Arizona State University

Academic Strategic Plan Archive
For 2022-2023 Planning

This document provides an archival record of the Arizona State University academic strategic plan addendum submitted during the 2021-2022 academic year for 2022-2023 planning. The Arizona Board of Regents Academic Strategic Plans Policy (2-223) states that this institution is required to submit an annual strategic plan for approval, which includes new academic programs, certain program eliminations and organizational unit changes. Other changes are reviewed as part of ASU's internal academic plan.

Note: Inclusion in this document does not indicate that the program or change has been approved by the university. This document only notates programs and changes which were approved for the 2022-2023 planning process.

About this Document

To navigate this version of the Academic Strategic Plan Archive, refer to the table of contents and the bookmarks provided. The table of contents provides a hyperlinked listing of resources in the order in which they appear in this document. Keyword searches may be employed as an additional means of locating resources within this document.

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EXECUTIVE SUMMARY

Item Name: **Request for New Academic Program for Arizona State University**

☒ Action Item

Requested Action: Arizona State University asks the board to approve the new program requests effective in the 2022-2023 academic year.

Background/History of Previous Board Action

As provided in the board policy, new program requests may be submitted throughout the year with the approval of the Academic Affairs and Educational Attainment Committee.

Discussion

Arizona State University is requesting the following new academic programs for implementation in the 2022-2023 Academic Year:

- PhD in Complex Adaptive Systems Science
- DPP in Regulatory and Clinical Research Management
- DPP in Global Leadership and Management
- MS in Computational Life Sciences
- MLM in Leadership and Management
- MA in Narrative and Emerging Media
- MA in Strategic Communication
- BAE in Elementary Multilingual Education
- BS in Global Health
- BS in Engineering Science
- BS in Emergency Management and Homeland Security

Degree planning at ASU is founded on the Charter: ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.

All academic degree programs go through multiple review and approval processes to ensure their currency, quality, and relevance. Each year, the Provost initiates the academic planning process. The academic deans, in consultation with the directors of

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the academic units, submit information on all proposed new degrees, concentrations, minors, and certificates for the ensuing year, as well as changes to existing degree titles, program disestablishments, and creation of new organizations, organizational changes and disestablishments. Once reviewed and approved by the Provost, these initiatives begin the review process, including, as applicable, the curriculum committees in the academic unit, college, Graduate College, and University Senate. At each level, a substantive review of the proposed program is completed to ensure quality and to avoid redundancy with other programs. At any step in the approval process, programs can be tabled and/or returned to the academic unit for further clarification and/or revision. The Provost reviews all resources involved in program development, both in the college offering the degree program and other colleges offering supporting courses. The distribution of the institution's resources, including faculty, infrastructure, administration and support staff, are reviewed to optimize and maximize capacity. In addition, the university invests annually in academic units based on enrollment growth, allowing academic units to expand capacity, with the additional funds invested in strategic hiring. The academic units also receive increasing revenue from summer and online operations which provides resources for the initiatives.

The proposed graduate degree programs will provide advanced training in complex problem-solving; analysis of increasingly large and complex datasets in life sciences to solve social and scientific problems; developing global leaders and research managers; and exploring narrative and communication strategies for a quickly moving world. The proposed undergraduate degrees will train students in multilingual education, global health; engineering science; and emergency management.

In keeping with the 2020 Operational and Financial Review Enterprise Plan, the degree proposals are aligned strategically with our design aspirations to leverage our place, transform society, value entrepreneurship, include use-inspired research, enable student success, fuse intellectual disciplines, be socially embedded, and engage students with issues locally, nationally and internationally.

Committee Review and Recommendation

The Academic Affairs and Educational Attainment Committee reviewed this item at its November 4, 2021 meeting and recommended forwarding the item to the full board for approval.

