations:

- The probationary admission policy to the program meets OSRHE policy, but may need future clarification in order to set distinct guidelines for the retention of students or their dismissal from the program when necessary.

- The inclusion of other advising faculty as part of a graduate committee for curriculum and admission decisions in concert with the Program Coordinator will provide a more democratic, broad-based management style that will enhance the program and student success.
- The faculty at present are sufficient to comfortably handle the proposed program student numbers through the first 5 years of the program. Beyond that, growth should be maintained in such a way that the faculty are not overburdened in the performance of their associated duties.
- Concerted efforts should be made to retain current faculty and, as proposed, increase faculty lines (one per year for the first two years). The current faculty represent some of the best in their fields, with extensive management knowledge that will make this program a benchmark program in the nation. Keeping the high level of expertise and ability to teach, research, and mentor students will need to be maintained through the replacement of faculty as they retire and increases in faculty if there is a desire to expand the program.
- The proposed program requires an M.S. in Forensic Science or related field, which is a suitable admission requirement. The program may want to consider other degree options in combination with forensic science management experience in place of an M.S. degree. This will allow those scientists currently in low to middle management, but who do not have an M.S. degree, to qualify and move straight into doctoral work that will advance their careers significantly.

In summary, the team declared support without reservation to establish the program at UCO. UCO responded satisfactorily to the team's recommendations.

Faculty and staff. Existing faculty will teach the courses in the proposed program.

Support services. Students within the proposed program will have the use of the following facilities: the W. Roger Webb Forensic Science Institute, the Donald Betz STEM Research and Learning Center, UCO Downtown, and the UCO 1st & Santa Fe Downtown Facility. The library, facilities, and equipment are adequate for the proposed program.

Financing. The proposed program will be offered on a self-supporting basis and the current tuition and fee structure will be sufficient to adequately fund the program. No additional funding is requested from the State Regents to support the program.

Program resource requirements. Program resource requirements for the D.Sc. in Forensic Science are shown in the following table.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$0	$30,000	$50,000	$70,000	$100,000
Explanation: The amounts reflect potential revenue from federal grants based on the faculty and doctoral graduate research.					
Total Resources Available from Other Non-State Sources	$0	$0	$25,000	$35,000	$50,000
Explanation: The amounts reflect potential revenue from private foundations and sources.					
Existing State Resources	$93,655	$87,275	$81,511	$81,511	$81,781
Explanation: The amount for Year 1 includes a percentage of the current 13 faculty members in the Forensic Science Institute who will provide a portion of their time (7.7 percent) to support course development, teach courses in the program, and advise doctoral students. A total salary and fringe amount of $1,210,414 is multiplied by 7.7 percent for the first year. Also included are existing resources					

A. Funding Sources	Year of Program 1st Year	2nd Year	3rd Year	4th Year	5th Year
in administrative support calculated as a percentage of administrative salary and benefits based on the doctoral headcount. In Year 1, $145,000 in administrative salary and benefits is multiplied by 0.04 percent (4 new students/1,064 projected students). In each subsequent year, the same calculation applies although the percentage for existing faculty salary and benefits decreases based on the increase of one faculty member for year 2 and 3. The opposite applies to the percentage of administrative expenses, as the number of students in the program increases.					
State Resources Available through Internal Allocation and Reallocation	$93,110	$208,219	$230,220	$230,220	$230,220
Explanation: UCO will reallocate one faculty position at $93,110 for year 1 and 2 and will sustain these positions throughout the program. Additional funds will be reallocated for graduate assistantships in the amount of $22,000. In year 2, one assistantship will be reallocated and two assistantships are included for the remainder of the program years.					
Student Tuition	$13,860	$20,790	$20,790	$20,790	$27,720
Explanation/Calculations: Graduate tuition and fees are $385.00 ($291.65 tuition, $93.35 fees) using UCO's Oklahoma graduate resident per credit hour rate. Each student will be taking 9 credit hours per semester. The amount is calculated based on the headcount of 4, 6, 6, 6, and 8 for the first 5 years of the program, respectively.					
TOTAL	**$200,625**	**$346,284**	**$407,521**	**$437,521**	**$489,721**

B. Breakdown of Budget Expenses/Requirements	Year of Program 1st Year	2nd Year	3rd Year	4th Year	5th Year
Administrative/Other Professional Staff	$545	$816	$816	$816	$1,086
Explanation: UCO administrative staff will assist with the implementation of the new doctoral program. Administrative support is calculated based on a percentage of administrative staff salaries in relation to the number of doctoral students in the program. For year 1, the percentage is 0.04 percent (4students/1,064 students; years 2-4 are calculated as 6/1,066 students, and year 5 is calculated as 8/1,068).					
Faculty	$186,219	$279,330	$279,330	$279,330	$279,330
Explanation: The funds include a percentage of the existing 13 faculty members in the Forensic Science Institute who will provide a portion of their time (7.7 percent) to support course development, teach courses in the program, and advise doctoral students. A total salary and fringe amount of $1,210,424 is multiplied by 7.7 percent for the first year. In each subsequent year, the same calculation applies but reduces the load of each faculty member as new faculty join the program – one faculty member in year 1 and one faculty member in year 2. Each faculty line equals $93,110 salaries and benefits.					
Graduate Assistants	$0	$22,000	$44,000	$44,000	$44,000
Explanation: UCO will offer one graduate assistantship in year 2 and two graduate assistantships in years 3-5 at $22,000 each.					
Student Employees	$0	$0	$0	$0	$0

Equipment and Instructional Materials	$0	$0	$0	$0	$0
Library	$0	$0	$0	$0	$0
Contractual Services	$0	$0	$0	$0	$0
Other Support Services	$0	$0	$0	$0	$0
Commodities	$0	$0	$0	$0	$0
Printing	$601	$601	$601	$601	$601
Explanation: Printing costs for course materials are included based on 7.7 percent of current costs.					
Telecommunications	$28	$28	$28	$28	$28
Explanation: A percentage of costs (7.7 percent) for communications are included based on the total cost to the Forensic Science program.					
Travel	$2,002	$2,002	$2,002	$2,002	$2,002
Explanation: Travel for the department is $26,000. The amount in the budget represents 7.7 percent of costs.					
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$189,395**	**$304,777**	**$326,777**	**$326,777**	**$327,047**

Attachment

ATTACHMENT A

UNIVERSITY OF CENTRAL OKLAHOMA
DOCTOR OF SCIENCE IN FORENSIC SCIENCE

Degree Requirements		**Credit Hours**
Forensic Science Core		**30**
*FRSC 6203	Advanced Forensic Program & Lab Management	3
*FRSC 6303	Advanced Forensic Statistics & Modeling	3
*FRSC 6403	Forensic Personnel Management & Diversity Awareness	3
*FRSC 6503	Global Perspectives in Forensic Science	3
*FRSC 6113	Investigations in Forensic Sciences	3
*FRSC 6123	Advances in Forensic DNA & Forensic Chemistry	3
*FRSC 6133	Advances in Trace Evidence & Digital Forensics	3
*FRSC 6143	Advances in Crime Scene Investigation & Impression Evidence	3
FRSC 6910	Forensic Science Research Seminar	3
FRSC 6950	Internship	3
Dissertation		**15**
FRSC 6990	Dissertation Research	15
Forensic Science Electives		**15**
	Select 15 credit hours from the following	
FRSC 5143	Crime Scene Reconstruction	3
FRSC 5153	Crime Scene Photography	3
FRSC 5163	Medicolegal Forensics	3
FRSC 5223	Behavior & Crime Scenes	3
FRSC 5233	Forensic Interviewing Techniques	3
FRSC 5243	Forensic Psychology	3
FRSC 5253	Forensic Science Analysis & Lab	3
FRSC 5263	Forensic & Biological Anthropology	3
FRSC 5273	Advanced Fingerprint Analysis	3
FRSC 5303	Forensic Archaeology	3
FRSC 5313	Forensic Pathology	3
FRSC 5323	Forensic Toxicology & Lab	3
FRSC 5333	Forensic Molecular Biology & Lab	3
FRSC 5343	Forensic Serology & Lab	3