Statutory/Policy Requirements

ABOR Policy 2-223 C, "New Academic Degree Programs"

Academic Plan 2022-2023 Requested Degree Programs

Graduate Programs	Degree	College
Complex Adaptive Systems Science	PhD	College of Global Futures
Regulatory and Clinical Research Management	DPP	Edson College of Nursing and Health Innovation
Global Leadership and Management	DPP	Thunderbird School of Global Management
Computational Life Sciences	MS	The College of Liberal Arts and Sciences
Leadership and Management	MLM	Thunderbird School of Global Management
Narrative and Emerging Media	MA	Walter Cronkite School of Journalism and Mass Communication/Herberger Institute for Design and the Arts
Strategic Communication	MA	Walter Cronkite School of Journalism and Mass Communication
Undergraduate Degrees	**Degree**	**College**
Elementary Multilingual Education	BAE	Mary Lou Fulton Teachers College
Global Health	BS	The College of Liberal Arts and Sciences
Engineering Science	BS	Ira A. Fulton Schools of Engineering
Emergency Management and Homeland Security	BS	Watts College of Public Service & Community Solutions

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: PhD in Complex Adaptive Systems Science
Academic Department: *The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).* College of Global Futures *School of Complex Adaptive Systems*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.* Downtown, Polytechnic, Tempe, and West campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Immersion
Total Credit Hours: *The number of credit hours required to complete the academic program* 84
Proposed Inception Term: *The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).* Fall 2022
Brief Program Description: *A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.* Complex adaptive system concepts and methods serve as a common language to fuse intellectual disciplines and thereby promote the interdisciplinary collaborations needed to come to grips with current and future intellectual and societal challenges of the 21st century. Rather than focus on specialized understanding of the characteristics of a limited suite of

phenomena, as is common in most academic disciplines, the Complex Adaptive Systems doctoral program emphasizes the interconnections among phenomena comprising dynamic, evolving systems. Many of the systems most critical to human life and society can be approached in this way: from cells to organisms to populations to ecosystems to societies to technologies. Graduates of this program will be fluent in the language, concepts, and methods of complexity needed to enable this innovative and valuable approach to understanding and addressing challenges of the coupled human and natural world in which we live. ASU is already an international leader in complex adaptive systems science, with a growing constellation of research centers, and now the first of its kind School of Complex Adaptive Systems. By broadly embedding an understanding of complex, adaptive-system-relevant approaches into the practice of normal science, graduates of the PhD program will gain the ability to transform science — further demonstrating ASU's global leadership in this emerging academic discipline.

The PhD in Complex Adaptive Systems Science program promotes the development and testing of robust theory and sophisticated methods in a wider array of research settings. This is needed to develop a deeper understanding of the nature and dynamics of complex adaptive systems, grounded in concrete examples and applications. Students in the PhD in Complex Systems Science program will develop skills in theoretical foundations, modeling, problem solving, and critical thinking. By embracing this complex systems perspective on human and natural systems, and, importantly, the multi-dimensional interconnections between them, graduates of this program will become advocates and leaders of a new kind of science with the potential to fundamentally transform society.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will demonstrate graduate-level proficiency in fundamental theories, complex systems, concepts of complex adaptive systems science and how they can be applied in real-world contexts.

- **Concepts:** Complex adaptive systems science theories, case analysis, research question formulation, data collection, and complex systems such as cells, organisms, populations, ecosystems, societies, and technologies.

- **Competencies:** Students will be able to apply learned theories, research, case analysis and knowledge of complex systems to analyze a real-world issue that will become the basis of their research proposal.

- **Assessment Methods:** Students will successfully complete their research proposal on a complex systems real-world issue in preparation for the dissertation. In addition, students will be able to show competency and an understanding of complex systems by completing the analysis of collective systems assignments in the Fundamentals of Complex Systems Science course. The school director and the program director will review the research proposal feedback from the students' committee based on a faculty-designed rubric and will also review student data from the collective systems assignments in the fundamentals course in relation to applied learned theories,

research, case analysis and knowledge of complex systems.

- **Measures:** Rubrics will be utilized to evaluate students' ability to demonstrate the competencies identified to meet outcome 1. The portfolio of findings will be reviewed by the school director and program director, and an improvement plan will be developed in conjunction with discussions with faculty teaching courses that are part of the degree program. Rubrics will be developed by faculty and the program will be continually refined based on assessment outcomes and feedback.

Learning Outcome 2: Students will demonstrate proficiency in quantitative and computational methods needed to apply a complex adaptive systems approach to a significant research question in social or natural science.