FRSC 5353	Firearm & Toolmark Analysis	3
FRSC 5363	Advanced Crime Scene Techniques	3
FRSC 5373	Cold Case Review and Analysis	3
FRSC 5413	Bloodstain Pattern Analysis	3
FRSC 5423	Bloodstain Pattern Analysis II	3
FRSC 5443	Forensic Arson Investigation	3
FRSC 5463	Digital Forensics & Lab	3
FRSC 5513	Forensic Chemistry & Lab	3
FRSC 5533	Forensic Microscopy & Lab	3
FRSC 5543	Advanced Firearm & Toolmark & Lab	3
FRSC 5553	WMD Forensics	3
FRSC 5613	Advanced Forensic DNA Analysis & Lab	3
FRSC 5633	Digital Forensic Tools & Analysis & Lab	3
FRSC 5653	Mobile Device Forensics & Lab	3
FRSC 5713	Forensic Pharmacology	3
FRSC 5863	Expert Witness	3
FRSC 5873	Research Methods in Forensic Science	3
FRSC 5881	Graduate Seminar	1
FRSC 5892	Professional Issues in Forensic Science	2
STAT 5103	Applied Experimental Design	3
STAT 5123	Mathematical Statistics II	3
STAT 5213	Applied Regression Analysis	3
STAT 5253	Quality Control	3
STAT 5263	Computer Applications in Statistics	3
STAT 5303	Non-Parametric Statistics	3
STAT 5353	Probability Theory	3
STAT 5423	Data Fitting	3
STAT 5513	Statistical Consulting	3
ENG 5023	Technical Writing	3
ENG 5063	Advanced Technical Writing	3
ISOM 5333	Project Management	3
Total		**60**

*Denotes a new course

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AGENDA ITEM #5-d:

New Programs.

SUBJECT: Southwestern Oklahoma State University. Approval to offer the Certificate in Medical Coding.

RECOMMENDATION:

It is recommended that the State Regents approve Southwestern Oklahoma State University's request to offer, via electronic delivery, the Certificate in Medical Coding, with the stipulation that continuation of the program will depend upon meeting the criteria established by the institution and approved by the State Regents, as described below.

- **Certificate in Medical Coding.** This certificate will be embedded within the Bachelor of Science in Health Information Management (033) and will be included in the initial program review due in 2023.

BACKGROUND:

Academic Plan

Institutional Academic Plans are submitted annually to the State Regents, with acknowledgment of receipt, not endorsement. Southwestern Oklahoma State University's (SWOSU) 2022-2023 Academic Plan is available at: https://okhighered.org/complete-college-america/degree-completion-plans.shtml.

APRA Implementation

In August 1991, the State Regents launched the Academic Planning/Resource Allocation (APRA) initiative, which was based on the principle that institutional officials would prioritize their programs and activities, and then fund higher priority activities at levels that ensured quality. Since implementation, the APRA has served as a framework for institutions to shift resources from low priority, low producing, and duplicate academic programs to higher priority programs that address state and local workforce needs.

As a result of the APRA process, a net of 93 academic programs have been eliminated. After 30 years of documenting institutions' successful efforts to prioritize programs through APRA, along with recommendations from the Task Force on the Future of Higher Education to expand collaboration and limit program duplication, the Net Reduction table has been reset, beginning with the 2021-2022 academic year, to monitor the next 30 years of progress on this initiative.

Since 2021, SWOSU has taken the following program actions in response to APRA:

2	Degree and/or certificate program deleted
0	Degree and/or certificate programs added

Program Review

SWOSU offers 69 degree and/or certificate programs as follows:

3	Certificates
6	Associate in Arts or Science Degrees
4	Associate in Applied Science Degrees
41	Baccalaureate Degrees
14	Master's Degrees
0	Doctoral Degrees
1	First Professional Degree

All of these programs were reviewed in the past five years with the exception of those programs with specialty accreditation. Programs with specialty accreditation are aligned with SWOSU's program review schedule as appropriate. Thus, if a professional program received a ten-year accreditation, it would not be reviewed for ten years, which is an approved exception to State Regents' policy.

Program Development Process

SWOSU's faculty developed the proposal, which was reviewed and approved by institutional officials. SWOSU's governing board approved delivery of the Certificate in Medical Coding at their September 9, 2022 meeting. SWOSU is currently approved to offer 20 degree and certificate programs through electronic delivery. SWOSU requests authorization to offer this program as outlined below.

POLICY ISSUES:

This action is consistent with the Oklahoma State Regents for Higher Education's Academic Program Approval and Distance Education and Traditional Off-Campus Courses and Programs policies.

ANALYSIS:

Certificate in Medical Coding

Program purpose. The proposed embedded Certificate in Medical Coding is a stackable credential that provides students with the needed foundation of medical coding knowledge to be eligible to take the Certified Coding Specialist (CCS) credentialing exam.

Program rationale and employment opportunities. The proposed certificate along with the CCS certification will assist students in finding employment quicker and allow more students to be eligible to enter the medical coding profession upon graduation. Students will also be able to complete this certificate as a stand-alone credential and enter the profession sooner, while continuing to work towards completing the Bachelor of Science in Health Information Management (BSHIM) if desired.

Student demand. SWOSU reviewed the last three years of graduates and found that 36 percent of the students obtained a medical coding position upon graduation. SWOSU also surveyed 52 alumni to determine if there would have been interest in a coding certificate had it been available when they were pursing the BSHIM. Of the 38 students that responded, 89.47 percent said they would have pursued both the coding certificate and the BSHIM program, 89.47 percent felt the coding certificate would have opened more job opportunities for them and 62.16 percent indicated their job duties upon graduation included coding responsibilities.

Duplication and impact on existing programs. The proposed Certificate in Medical Coding may share similar content with the following programs:

Institution	Existing Program
Rose State College	Certificate in Health Information Technology Coding (105)
Tulsa Community College	Certificate in Health Information Technology/Coding/Reimbursement Specialist (237)

A systemwide letter of intent was communicated by email on July 25 2022. None of the State System institutions notified State Regents' staff of a protest to the proposed certificate. Approval will not constitute unnecessary duplication.

Curriculum. The proposed Certificate in Medical Coding will consist of 50 total credit hours as shown in the following table. No new courses will be developed, and the curriculum is detailed in the attachment (Attachment A).

Content Area	Credit Hours
General Education	3
Program Requirements	47
Total	**50**

Delivery method and support services. The proposed certificate will be offered via electronic delivery. SWOSU utilizes Canvas as its learning management system to deliver program content for online courses. The following features in Canvas help facilitate student learning: discussion boards, assignment submission, resources, and direct messaging between instructors and students. Students will also be required to use a virtual lab encoder which gives them experience using the platform used in the coding industry. The library and equipment are adequate for the proposed certificate.

Online Pedagogy and Training. Faculty who teach in online environments complete training in both the technical tools as well as pedagogical design. In addition, professional development sessions throughout the year offer faculty supplemental training on the latest online teaching techniques. SWOSU is a member of Quality Matters (QM). QM is a global organization leading quality assurance in online and innovative digital teaching and learning environments through research-supported and practice-based quality standards, as well as peer review and certification of quality in online education. The State Regents support institutional membership to ensure online programs meet QM standards.

Financing and program resource requirements. The proposed Certificate in Medical Coding will be embedded within the Bachelor of Science in Health Information Management (033). Program resource

requirements are supported through their main program and the proposed certificate will be offered on a self-supporting basis. Current tuition and fee structure will be sufficient to adequately fund the certificate. No additional funding is requested from the State Regents to support the certificate.

Attachment

ATTACHMENT A

SOUTHWESTERN OKLAHOMA STATE UNIVERSITY
CERTIFICATE IN MEDICAL CODING

Program Requirements		Credit Hours
General Education		**3**
ENGL 1113	English Composition I	3
Program Requirements		**47**
COMSC 1023	Computer Information and Access	3
ALHLT 2453	Medical Terminology	3
ALHLT 2154	Anatomy and Physiology I w/ Lab	4
ALHLT 2164	Anatomy and Physiology II w/ Lab	4
ALHLT 4074	Pathophysiology	4
ALHLT 3073	Diagnostics, Drugs, & Therapeutics	3
HIM 3033	Introduction to HIM w/ Lab	3
HIM 3223	Introduction to Electronic Health Records	3
HIM 3213	Healthcare Law & Information Protection	3
ALHLT 4123	Healthcare Revenue Cycle	3
HIM 3453	Healthcare Finance	3
HIM 3333	Coding I w/ Lab	3
HIM 3343	Coding II w/ Lab	3
HIM 4223	Coding III	3
HIM 4132	Medical Coding Internship	2
Total		**50**

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AGENDA ITEM #5-e:

New Programs.

SUBJECT: Carl Albert State College. Approval to offer the Associate in Applied Science in Environmental Science Technology.

RECOMMENDATION:

It is recommended that the State Regents approve Carl Albert State College's request to offer the Associate in Applied Science in Environmental Science Technology, via traditional and electronic delivery, with the stipulation that continuation of the program will depend upon meeting the criteria established by the institution and approved by the State Regents, as described below.

- **Associate in Applied Science in Environmental Science Technology.** Continuation beyond Fall 2026 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 20 students in Fall 2025; and
  Graduates: a minimum of 18 students in 2025-2026.

BACKGROUND:

Academic Plan

Institutional Academic Plans are submitted annually to the State Regents, with acknowledgment of receipt, not endorsement. Carl Albert State College's (CASC) 2022-2023 Academic Plan is available at: https://okhighered.org/complete-college-america/degree-completion-plans.shtml.

APRA Implementation
In August 1991, the State Regents launched the Academic Planning/Resource Allocation (APRA) initiative, which was based on the principle that institutional officials would prioritize their programs and activities, and then fund higher priority activities at levels that ensured quality. Since implementation, the APRA has served as a framework for institutions to shift resources from low priority, low producing, and duplicate academic programs to higher priority programs that address state and local workforce needs.

As a result of the APRA process, a net of 93 academic programs have been eliminated. After 30 years of documenting institutions' successful efforts to prioritize programs through APRA, along with recommendations from the Task Force on the Future of Higher Education to expand collaboration and limit program duplication, the Net Reduction table has been reset, beginning with the 2021-2022 academic year, to monitor the next 30 years of progress on this initiative.

Since 2021, CASC has taken the following program actions in response to APRA:

0	Degree and/or certificate programs deleted
1	Degree and/or certificate programs added

Program Review

CASC offers 32 degree and/or certificate programs as follows:

9	Certificates
15	Associate in Arts or Science Degrees
8	Associate in Applied Science Degrees
0	Baccalaureate Degrees
0	Master's Degrees
0	Doctoral Degrees
0	First Professional Degrees

All of these programs were reviewed in the past five years with the exception of those programs with specialty accreditation. Programs with specialty accreditation are aligned with CASC's program review schedule as appropriate. Thus, if a professional program received a ten-year accreditation, it would not be reviewed for ten years, which is an approved exception to State Regents' policy.

Program Development Process
CASC's faculty developed the proposal, which was reviewed and approved by institutional officials. CASC's governing board approved delivery of the Associate in Applied Science in Environmental Science Technology at their December 6, 2022 meeting. CASC is currently approved to offer 24 degree and certificate programs through electronic delivery. CASC requests authorization to offer this program as outlined below.

POLICY ISSUES:

This action is consistent with the Oklahoma State Regents for Higher Education's Academic Program Approval and Distance Education and Traditional Off-Campus Programs and Courses policies.

ANALYSIS:

Associate in Applied Science in Environmental Science Technology

Program purpose. The proposed program prepares students for careers identifying and addressing complex environmental issues from a problem-oriented, interdisciplinary perspective.

Program rationale and background. The proposed Associate in Applied Science in Environmental Science Technology program prepares students for entry-level jobs and focuses on the application of biological, chemical, and physical principles to the study of the physical environment and the solution of environmental problems. Subjects covered in this program include abating or controlling environmental pollution and degradation, the interaction between human society and the natural environment, and natural resources management.

Employment opportunities. In July 2021 a Regional Needs Assessment was prepared for CASC by Hanover Research. The assessment indicated regional and statewide demand in the areas of biological sciences, physical sciences, and general engineering, which this proposed program addresses. Additionally, the Southern Workforce Board Demand Occupation List indicates potential employer demand/career opportunities for the program, and it remains a promising career path, with opportunities for students to transfer to Northeastern State University to further their education in the field of safety engineering. The Bureau of Labor Statistics reports that employment of environmental science and protection technicians is projected to grow 6 percent from 2021 to 2031. Approximately 4,000 openings for environmental science and protection technicians are projected each year for the next 10 years.

Student demand. The proposed program is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum Enrollment of majors in the program	20	Fall 2025
Minimum Graduates from the program	18	2025-2026

Duplication and impact on existing programs. The proposed program may share similar content to the following program:

Institution	Existing Program
Rose State College	Associate in Science in Earth and Environmental Sciences (118)
Tulsa Community College	Associate in Science in Environmental Science and Natural Resources (279)

A system wide letter of intent was communicated by email on September 27, 2022. None of the State System institution notified State Regents' staff of a protest to the proposed program. Approval to offer the program will not constitute unnecessary duplication.

Curriculum. The proposed Associate in Applied Science in Environmental Science Technology program will consist of 6 total credit hours as shown in the following table. No new courses will be developed and the curriculum is detailed in the attachment (Attachment A).

Content Area	Credit Hours
General Education	19
Major Requirements	28
Major Electives	15
Total	**62**

Faculty and staff. Existing and new faculty will teach the courses in the proposed program.

Delivery method and support services. The proposed Associate in Applied Science in Environmental Science Technology will be offered traditionally and electronically through Blackboard, FLEX, Zoom, and face to face course options. Blackboard will allow students access to presentations, videos, submit assignments online, receive feedback from instructors, and discussions with peers. Zoom will allow classes

to meet using webcams and sound systems. The libraries, online learning center services, classrooms, and corresponding resources are adequate for the proposed program.

Online pedagogy and training. Faculty who teach in online environments complete training in both the technical tools as well as pedagogical design. In addition, professional development sessions throughout the year offer faculty supplemental training on the latest online teaching techniques. CASC is a member of Quality Matters (QM). QM is a global organization leading quality assurance in online and innovative digital teaching and learning environments through research-supported and practice-based quality standards, as well as peer review and certification of quality in online education. The State Regents support institutional membership to ensure online programs meet QM standards.

Financing. The proposed program will utilize resources currently available through the departmental budget. A grant from NASNTI will provide additional working capital, as well as funding for course development. Institutional resources will be directed into the department for faculty pay and administrative expenses until the program can be self-supporting.