- **Concepts:** Computational methods, quantitative methods, analytical approaches to complex adaptive systems

- **Competencies:** Ability to apply computational and quantitative methods to a research question, evaluate the chosen research question based on methods, analysis, and analyze the research question based on analytical approaches to complex adaptive systems

- **Assessment Methods:** Students will successfully complete their research proposal on a complex systems real world issue in preparation for the dissertation demonstrating the use of methods appropriate to their research question. In addition, students will be able to show competency and an understanding of complex systems by completing specific methods assignments in Fundamentals of Complex Systems Science Methods courses. The school director and the program director will review the research proposal feedback from the students' committee based on a faculty designed rubric and will also review student data from the collective systems assignments in the complex adaptive systems fundamentals course in relation to applied learned theories, research, case analysis and knowledge of complex systems.

- **Measures:** Rubrics will be utilized to evaluate students' ability to demonstrate the competencies identified to meet the outcome. The portfolio of findings will be reviewed by the school director and program director, and an improvement plan will be developed in conjunction with discussions with faculty teaching courses that are part of the degree program. Rubrics will be developed by faculty and the program will be continually refined based on assessment outcomes and feedback.

Learning Outcome 3: Students will demonstrate proficiency in the application and use of complex system concepts and methods by using a complex adaptive systems approach on research questions and data in either a single intellectual domain or across multiple intellectual domains.

- **Concepts:** Computational methods, quantitative methods, analytical approaches, research question development

- **Competencies:** Ability to apply computational and quantitative methods to a research question, evaluate the chosen research question based on methods, analysis, and

analyze the research question based on analytical approaches to complex adaptive systems

- **Assessment Methods:** Students will successfully complete their research proposal on a complex systems real-world issue in preparation for the dissertation demonstrating the use of methods appropriate to their research question. Students will successfully complete their dissertation analyzing a real-world problem either within a single domain or across multiple domains/disciplines. In addition, students will report on their ability to apply their skills and knowledge after the successful completion of their course of study. The school director and the program director will review the research proposal and dissertation feedback from students' committee based on a faculty designed rubric and will also review alumni responses to the annual College of Global Futures Alumni employment survey.

- **Measures:** Rubrics will be utilized to evaluate students' ability to demonstrate the competencies identified to meet the outcome. The portfolio of findings will be reviewed by the school director and program director, and an improvement plan will be developed in conjunction with discussions with faculty teaching courses that are part of the degree program. Rubrics will be developed by faculty and the program will be continually refined based on assessment outcomes and feedback. Responses from the annual College of Global Futures alumni employment survey will also be reviewed to ensure that the program provides the skills and knowledge needed for students' continued success.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

First Year: 10
Second Year: 15
Third Year: 25

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the *proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin these projections. If job-market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.*

Graduates of this degree will have multiple career opportunities in such areas as sustainability, finance, social sciences, the biomedical sciences, and computer science. Complex systems science is foundational for all attempts to understand risk and security.

A PhD in a new field like complex adaptive systems will prepare graduates to enter the academic interdisciplinary departments. At this time, there are no complex adaptive systems departments like the school at ASU. Instead, the degree will give graduates knowledge and expertise to be marketable in diverse social and natural science fields, especially in the growing number of interdisciplinary programs, such as sustainability programs.

Career options for graduates in this program include, but are not limited to:

- 15-0000 Computer and Mathematical Occupations, with a projected growth rate in employment from 2018 to 2028 of 12.7%
- 19-0000 Life, Physical and Social Science Occupations, with a projected growth rate in employment from 2018 to 2028 of 7.4% (source Bureau of Labor Statistics (www.bls.gov).

Furthermore, the report "The New Foundational Skills for the Digital Economy: Developing the Professionals of the Future" by Burning Glass Technologies (https://www.burning-glass.com/wp-content/uploads/New_Foundational_Skills.pdf) identifies many of the skills developed as part of this degree as foundational to a large number of employment opportunities in both the public and private sector. Given these options and trends and the tremendous growth in these sectors of the economy, we project outstanding career options for graduates. This degree serves a number of market needs.
The Economist, in an editorial in 2004 (28th October) and in many articles afterwards, called for the need to “keep it simple” in light of ever-increasing complexity and identified complexity science as the way to advance that vision. Similarly, the Journal of the American Medical Association (JAMA) called or the urgent need to understand health care as a complex system (doi:10.1001/jama.2012.7551). The need to better understand complexity is widely recognized.

Science Magazine identified expertise in networks, especially complex networks, as a major career option (https://barabasi.com/f/305.pdf).