Program resource requirements. Program resource requirements for the Associate in Applied Science in Environmental Science Technology are shown in the following table.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$6,500	$15,398	$27,732	$0	$0
Explanation: NASNTI Grant					
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$0	$0	$0	$0	$0
State Resources Available through Internal Allocation and Reallocation	$55,000	$55,000	$55,000	$55,000	$55,000
Explanation: Department budget allocation					
Student Tuition	$12,000	$24,000	$36,000	$48,000	$60,000
Explanation/Calculations: Tuition was calculated for the expected number of students each year at $100 per credit hour for 12 credit hours per semester. General education coursework was not used in the calculation.					
TOTAL	**$73,500**	**$94,398**	**$118,732**	**$103,000**	**$115,000**

	Year of Program				
B. Breakdown of Budget Expenses/Requirements	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Administrative/Other Professional Staff	$0	$0	$0	$0	$0
Faculty	$50,000	$50,000	$50,000	$50,000	$50,000
Explanation: Faculty salary and benefits are based on the expected candidate possessing a master's degree in Environmental Science or appropriate degree.					
Graduate Assistants	$0	$0	$0	$0	$0

Student Employees	$2,000	$2,000	$2,000	$2,000	$2,000
Explanation: Work study cost					
Equipment and Instructional Materials	$21,000	$20,067	$17,178	$10,000	$10,000
Explanation: Material cost front loaded for development.					
Library	$0	$0	$0	$0	$0
Contractual Services	$0	$0	$0	$0	$0
Other Support Services	$0	$0	$0	$0	$0
Commodities	$0	$0	$0	$0	$0
Printing	$250	$250	$250	$250	$250
Explanation: Standard institutional rate for printing.					
Telecommunications	$250	$250	$250	$250	$250
Explanation: Standard institutional rate for telecommunication items.					
Travel	$0	$1,150	$0	$0	$0
Explanation: Conference and travel cost.					
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$73,500**	**$73,717**	**$69,678**	**$62,500**	**$62,500**

Attachment

ATTACHMENT A

CARL ALBERT STATE COLLEGE
ASSOCIATE IN APPLIED SCIENCE IN ENVIRONMENTAL SCIENCE TECHNOLOGY

Degree Requirements		**Credit Hours**
General Education		**19**
ENGL 1113	English Composition I	3
SPCH 1113	Introduction to Speech Communication	3
POS 1113	American Federal Government	3
HIST 1483 or HIST 1493	American History to 1865 or American History 1865 – present	3
MATH 1513	College Algebra	3
ORI 1111	Freshman Orientation	1
ELECTIVES	CS 1103: Microcomputer Application and 3 credit hours of approved electives	6
Major Requirements		**28**
EM 1013	Environmental Management	3
EM 1433	Environmental Sampling & Analysis	3
EM 1133	Environmental Compliance Documentation	3
EM 2103	Introduction to Geographic Information Science	3
EM 1233	Introduction to Soil Science	3
EM 1421	Environmental Sciences Internship I	1
EM 2422	Environmental Sciences Internship II	2
GPS 1214	General Physical Science with Lab	4
OHS 1313	Introduction to Health & Safety	3
OHS 2203	Legal Aspects & Environmental Law	3
Major Electives		**15**
	Select 15 credit hours from the following	
BIO 1114	General Biology	4
BOT 1114	General Botany	4
BUS 1013	Introduction to Business	3
CHEM 1115	General Chemistry I	5
GEOL 1014	General Geology	4
SOC 1313	Introduction to Sociology	3
ZOO 1114	General Zoology	4
GEOG 2243	Fundamentals of Human Geography	3

OHS 2303	Introduction to Hazardous Materials and Waste	3
OHS 2403	Principles of Industrial Hygiene	3
Total		**62**

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AGENDA ITEM #5-f:

New Programs.

SUBJECT: Murray State College. Approval to offer the Certificate in Child Development.

RECOMMENDATION:

It is recommended that the State Regents approve Murray State College's request to offer via traditional and electronic delivery the Certificate in Child Development with the stipulation that continuation of the program will depend upon meeting the criteria established by the institution and approved by the State Regents, as described below.

- **Certificate in Child Development.** This certificate will be embedded within the Associate in Applied Science in Child Development (041) and the Associate in Arts in Child Development (061) and will be included in the initial program review of each due in 2026.

BACKGROUND:

Academic Plan

Institutional Academic Plans are submitted annually to the State Regents, with acknowledgment of receipt, not endorsement. Murray State College's (MSC) 2022-2023 Academic Plan is available at: https://okhighered.org/complete-college-america/degree-completion-plans.shtml.

APRA Implementation

In August 1991, the State Regents launched the Academic Planning/Resource Allocation (APRA) initiative, which was based on the principle that institutional officials would prioritize their programs and activities, and then fund higher priority activities at levels that ensured quality. Since implementation, the APRA has served as a framework for institutions to shift resources from low priority, low producing, and duplicate academic programs to higher priority programs that address state and local workforce needs.

As a result of the APRA process, a net of 93 academic programs have been eliminated. After 30 years of documenting institutions' successful efforts to prioritize programs through APRA, along with recommendations from the Task Force on the Future of Higher Education to expand collaboration and limit program duplication, the Net Reduction table has been reset, beginning with the 2021-2022 academic year, to monitor the next 30 years of progress on this initiative.

Since 2021, MSC has taken the following program actions in response to APRA:

0	Degree and/or certificate program deleted
0	Degree and/or certificate programs added

Program Review

MSC offers 38 degree and/or certificate programs as follows:

12	Certificates
15	Associate in Arts or Science Degrees
11	Associate in Applied Science Degrees
0	Baccalaureate Degrees
0	Master's Degrees
0	Doctoral Degrees
0	First Professional Degree

All of these programs were reviewed in the past five years with the exception of those programs with specialty accreditation. Programs with specialty accreditation are aligned with MSC's program review schedule as appropriate. Thus, if a professional program received a ten-year accreditation, it would not be reviewed for ten years, which is an approved exception to State Regents' policy.

Program Development Process

MSC's faculty developed the proposal, which was reviewed and approved by institutional officials. MSC's governing board approved delivery of the Certificate in Child Development at their April 16, 2019 meeting. MSC is currently approved to offer 11 degree and certificate programs through electronic delivery. MSC requests authorization to offer this program as outlined below.

POLICY ISSUES:

This action is consistent with the Academic Program Approval and Distance Education and Traditional Off-Campus Courses and Programs policies.

ANALYSIS:

Certificate in Child Development

Program purpose. The proposed certificate will be embedded within the Associate in Applied Science in Child Development (041) and Associate in Arts in Child Development (061). The program is designed to be a stackable certificate that will allow students working in the childcare industry an opportunity to earn a credential and attain a master-level teaching position.

Program rationale and employment opportunities. The field of childcare was greatly impacted by COVID-19. Many facilities across Oklahoma and the United States have found it difficult to fill the vacancies created by the pandemic. Currently, students can successfully complete classes and apply for advancement on the Oklahoma Registry with the Center for Early Childhood Professional Development. The proposed certificate works in conjunction with this opportunity. Many students (98 percent) at MSC start by pursuing courses required for a certificate in order to meet requirements for the Scholars for Excellence in Childcare program and for level advancement. MSC connected with several childcare facilities in their area and all were in support of the proposed certificate and its benefits to their facilities.

Student demand. The proposed certificate is expected to fulfill student demand within the Associate in Applied Science in Child Development (041) and the Associate in Arts in Child Development (061) programs.

Duplication and impact on existing programs. The proposed certificate may share similar content with the following programs:

Institution	Existing Program
Carl Albert State College	Certificate in Child Development (048)
Connors State College	Certificate in Child Development (076) & (090)
Northeastern Oklahoma A&M College	Certificate in Child Development (121)
Oklahoma City Community College	Certificate in Child Development (077)
Redlands Community College	Certificate in Child Development (061)
Rose State College	Certificate in Child Development (305)
Seminole State College	Certificate in Child Development (229)
Tulsa Community College	Certificate in Child Development (206)

A systemwide letter of intent was communicated by email on July 25, 2022. Rose State College (RSC) requested a copy of the proposal, which was sent on January 4, 2023. Neither RSC nor any other State System institution notified State Regents' staff of a protest to the proposed certificates. Approval will not constitute unnecessary duplication.

Curriculum. The proposed Certificate in Child Development will consist of 18 total credit hours as shown in the following table. No new courses will be developed, and the curriculum is detailed in the attachment (Attachment A).

Content Area	Credit Hours
General Education	3
Program Requirements	15
Total	**18**

Faculty and staff. Existing faculty will teach the courses in the proposed Certificate in Child Development.

Delivery method and support services. The proposed certificate will be offered via traditional and electronic delivery. MSC utilizes Ultra Blackboard as its learning management system to deliver program content for online courses. The following features in Ultra Blackboard help facilitate student learning: discussion boards, assignment submission, resources, and direct messaging between instructors and students. The library and classroom equipment are adequate for the proposed certificate.