Only a handful of complex systems degree programs/concentrations exist globally at the PhD level and all are more narrowly focused than the one proposed here. This highlights the need for a broad, interdisciplinary PhD program like this one.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

There are no comparable PhD degrees offered at other universities in Arizona.

Objection(s) Raised by Another Arizona Public University? YES NO

Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires

new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

None

Plan to Request Program Fee/Differentiated Tuition? YES **NO**

Estimated Amount: N/A

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

None requested.

Specialized Accreditation? YES **NO**

Accreditor:
The name of the agency or entity from which accreditation will be sought

Not applicable.

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: Doctor of Professional Practice in Regulatory and Clinical Research Management
Academic Department: *The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).* Edson College of Nursing and Health Innovation
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.* Downtown, Polytechnic, Tempe, West campus and Online
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Immersion and Online
Total Credit Hours: *The number of credit hours required to complete the academic program* 84
Proposed Inception Term: *The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).* Fall 2022
Brief Program Description: *A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.* The Doctor of Professional Practice (DPP) in Regulatory and Clinical Research Management is a practice-oriented doctorate for working professionals who desire to advance their leadership in the rapidly changing health care field. Graduates of this program will generate ideas, develop and implement evidence-based interventions, evaluate outcomes, and

disseminate findings in practice settings in the community, governmental agencies, and health care institutions.

The DPP provides an academically rigorous program to prepare graduates as evidence-based, global thought and practice leaders, entrepreneurs, intrapreneurs, and innovators who lead organizations to meet challenges of ethical and compliant research and regulatory science. The degree is ideally suited for those wishing to advance and transform their careers through practical, evidence-based approaches. Students will develop the analytic and research skills to address challenges in clinical research and regulations in drug and device research and approvals. There is a shortage of doctoral-prepared compliance and regulatory executives who are responsible for research, development, and approval of new drugs and devices in the United States and globally. The DPP in Clinical Research Management and Regulatory Science will be the only degree with this focus in Arizona and one of two in the Western United States.

This program will attract students who currently work in the field and wish to continue their careers at an advanced level to meet the complexities of clinical research and regulations. The program is consistent with ASU's design aspirations "Transform Society" and "Engage Globally".

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will demonstrate the ability to apply organizational management methods and processes to support organizational missions and goals in compliance with required quality-regulatory processes and operations.

- **Concepts**: Organizational leadership, management methods and strategies, development of business plans, project planning and oversight, analysis of industry and market needs, incorporating quality and regulatory standards and organizational forecasting.

- **Competencies:** Apply business and ethical principles in the management and conduct of regulatory affairs and clinical-research management. Understand required quality-regulatory processes and operations.

- **Assessment Methods:** Students will complete a successful written business plan for a pharmaceutical company in RCR 712 Leadership in the Medical Product Industry and in RCR 714 Responsible Conduct and Ethics in Regulatory Affairs, identify a current research, health condition, or issue and successfully design an intervention grounded in research ethics and complaint with applicable regulations. Successful completion will show competency in the student's ability to apply business and ethical principles in the management and conduct of regulatory affairs and clinical research, and show an understanding of the required quality-regulatory process and operations. The program director and associate director will collect data from the assignments in RCR 712 and RCR 714 at the end of each session and assess using

a faculty-developed rubric. Data will be collected from the course gradebook, rubric scores, and student papers, and will be reviewed with appropriate faculty and at faculty meetings. Dips in scores will prompt faculty to examine teaching methods and material.

- **Measures:** Rubrics will be utilized to evaluate students' ability to demonstrate the competencies identified to meet outcome 1. The program chair — in consultation with the graduate program committee — will look at average rubric scores and compare them on a historical basis to identify trends. Rubrics will be continually refined based on assessment outcomes and feedback.

Learning Outcome 2: Students will demonstrate the ability to apply the US Food and Drug Administration (FDA), global regulatory authorities' regulations, International Conference on Harmonization (ICH) principles for clinical studies, industry guidance and best practices to application of approval for new medical products.

- **Concepts:** Regulatory requirements for new medical-product approval, applicant processes, review and analysis of required data and information for approvals in US, EU, Canada, and Japan; product-development lifecycle.