Online Pedagogy and Training. Faculty who teach in online environments complete training in both the technical tools as well as pedagogical design. In addition, professional development sessions throughout the year offer faculty supplemental training on the latest online teaching techniques. MSC is a member of Quality Matters (QM). QM is a global organization leading quality assurance in online and innovative digital teaching and learning environments through research-supported and practice-based quality standards, as well as peer review and certification of quality in online education. The State Regents support institutional membership to ensure online programs meet QM standards.

Financing and program resource requirements. The proposed Certificate in Child Development will be embedded within the Associate in Applied Science in Child Development (041) and the Associate in Arts in Child Development (061). Program resource requirements are supported through their main program and the proposed certificate will be offered on a self-supporting basis. Current tuition and fee structure will be sufficient to adequately fund the certificate. No additional funding is requested from the State Regents to support the certificate.

Attachment

ATTACHMENT A

MURRAY STATE COLLEGE
CERTIFICATE IN CHILD DEVELOPMENT

Program Requirements		Credit Hours
General Education		**3**
ENG 1113	English Composition I	3
Program Requirements		**15**
CD 1243	Health, Safety, and Nutrition	3
CD 1353	Child and Family Development	3
CD 2453	Curriculum Planning	3
CD 2573	Children with Special Needs	3
CD 2533	Guidance of Young Children	3
Total		**18**

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AGENDA ITEM #5-g:

New Programs.

SUBJECT: Oklahoma State University-Oklahoma City. Approval to offer the Associate in Applied Science in Biomanufacturing Technologies, the Certificate in Advanced Laboratory Practices, the Certificate in Laboratory Practices, and the Certificate in Laboratory Quality.

RECOMMENDATION:

It is recommended that the State Regents approve Oklahoma State University-Oklahoma City's requests to offer, via traditional and electronic delivery, the Associate in Applied Science in Biomanufacturing Technologies, the Certificate in Advanced Laboratory Practices, the Certificate in Laboratory Practices, and the Certificate in Laboratory Quality with the stipulation that continuation of the programs will depend upon meeting the criteria established by the institution and approved by the State Regents, as described below.

- **Associate in Applied Science in Biomanufacturing Technologies.** Continuation beyond Fall 2028 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 30 students in Fall 2027; and
  Graduates: a minimum of 22 students in 2027-2028.

- **Certificate in Advanced Laboratory Practices.** This certificate will be embedded within the proposed Associate in Applied Science in Biomanufacturing Technologies and will be included in the initial program review due in 2028.

- **Certificate in Laboratory Practices.** This certificate will be embedded within the proposed Associate in Applied Science in Biomanufacturing Technologies and will be included in the initial program review due in 2028.

- **Certificate in Laboratory Quality.** This certificate will be embedded within the proposed Associate in Applied Science in Biomanufacturing Technologies and will be included in the initial program review due in 2028.

BACKGROUND:

Academic Plan

Institutional Academic Plans are submitted annually to the State Regents, with acknowledgment of receipt, not endorsement. Oklahoma State University-Oklahoma City's (OSU-OKC) 2022-2023 Academic Plan is available at: https://okhighered.org/complete-college-america/degree-completion-plans.shtml.

APRA Implementation

In August 1991, the State Regents launched the Academic Planning/Resource Allocation (APRA) initiative, which was based on the principle that institutional officials would prioritize their programs and activities, and then fund higher priority activities at levels that ensured quality. Since implementation, the APRA has served as a framework for institutions to shift resources from low priority, low producing, and duplicate academic programs to higher priority programs that address state and local workforce needs.

As a result of the APRA process, a net of 93 academic programs have been eliminated. After 30 years of documenting institutions' successful efforts to prioritize programs through APRA, along with recommendations from the Task Force on the Future of Higher Education to expand collaboration and limit program duplication, the Net Reduction table has been reset, beginning with the 2021-2022 academic year, to monitor the next 30 years of progress on this initiative.

Since 2021, OSU-OKC has taken the following program actions in response to APRA:

10	Degree and/or certificate program deleted
1	Degree and/or certificate programs added

Program Review

OSU-OKC offers 45 degree and/or certificate programs as follows:

14	Certificates
7	Associate in Arts or Science Degrees
23	Associate in Applied Science Degrees
1	Baccalaureate Degrees
0	Master's Degrees
0	Doctoral Degrees
0	First Professional Degree

All of these programs were reviewed in the past five years with the exception of those programs with specialty accreditation. Programs with specialty accreditation are aligned with OSU-OKC's program review schedule as appropriate. Thus, if a professional program received a ten-year accreditation, it would not be reviewed for ten years, which is an approved exception to State Regents' policy.

Program Development Process

OSU-OKC's faculty developed the proposals, which were reviewed and approved by institutional officials. OSU-OKC's governing board approved delivery of the Associate in Applied Science in Biomanufacturing Technologies, the Certificate in Advanced Laboratory Practices, the Certificate in Laboratory Practices, and the Certificate in Laboratory Quality at their December 2, 2022 meeting. OSU-OKC is currently approved to offer 16 degree and certificate programs through electronic delivery. OSU-OKC requests authorization to offer this program as outlined below.

POLICY ISSUES:

These actions are consistent with the Oklahoma State Regents for Higher Education's Academic Program Approval and Distance Education and Traditional Off-Campus Courses and Programs policies.

ANALYSIS:

Associate in Applied Science in Biomanufacturing Technologies

Program purpose. The proposed program is designed to be a workforce-ready degree with stackable certificates that will allow students to be employed with the competencies gained in the first certificate and additional workforce opportunities with the second and third certificates.

Program rationale and employment opportunities. Enrollment in health science related programs is high at OSU-OKC, accounting for 5 of their top 10 programs. Three of the health science programs have selective admission processes, which often result in interested students unable to pursue a specific pathway. One specific initiative OSU-OKC has identified is the need for an alternative program pathway for students to pursue if they are not accepted into other health science programs.

The proposed program will also better meet the expressed needs of industry partners. In Spring 2022, OSU-OKC met with industry partners on the growing field of Biomanufacturing. It was noted during this meeting that companies often hire students with a Biology degree who do not have the direct workforce skills needed in the laboratory setting. These employers identified skill sets that are in high demand for entry-level laboratory positions as well as upskilling of the current workforce. Oklahoma Works lists Biology/Biological Sciences as one of the 5 leading industries for workforce production. Job positions in high demand are Process Development Associate, Solution Prep Associate, Quality Control Associate, and Regulatory Affairs Specialists. The curriculum for the Associate in Applied Science in Biomanufacturing Technologies was developed with the skill sets industry partners identified for each of these positions in mind.

Student demand. The proposed program is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum enrollment of majors in the program	30	Fall 2027
Minimum graduates from the program	22	2027-2028

Duplication and impact on existing programs. The proposed Associate in Applied Science in Biomanufacturing Technologies may share similar content with the following programs:

Institution	Existing Program
Northern Oklahoma College	Associate in Applied Science in Applied Technology in Manufacturing Technology (875)
Rogers State University	Associate in Applied Science in Applied Technology in Manufacturing Management (111)
Rogers State University	Associate in Applied Science in Applied Technology in Advanced Manufacturing (875)
Tulsa Community College	Associate in Applied Science in Engineering Technology in Quality Technology (151)
Tulsa Community College	Associate in Applied Science in Applied Technology in Advanced Manufacturing (875)

A systemwide letter of intent was communicated by email on May 24, 2022. The University of Oklahoma (OU) requested a copy of the proposal, which was sent on December 12, 2022. Neither OU nor any other State System institution notified State Regents' staff of a protest to the proposed program. Approval will not constitute unnecessary duplication.

Curriculum. The Associate in Applied Science in Biomanufacturing Technologies will consist of 61 total credit hours, as shown in the following table. Twelve new courses will be added and the curriculum is detailed in the attachments (Attachment A).

Content Area	Credit Hours
General Education	19
Support Courses	9
Program Requirements	33
Total	**61**

Certificate in Advanced Laboratory Practices
Certificate in Laboratory Practices
Certificate in Laboratory Quality

Program purpose. The proposed certificates are designed to allow students to earn stackable credentials so they can begin working in the healthcare field while continuing to develop skills for employment and advancement, as well as continuing to work, as desired, on the Associate of Applied Science in Biomanufacturing Technologies program.

Program rationale and employment opportunities. The proposed certificates will be embedded within the proposed Associate in Applied Science in Biomanufacturing Technologies. The proposed certificates are designed so that completers will be able to secure entry-level positions in the biomanufacturing industry. According to Oklahoma Works, Clinical Laboratory Technologists and Technicians is among the ecosystems listed on the 2020-2022 Critical Occupations for Oklahoma. Data indicates that 337 new positions are anticipated in the next 5 years. In-demand occupations related to this field include Process Development Associates, Solution Prep Associates, Quality Control Associates, and Regulatory Affairs Specialists.

Student demand. The proposed certificates are expected to fulfill student demand within the Associate in Applied Science in Biomanufacturing Technologies program.

Duplication and impact on existing programs. The proposed Certificate in Advanced Laboratory Practices and the Certificate in Laboratory Practices may share similar content with the following program:

Institution	Existing Program
Tulsa Community College	Certificate in Medical Laboratory Technician (182)

The proposed Certificate in Laboratory Quality may share similar content with the following programs:

Institution	Existing Program
Northeastern State University	Certificate in Quality Management (192)

Tulsa Community College	Certificate in Quality and Inspection Technician I (290)
Tulsa Community College	Certificate in Quality and Inspection Technician II (188)

A systemwide letter of intent was communicated by email on May 24, 2022. None of the State System institutions notified State Regents' staff of a protest to the proposed certificates. Approval will not constitute unnecessary duplication.

Curriculum. The proposed certificates will consist of the total credit hours shown in the following tables. Twelve new courses will be developed, and the curriculum is detailed in the attachments (Attachment B, C, and D).

Certificate in Advanced Laboratory Practices

Content Area	Credit Hours
General Education	8
Program Requirements	12
Total	**20**

Certificate in Laboratory Practices

Content Area	Credit Hours
General Education	10
Program Requirements	11
Related Electives	4
Total	**25**

Certificate in Laboratory Quality

Content Area	Credit Hours
General Education	6
Program Requirements	10
Total	**16**

Faculty and staff. Existing and new faculty will teach the courses in the proposed Associate in Applied Science in Biomanufacturing Technologies and the proposed certificate programs.

Delivery method and support services. The proposed Associate in Applied Science in Biomanufacturing Technologies, the Certificate in Advanced Laboratory Practices, the Certificate in Laboratory Practices, and the Certificate in Laboratory Quality will be offered via traditional and electronic delivery. OSU-OKC utilizes Canvas as its learning management system to deliver program content for online courses. The following features in Canvas facilitate student learning: discussion boards, assignment submission, resources, and direct messaging between instructors and students. The library and classroom equipment are

adequate for the proposed programs.

Online Pedagogy and Training. Faculty who teach in online environments complete training in both the technical tools as well as pedagogical design. In addition, professional development sessions throughout the year offer faculty supplemental training on the latest online teaching techniques. OSU-OKC is a member of Quality Matters (QM). QM is a global organization leading quality assurance in online and innovative digital teaching and learning environments through research-supported and practice-based quality standards, as well as peer review and certification of quality in online education. The State Regents support institutional membership to ensure online programs meet QM standards.

Financing and program resource requirements. Program resource requirements for the Associate in Applied Science in Biomanufacturing Technologies are shown in the following table. The proposed Certificate in Advanced Laboratory Practices, the Certificate in Laboratory Practices, and the Certificate in Laboratory Quality will be embedded within the proposed Associate in Applied Science in Biomanufacturing Technologies. Program resource requirements for these certificates will be supported through their main program and will be offered on a self-supporting basis. Current tuition and fee structure will be sufficient to adequately fund the certificates. No additional funding is requested from the State Regents to support the certificates.

	Year of Program				
A. Funding Sources	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Total Resources Available from Federal Sources	$0	$0	$0	$0	$0
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$0	$0	$0	$0	$0
State Resources Available through Internal Allocation and Reallocation	$120,000	$100,000	$50,000	$0	$0
Explanation: Internal funds have been reallocated to support equipment needs (although grant funding and industry donations will be sought for future years) and for salary and benefits for added adjunct or full-time faculty positions if program is approved and depending on enrollment demands. Division head for STEM is well-qualified to develop program and teach courses in year 1 as well.					
Student Tuition	$56,682	$113,364	$113,364	$141,705	$141,705
Explanation & Calculations: Estimate for tuition and fees is based on an initial enrollment of 12 students taking 12 credit hours (full-time) per semester in years 1 through 5. Estimated 35 students in full-time enrollment.					
TOTAL	**$176,682**	**$213,364**	**$163,364**	**$141,705**	**$141,705**

	Year of Program				
B. Breakdown of Budget Expenses/Requirements	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**
Administrative/Other Professional Staff	$12,500	$12,875	$13,261	$13,658	$14,067
Explanation: These estimates are based on a maximum 5 percent increase in time for tracking additional enrollment through assessment reporting and program reviews, and advising for 3 positions in institutional effectiveness, departments, and academic advising, with a 3 percent increase built in each year for potential cost					

of living increases.					
Faculty	$90,000	$90,000	$90,000	$92,700	$95,561
Explanation: In year 1 and 2, program will be overseen by division head for STEM who can also teach 2 courses per semester. Adjuncts will be hired as needed for additional lab courses. The total above also reflects funding that has been set aside to hire an additional full-time faculty member (salary and benefits) in year 1 or 2, depending on enrollment demands. Credit hours linked to program courses are 5 credits in fall of year 1 and 9 credit hours in spring of year 1. In year 2, with additional courses to complete the program and a new cohort for year 1, the total program credit hours offered would be 14 in fall and 19 in spring.					
Graduate Assistants	$0	$0	$0	$0	$0
Student Employees	$0	$0	$0	$0	$0
Equipment and Instructional Materials	$50,000	$50,000	$30,000	$30,000	$20,000
Explanation: Current facilities are sufficient for starting the program. Additional equipment may be needed if enrollment increases as anticipated in years 3 through 5 with enrollment offsetting costs.					
Library	$0	$0	$0	$0	$0
Contractual Services	$0	$1,000	$2,000	$2,000	$3,000
Explanation: Budget allows for equipment maintenance after initial year of purchase.					
Other Support Services	$0	$0	$0	$0	$0
Commodities	$0	$0	$0	$0	$0
Printing	$500	$500	$750	$750	$750
Explanation: Budget provides for classroom materials being printed.					
Telecommunications	$250	$250	$250	$250	$250
Explanation: Phone charges.					
Travel	$250	$250	$250	$250	$250
Explanation: Ongoing meetings with business partners.					
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$153,500**	**$154,875**	**$136,511**	**$139,608**	**$133,878**

Attachments

ATTACHMENT A

OKLAHOMA STATE UNIVERSITY – OKLAHOMA CITY
ASSOCIATE IN APPLIED SCIENCE IN BIOMANUFACTURING TECHNOLOGIES

Program Requirements		**Credit Hours**
General Education		**19**
ENGL 1113	English Composition I	3
ENGL 1213 or SPCH 1113 or ENGL 2333	English Composition II or Introduction to Speech Communication or Introduction to Technical Report Writing	3
HIST 1483 or HIST 1493	US History to 1865 or US History since 1865	3
POLS 1113	American Government	3
MATH 1483 or MATH 1513	Mathematical Functions and their Uses or Precalculus I	3
BIOL 1303/1311	Principles of Biology & Principles of Biology Lab	4
Support Courses		**9**
CHEM 1154	General, Organic, and Biochemistry	4
CHEM 1315	General Chemistry I	5
Program Requirements		**33**
*BMFT 1002	Aseptic Techniques	2
*BMFT 1102	Basic Laboratory Operations	2
*BMFT 1113	Introduction to Laboratory Management	3
*BMFT 1134	Introduction to Laboratory Equipment	4
*BMFT 2203	Bioreactors and Cell Culture	3
*BMFT 2254	Downstream Laboratory Operations	4
*BMFT 2232	Cell Harvesting	2
*BMFT 2273	Chromatography	3
*BMFT 2302	Current Practices in Biomanufacturing	2
*BMFT 2332	Regulatory Compliance in Biomanufacturing	2
*BMFT 2353	Advanced Laboratory Management	3
*BMFT 2373	Industry Practicum	3
Total		**61**