- **Competencies:** Students will be able to apply regulations to phases of the product-development-and-approval lifecycle, collection of data for approval, ability to compare and contrast differences in regulatory processes in US to other countries; complete approval applications, scientific presentation of safety and efficacy data.

- **Assessment Methods:** Students will create a presentation appropriate for organizational senior management regarding the development of a new drug entity in RCR 715 Pharmacology, Drugs, and Society. In addition, in RCR 717 Development and Regulation of Biologics, students will develop a paper that compares and contrasts the FDA and another country's pathways for new medical product approval. Successful completion will show competency in the student's ability to apply FDA, global regulatory authorities' regulations, International Conference on Harmonization principles, industry guidance and best practices for application of approval of new medical products. The program director and associate director will collect data from the assignments in RCR 717 and RCR 715 at the end of each session and assess using a faculty-developed rubric. Data will be collected from the course gradebook, rubric scores, and student papers, and will be reviewed with appropriate faculty and at faculty meetings. Dips in scores will prompt faculty to examine teaching methods and material.

- **Measures:** Rubrics will be utilized to evaluate students' ability to demonstrate the competencies identified to meet outcome 2. The program chair — in consultation with the graduate program committee — will look at average rubric scores and compare them on a historical basis to identify trends. Rubrics will be continually refined based on assessment outcomes and feedback.

Learning Outcome 3: Students will demonstrate their contributions to scientific knowledge of regulatory or clinical research to expand on current thinking through the development and successful defense of an applied dissertation.

- **Concepts:** Identification of research problem; research methodology; evaluation and statistical analysis of data; recommendations for future studies; publication of final document.

- **Competencies**: Students will demonstrate proficiency in scientific writing; application of methodology and statistical analysis; contribution to the scientific field; defense of dissertation.

- **Assessment Methods:** Students will identify a problem that impacts the current regulatory or research management field, apply and develop a possible solution, then develop and defend a dissertation. Students will also complete qualifying exams prior to starting their dissertation that consist of content in regulatory affairs, drug development, regulatory writing, and regulation of new medical products. The program director and associate director will collect the data from the qualifying exams and the dissertation committee upon students' successful completion. The program chair, in consultation with the graduate program committee, will look at average rubric scores from the qualifying exams and compare them on a historical basis to identify trends. Dips in scores will prompt faculty to examine teaching methods and material. The program chair, in consultation with the dissertation committee, will review comments and feedback as well as scores on student dissertation.

- **Measures:** Rubrics will be utilized to evaluate students' ability to demonstrate the competencies identified to meet outcome 3. Data will be collected at the end of the qualifying exams on all doctoral students and again at the end of the defenses of their dissertations from the qualifying exam-panel members and from the dissertation committee. Data will be reviewed with appropriate faculty and at faculty meetings. Rubrics will be continually refined based on assessment outcomes and feedback.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1:10
Year 2: 22
Year 3: 34

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin

these projections. If job-market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

A review of 53 leading universities identified one university with a doctorate degree in regulatory science, one with a doctorate in clinical practice and education, one with a doctorate in Pharmacy Science with a focus on Regulatory Affairs, and several with a focus on clinical and translational science. Although a doctorate that addresses both regulatory science and clinical-research administration is not currently available domestically or internationally, students who complete the ASU program will be prepared to move into an advanced position in the health care field where they will research, develop, and perform clinical trials of drugs, devices, and biomedical technology. Similarly, the analytical and research skills learned through the doctoral program provide a knowledge contribution toward one's chosen field and are highly transferable to other industries. The proposed doctorate is essential to bridging the gap between conceptualization an implementation of clinical research, directly addressing complex organizational, scientific, and technological issues.

In 2020, prescription drug sales in the US were $904 billion. Sales are expected to reach $1.4 trillion by 2026. Pharmaceutical products make up one-fifth of all sales in the US. This projected growth is not only for the US but worldwide. According to the Bureau of Labor, growth in the pharmaceutical sector shows pharmaceutical employment expanding at a greater rate than the economy, signaling impressive opportunities in the pharmaceutical area. Jobs in drug development and manufacturing are projected to grow 11% in the next few years, with faster than average growth for professional specialty occupations. These include biological and medical scientists engaged in research and development — the backbone of the drug industry — and computer systems analysts, engineers, scientists, managers, and other staff — who understand the science and research and can also manage business operations.

The US Department of Labor and Statistics estimates the average job openings per year for health-specialty job openings for individuals with a doctorate or professional degree is 26,000. This includes a variety of careers in the pharmaceutical industry such as regulatory affairs, quality assurance, project managers, etc.

Relevant data:

- US Department of Labor and Statistics employment in the area of research management and regulation is projected to grow from $153.5 million to $165.4 million from 2020 – 2030.
- Pharmaceutical Research and Manufacturers of America (PhRMA) reports that management occupations in scientific research and development services accounts for 6.3% of careers and research and development management occupations 7.8%
- Pharmaceutical and Medical Manufacturing reports 7.66% increase in jobs due to COVID pandemic.
- Pharma Manufactures projected to grow at an annual rate of 11.34% from 2021 – 2028.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

No other comparable doctoral programs are currently offered at Arizona Public Universities.

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No new resources will be required for launch. Program growth will be used to support resources necessary for expansion

Program Fee/Differentiated Tuition Required? **YES** NO

Estimated Amount: $2000

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

The doctoral program in Regulatory and Clinical Research Management fee supports hiring of faculty who are experts in the field and hold doctoral degrees. They are leaders in the pharmaceutical industry field with access to industry support, tools, materials and resources to prepare our graduates to become the future leaders in the industry. The Regulatory and Clinical Research Management program offers student experiential opportunities through our alliance with industry companies and organizations. This alliance allows the program to provide experts as speakers and professional mentors on current and future trends in the industry such as the use of artificial intelligence and machine learning in the discovery, development and manufacturing of new medical products. Faculty will teach didactic courses, serve as student advisors and mentors, and provide dissertation oversight.

Specialized Accreditation? YES **NO**
Accreditor:
The name of the agency or entity from which accreditation will be sought

There are no formal accreditation or professional licensing requirements for this profession. We align our curriculum with the National Competencies developed by the Joint Task Force for clinical research management graduate programs under the auspices of the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: Doctor of Professional Practice in Global Leadership and Management
Academic Department: *The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).* Thunderbird School of Global Management
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.* Downtown, Polytechnic, Tempe, West campus and Online
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Immersion and Online
Total Credit Hours: *The number of credit hours required to complete the academic program* 84
Proposed Inception Term: The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022). Fall 2022
Brief Program Description: *A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.* The Doctor of Professional Practice (DPP) in Global Leadership and Management is an academically rigorous yet practically oriented degree that is semi-customized to each student's needs and aspirations. This program is tailored for seasoned working professionals (8+ years of experience) who desire to pursue a doctorate degree to advance their leadership journey in a globally oriented public, private, governmental, and/or non-profit organization. The DPP trains students to become evidence-based, global-thought-and-practice leaders,

entrepreneurs, intrapreneurs, and innovators who can help position organizations to meet the challenges of the 4th industrial revolution). The rapid advancement of disruptive new technologies like artificial intelligence, blockchain, and machine learning, requires leaders who understand the potential impact on daily home and work lives. They will need contemporary skills, insights, partnerships, and models of business and governance to navigate this new world effectively.

The program is ideally suited for those wishing to advance and transform their careers through practical, research-based approaches. Students will develop the analytic and research skills to address challenges in transnational and multinational corporations, intergovernmental agencies, international nongovernmental organizations, international nonprofit organizations, global public-private partnerships, and social enterprises. There is a shortage of workforce leaders who are grounded in evidence-based leadership competencies to meet market demands. The DPP is uniquely positioned to fill this void by amalgamating global leadership and management, global affairs, and cross-cultural theory and practice. Students will be working professionals recruited from around the globe, consistent with ASU's design aspiration, "Engage Globally."

Students will design an innovative and creative applied culminating experience that not only advances knowledge but also contributes to improving practice and applications in multinational organizations. Projects could focus on global strategy, digital transformation, global affairs, international nonprofit management, global entrepreneurship, or global marketing, to name just a few.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will demonstrate and apply concepts of social capital through the creation and evaluation of relationships with people from other parts of the world.

- **Concepts:** Self-awareness, self-management, empathy, cross-cultural communication, team building, network building.

- **Competencies:** Students will have the ability to create, design, and develop teams and networks globally through effective cross-cultural communication and interpersonal skills. Students will be able to bridge academics and practice by simplifying complex concepts and developing real-world solutions for 21st-century challenges that maximize the benefits of the 4th industrial revolution.