*Denotes a new course

ATTACHMENT B

OKLAHOMA STATE UNIVERSITY – OKLAHOMA CITY
CERTIFICATE IN ADVANCED LABORATORY PRACTICES

Program Requirements		**Credit Hours**
General Education		**8**
ENGL 1213 or ENGL 2333 or SPCH 1113	English Composition II or Introduction to Technical Report Writing or Introduction to Speech Communication	3
CHEM 1315	General Chemistry I	5
Program Requirements		**12**
*BMFT 2203	Bioreactors and Cell Culture	3
*BMFT 2232	Cell Harvesting	2
*BMFT 2254	Downstream Laboratory Operations	4
*BMFT 2273	Chromatography	3
Total		**20**

*Denotes a new course

ATTACHMENT C

OKLAHOMA STATE UNIVERSITY – OKLAHOMA CITY
CERTIFICATE IN LABORATORY PRACTICES

Program Requirements		**Credit Hours**
General Education		**10**
ENGL 1113	English Composition I	3
MATH 1483 or MATH 1513	Mathematical Functions and Their Uses or Precalculus I	3
BIOL 1303/1311 or CHEM 1154	Principles of Biology w/ Lab or General, Organic, and Biochemistry	4
Program Requirements		**11**
*BMFT 1002	Aseptic Techniques	2
*BMFT 1102	Basic Laboratory Operations	2
*BMFT 1113	Introduction to Laboratory Management	3
*BMFT 1134	Introduction to Laboratory Equipment	4
Related Electives		**4**
	Electives approved by department.	
Total		**25**

*Denotes a new course

ATTACHMENT D

OKLAHOMA STATE UNIVERSITY – OKLAHOMA CITY
CERTIFICATE IN LABORATORY QUALITY

Program Requirements		Credit Hours
General Education		**6**
HIST 1483 or HIST 1493	US History to 1865 or US History since 1865	3
POLS 1113	American Government	3
Program Requirements		**10**
*BMFT 2302	Current Practices in Biomanufacturing	2
*BMFT 2332	Regulatory Compliance in Biomanufacturing	2
*BMFT 2353	Advanced Laboratory Management	3
*BMFT 2373	Industry Practicum	3
Total		**16**

*Denotes a new course

Meeting of the
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AGENDA ITEM #5-h:

New Programs.

SUBJECT: Tulsa Community College. Approval to offer the Associate in Applied Science in Cybersecurity.

RECOMMENDATION:

It is recommended that the State Regents approve Tulsa Community College's request to offer the Associate in Applied Science in Cybersecurity, via traditional delivery, with the stipulation that continuation of the program will depend upon meeting the criteria established by the institution and approved by the State Regents, as described below.

- **Associate in Applied Science in Cybersecurity.** Continuation beyond Fall 2027 will depend upon meeting the following criteria:
  Majors enrolled: a minimum of 15 students in Fall 2026; and
  Graduates: a minimum of 7 students in 2026-2027.

BACKGROUND:

Academic Plan

Institutional Academic Plans are submitted annually to the State Regents, with acknowledgment of receipt, not endorsement. Tulsa Community College's (TCC) 2022-2023 Academic Plan is available at: https://okhighered.org/complete-college-america/degree-completion-plans.shtml.

APRA Implementation
In August 1991, the State Regents launched the Academic Planning/Resource Allocation (APRA) initiative, which was based on the principle that institutional officials would prioritize their programs and activities, and then fund higher priority activities at levels that ensured quality. Since implementation, the APRA has served as a framework for institutions to shift resources from low priority, low producing, and duplicate academic programs to higher priority programs that address state and local workforce needs.

As a result of the APRA process, a net of 93 academic programs have been eliminated. After 30 years of documenting institutions' successful efforts to prioritize programs through APRA, along with recommendations from the Task Force on the Future of Higher Education to expand collaboration and limit program duplication, the Net Reduction table has been reset, beginning with the 2021-2022 academic year, to monitor the next 30 years of progress on this initiative.

Since 2021, TCC has taken the following program actions in response to APRA:

3	Degree and/or certificate programs deleted
1	Degree and/or certificate programs added

Program Review

TCC offers 94 degree and/or certificate programs as follows:

33	Certificates
29	Associate in Arts or Science Degrees
32	Associate in Applied Science Degrees
0	Baccalaureate Degrees
0	Master's Degrees
0	Doctoral Degrees
0	First Professional Degrees

All of these programs were reviewed in the past five years with the exception of those programs with specialty accreditation. Programs with specialty accreditation are aligned with TCC's program review schedule as appropriate. Thus, if a professional program received a ten-year accreditation, it would not be reviewed for ten years, which is an approved exception to State Regents' policy.

Program Development Process
TCC's faculty developed the proposal, which was reviewed and approved by institutional officials. TCC's governing board approved delivery of the Associate in Applied Science in Cybersecurity at their November 17, 2022 meeting. TCC requests authorization to offer this program as outlined below.

POLICY ISSUES:

This action is consistent with the Oklahoma State Regents for Higher Education's Academic Program Approval policy.

ANALYSIS:

Associate in Applied Science in Cybersecurity

Program purpose. The proposed program will provide students with fundamental concepts of the cybersecurity discipline. Students will diagnose causes of network, hardware, and software problems, create solutions to these problems, and configure networks and hosts to defend against cyber threats.

Program rationale and background. The analytical nature of the proposed program supports critical thinking through situational and data analysis using computer technology while communicating the framework, structure, challenges, and solutions to cybersecurity issues. Inherent within cybersecurity is an ethical responsibility that aligns with personal and social responsibility. The program's objectives align with and support TCC's Institutional Learning Outcomes of Communication Skills, Critical Thinking, Personal Responsibility, and Social Responsibility.

Employment opportunities. The field of cybersecurity is continually changing and presents a plethora of opportunities for graduates. The leading position for graduates with this degree is Cybersecurity Analyst.

Demand is robust locally, regionally, and nationally for specialists in cybersecurity and IT professionals with cybersecurity skills and background. The Bureau of Labor Statistics estimates growth in this field to exceed 33 percent from 2020 to 2030.

Student demand. The proposed program is expected to meet the enrollment and graduation standards by the established deadline prior to final approval by the State Regents as shown in the following table.

Productivity Category	Criteria	Deadline
Minimum Enrollment of majors in the program	15	Fall 2026
Minimum Graduates from the program	7	2026-2027

Duplication and impact on existing programs. The proposed program may share similar content to the following program:

Institution	Existing Program
Carl Albert State College	Associate in Applied Science in Cybersecurity

A system wide letter of intent was communicated by email on August 5, 2022. Rose State College (RSC) requested a copy of the proposal, which was sent on December 9, 2022. Neither RSC nor any other State System institution notified State Regents' staff of a protest to the proposed program. Due to the distance between institutions and the specific curricular focus of TCC's program, approval will not constitute unnecessary duplication.

Curriculum. The proposed Associate in Applied Science in Cybersecurity program will consist of 60 total credit hours as shown in the following table. Seven new courses will be developed and the curriculum is detailed in the attachment (Attachment A).

Content Area	Credit Hours
General Education	18
Specialized Courses	42
Total	**60**

Faculty and staff. Existing and new faculty will teach the courses in the proposed program.

Delivery method and support services. All courses will be delivered in a traditional format. All campus classrooms are equipped with computers, projectors and/or televisions and wireless capabilities. Campus computer labs are equipped with software necessary for students to work on course assignments. The library and corresponding resources are adequate for the proposed program.