- **Assessment Methods:** Students will complete two five-point Likert scale Global Mindset Inventory (GMI) surveys — one at the start of the degree program, and the other during the student's final semester — to evaluate the extent to which the program increased/improved the graduating student's social capital based on the creation and evaluation of relationships with clients and stakeholders around the world. The Assurance of Learning Committee will compare the survey results to relevant historical GMI data. Students will also be evaluated in multiple assignments

in the required-core, cross-cultural-communication course that will address the competencies listed above.

- **Measures:** Data collected via the global mindset inventory assessment from the start of the program and the end of the program will be compared and analyzed using a faculty-designed rubric intended to evaluate the students' competencies of outcome 1. In addition, assignments in the cross-cultural-communication course will be evaluated using faculty-designed rubrics. The assessment outcomes and feedback will be used by the faculty for continuous improvement.

Learning Outcome 2: Students will demonstrate intellectual capital through articulation of complex topics related to global business, and the ability to interpret global dynamics by applying appropriate frameworks.

- **Concepts:** The role of global organizations and institutions, global trade, global management, current global affairs, global strategic decision making, and environmental analysis.

- **Competencies:** Students will have the ability to demonstrate three critical dimensions of intellectual capital: (1) global business savvy, what a student knows about global business, global organizations, global trade, and global affairs; (2) cognitive complexity, how well a student can explain complex topics; and (3) cosmopolitan outlook, the ability to interpret global dynamics through a sophisticated understanding and apply appropriate frameworks.

- **Assessment Methods:** Students will complete two five-point Likert scale global mindset inventory surveys — one at the start of the degree program, and the other during the student's final semester — to evaluate the extent to which the program increased/improved the graduating student's intellectual capital in articulation of complex topics related to global business, and the ability to interpret global dynamics by applying appropriate frameworks. The Assurance of Learning Committee will compare the survey results to relevant historical mindset data. Students will also be evaluated in multiple assignments in the required capstone course that will address the competencies listed above.

- **Measures:** Data collected via the assessment from the start of the program and the end of the program will be compared and analyzed using a faculty-designed rubric intended to evaluate the students' competencies of outcome 2. In addition, assignments in the final capstone course will be evaluated using chair- and faculty-designed rubrics. The assessment outcomes and feedback will be used by the faculty for continuous improvement.

Learning Outcome 3: Students will be able to compare academic frameworks, select methods, and evaluate analysis to appraise and justify solutions to practical, real-world, 21st-century challenges.

- **Concepts:** Leadership frameworks, quantitative and qualitative research methods, applied-research skills, change management, strategy design and implementation.

- **Competencies:** Ability to design, defend, and justify solutions to solve a real-world challenge by incorporating 4th industrial revolution perspectives, relevant academic literature, and appropriate quantitative and qualitative research methods.

- **Assessment Methods**: Students will complete a required project in the capstone and will be required to apply appropriate literature-based frameworks and analytic methodologies in their final project. Students will be required to incorporate 4th industrial revolution concepts and solutions in their final project of the capstone. Students will be evaluated based on their ability to successfully propose a solution to a real-world, 21st-century challenge using selected frameworks, methods, and analysis based on the competencies listed above.

- **Measures**: Faculty-designed rubrics will be utilized to evaluate students' ability to apply appropriate, literature-based frameworks and analytic methodologies while incorporating 4th industrial revolution concepts and solutions in their final project of the capstone. The graduate-program chair, in consultation with the graduate-program committee, will specifically look at average rubric scores compared to historical data. The portfolio of findings will be reviewed along with course feedback and an improvement plan developed in conjunction with discussions with faculty teaching the program's coursework. Rubrics will be continually refined based on assessment outcomes and feedback.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1: 10
Year 2: 20
Year 3: 30

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin these projections. If job-market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

Three distinct groups have expressed interest in a professional doctorate in global leadership and management building on ASU's existing strengths in those fields: (1) Thunderbird and ASU alumni around the world, as well as staff who see such a doctorate as advancing their professional careers. (2) Mid-to-senior-level managers who seek to expand global and 4th industrial revolution management understanding and acumen. (3) Participants who have completed Thunderbird Executive programs and seek deeper exposure to Thunderbird

4.0@ASU content. This DPP degree is uniquely positioned to satisfy the demand for these 3 groups.