Financing. The proposed program will initially utilize reallocated funds. The program will move to a self-supporting basis once the current tuition and fee structure is sufficient to adequately fund the program. No additional funding is requested from the State Regents to support the program.

Program resource requirements. Program resource requirements for the Associate in Applied Science in Cybersecurity are shown in the following table.

A. Funding Sources	Year of Program				
	1st Year	2nd Year	3rd Year	4th Year	5th Year
Total Resources Available from Federal Sources	$0	$0	$0	$0	$0
Total Resources Available from Other Non-State Sources	$0	$0	$0	$0	$0
Existing State Resources	$0	$0	$0	$0	$0
State Resources Available through Internal Allocation and Reallocation	$90,000	$110,000	$125,000	$150,000	$150,000
Explanation: This amount reflects current funds within the School of Business and IT.					
Student Tuition	$0	$22,500	$31,500	$45,000	$67,500
Explanation/Calculations: Tuition was calculated as $150 per credit hour for tuition and fees multiplied by the number of anticipated full-time enrollments and each taking 30 credit hours per year.					
TOTAL	**$90,000**	**$132,500**	**$156,500**	**$195,000**	**$217,500**

B. Breakdown of Budget Expenses/Requirements	Year of Program				
	1st Year	2nd Year	3rd Year	4th Year	5th Year
Administrative/Other Professional Staff	$0	$0	$0	$0	$0
Faculty	$90,000	$110,000	$125,000	$150,000	$150,000
Explanation: FT faculty salary and benefits.					
Graduate Assistants	$0	$0	$0	$0	$0
Student Employees	$0	$0	$0	$0	$0
Equipment and Instructional Materials	$0	$5,000	$5,000	$5,000	$5,000
Explanation: IT, Data Center, cybersecurity equipment for demonstration, teaching, and experiential learning purposes.					
Library	$0	$0	$0	$0	$0
Contractual Services	$0	$0	$0	$0	$0
Other Support Services	$0	$0	$0	$0	$0
Commodities	$0	$0	$0	$0	$0
Printing	$0	$0	$0	$0	$0
Telecommunications	$0	$0	$0	$0	$0
Travel	$0	$2,500	$2,500	$2,500	$2,500
Explanation: Conference travel.					
Awards and Grants	$0	$0	$0	$0	$0
TOTAL	**$90,000**	**$117,500**	**$132,500**	**$157,500**	**$157,500**

ATTACHMENT A

TULSA COMMUNITY COLLEGE
ASSOCIATE IN APPLIED SCIENCE IN CYBERSECURITY

Degree Requirements		**Credit Hours**
General Education		**18**
ENGL 1113	Composition I	3
ENGL 1213 or ENGL 2333 or ENGL 2343	Composition II or Technical/Professional Writing or Business Communication I	3
POLS 1113	American Federal Government	3
HIST 1483 or HIST 1493	U.S. History - 1492 to the Civil War Era or U.S. History – Civil War Era to the Present	3
ELECTIVE	Liberal Arts and Sciences Electives	6
Specialized Course Requirements		**42**
CSCI 1263	Network Fundamentals	3
CSYS 2493	Principles of Cybersecurity	3
CSYS 1203	Introduction to Programming	3
CSCI 2163	Operating Systems Concepts	3
*CSEC 2503	Network Security	3
*CSEC 2603	Secure System Administration	3
*CSEC 2633	Digital Forensics	3
CSYS 2063	Windows Server Administration	3
CSCI 1483	Introduction to UNIX (Linux)	3
*CSEC 2663	Pen Testing	3
*CSEC 2563	Cryptography	3
*CSEC 2593	Virtualization	3
Controlled Elective	CSCI 2133, CSCI 2473, CSCI 2683, CSCI 2843, CSEC 2104, CSEC 2204, CSEC 2304, CSEC 2404, CSYS 1013, CSYS 2463, CSYS 2613, CSYS 2643, or CSYS 2743	3
Total		**60**

*Denotes a new course

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AGENDA ITEM #6-a:

Certificates of 15 or fewer credit hours.

SUBJECT: Northwestern Oklahoma State University. Ratification of institutional request to offer certificate of 15 or fewer credit hours.

RECOMMENDATION:

It is recommended that the State Regents ratify the approved institutional request to offer the following certificate of 15 or fewer credit hours, as described below.

BACKGROUND:

Northwestern Oklahoma State University (NWOSU)

- Graduate Certificate in Superintendent

POLICY ISSUES:

This action is consistent with the Oklahoma State Regents for Higher Education's Academic Program Approval policy.

ANALYSIS:

NWOSU requested authorization to offer the Graduate Certificate in Superintendent.

- The proposed certificate provides district-level superintendent certification to candidates who have completed principal certification or are working on the Master of Education in Educational Leadership (084) degree.
- Shortages remain in all areas of education, including educational leaders such as principals and superintendents. NWOSU is seeking to fill a need in rural northwest Oklahoma by making opportunities to obtain certification in critical shortage areas more accessible.
- The certificate will be a stand-alone program.
- The certificate will consist of 15 total credit hours as detailed in the attachment (Attachment A).
- One new course will be added for the certificate.
- No funds are requested from the State Regents.

Delivery method and support services. The certificate will be offered in both the traditional and electronic delivery format. Existing resources are sufficient to support this program.

Authorization was granted by the Chancellor for the above request. State Regents' ratification is requested.

Attachment

ATTACHMENT A

NORTHWESTERN OKLAHOMA STATE UNIVERSITY
GRADUATE CERTIFICATE IN SUPERINTENDENT

Program Requirements		**Credit Hours**
Required Course		**15**
EDUC 5623	The Superintendency	3
EDUC 5633	Fiscal Management	3
EDUC 5643	Human Resources	3
*EDUC 5693	Superintendent: The Internship	3
EDUC 5793	Facilities & Operations	3
Total		**15**

*Denotes new courses

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AGENDA ITEM #6-b:

Certificates of 15 or fewer credit hours.

SUBJECT: Redlands Community College. Ratification of institutional request to offer certificate of 15 or fewer credit hours.

RECOMMENDATION:

It is recommended that the State Regents ratify the approved institutional request to offer the following certificate of 15 or fewer credit hours, as described below.

BACKGROUND:

Redlands Community College (RCC)

- Certificate in Documentary Film Production

POLICY ISSUES:

This action is consistent with the Oklahoma State Regents for Higher Education's Academic Program Approval policy.

ANALYSIS:

RCC requested authorization to offer the Certificate in Documentary Film Production.

- The proposed certificate will provide students with a co-instructional model of teaching, leveraging industry experts for technical topics along with general education faculty. RCC has partnered with Coleman Television for this program. This partnership is committed to visual storytelling through the use of the documentary medium.
- Students will have the opportunity to be employed by Coleman Television upon certificate completion. They will also be eligible to earn micro-credentials and digital badges for special topics within the curricular courses, increasing their employability.
- The certificate will be a stand-alone program.
- The certificate will consist of 15 total credit hours as detailed in the attachment (Attachment A).
- Seven new courses will be added for the certificate.
- No funds are requested from the State Regents.

Delivery method and support services. The certificate will be offered in the traditional format. A newly remodeled studio room in the RCC Library Resource Center will be the instructional setting for courses. Other existing resources are sufficient to support this program.

Authorization was granted by the Chancellor for the above request. State Regents' ratification is requested.

Attachment

ATTACHMENT A

REDLANDS COMMUNITY COLLEGE
CERTIFICATE IN DOCUMENTARY FILM PRODUCTION

Program Requirements		**Credit Hours**
Required Course		**3**
ENGL 1113	English Composition	3
Elective Courses		**12**
	Choose from the following	
*FV 2053	Introduction to Screenwriting	3
ENGL 2063	Creative Writing I	3
*FV 2013	Documentary Film	3
*FV 2023	Video Production	3
*FV 2033	Basic Audio Production	3
*FV 2043	Film and Video Editing	3
*FV 2001-4	Seminar in Documentary Filmmaking	1-4
*FV 2101-4	Internship in Documentary Filmmaking	1-4
Total		**15**

*Denotes new courses