Burning Glass Technologies has documented strong demand for jobs that require a doctorate in Global Leadership and Management. Employers come from various industries including pharmaceutical and medicine manufacturing, accounting and payroll services, management, scientific and technical consulting services, and academia. The number of people employed is expected to grow for at least the next 10 years with California and nationwide growing 13.57% and 6.68%, respectively. The U.S. Bureau of Labor Statistics projects 6% job growth (2018-2028) for doctoral degrees in leadership and management. Emsi Analyst and Labor Market Analytics (www.economicmodeling.com) data shows a 367% increase in completed online/hybrid doctorate of management programs across public and private universities for the 2011-2018 period.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

There are currently no comparable doctoral programs in global leadership and management designed for students at the executive or administrative leadership levels offered by Arizona public universities.

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No new resources are required to initiate the program.

Plan to Request Program Fee/Differentiated Tuition? **YES** NO

Estimated Amount: $17,613

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

The per-semester-program fee is based on $1,957 per credit of program fees over the tuition, nine credits per semester, which is in line with Thunderbird's other executive-level-degree programs. This fee is market-based, derived from the doctoral-business degrees at competitive schools such as Pepperdine University or DePaul University.

Specialized Accreditation? **YES** NO

Accreditor:
The name of the agency or entity from which accreditation will be sought

The Doctor of Professional Practice (DPP) in Global Leadership and Management will be accredited by The Association to Advance Collegiate Schools of Business (AACSB), along with Thunderbird's other degree programs. There is no specialized-professional-licensing requirement for students, though students may still seek their own certifications (e.g. PMP, CFP, CPA).

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: Master of Science in Computational Life Sciences
Academic Department: *The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).* The College of Liberal Arts and Sciences *School of Life Sciences*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.* Downtown, Polytechnic, Tempe, West campus and Online
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Immersion and Online
Total Credit Hours: *The number of credit hours required to complete the academic program* 30
Proposed Inception Term: *The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).* Fall 2022
Brief Program Description: *A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university.* Graduate students in life-science fields must now work with ever-larger biological datasets, which require skills in data analysis and a strong grounding in hypothesis-driven and hypothesis-generating research methods. The School of Life Sciences is uniquely positioned to work towards Arizona State University's design aspiration of fusing intellectual disciplines, because it includes faculty members from diverse scientific disciplines whose research spans computation and life sciences in unique ways. The life sciences are generating new and

diverse types of big data including biomarkers, long-term monitoring, longitudinal samples, genomic, transcriptomic, proteomic, and metabolomics data from human and non-human samples (including viruses, plants, animals, bacteria, the environment, and ecosystems). The ability to combine and analyze these data quantitatively and to consider the ethical implications of using these large life sciences datasets (e.g., personalized genomics, or endangered species data) is also critical for life sciences graduate students who strive toward Arizona State University's design aspiration of conducting use-inspired research.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will be able to summarize key computational concepts, such as algorithms and relational databases, and their applications in the life sciences, and apply statistical concepts used in computational life sciences.

- **Concepts:** Tools and methods in computational life sciences, including algorithms for genomic, transcriptomic, biomarker or longitudinal environmental analysis, and relational databases of DNA, RNA, protein, metabolic, environmental, or ecosystem data.

- **Competencies:** Ability to use tools and methods used in genomic, transcriptomic, biomarker or longitudinal environmental analysis and ability to apply the tools in the analysis of DNA, RNA, protein, metabolic, environmental, or ecosystem data.

- **Assessment Methods:** Students will complete assignments and projects with poster presentations in BIO 543 Molecular Genetics and Genomics and MCB 540 Functional Genomics, both of which courses allow students to develop these skills and competencies. Data from the assignments, projects, and exams will be assessed for competency in the concepts and competencies listed above, and they will be evaluated based on a rubric developed by members of the School of Life Sciences faculty.

- **Measures:** The department will use a faculty-developed rubric to evaluate project progress and poster presentations to assess student application of tools. Final project scores will be evaluated in MCB 540 and BIO 534, which all students will take, to infer student knowledge of current computational life sciences tools. The results will be summarized and shared each year with faculty, who will provide guidance on how to adjust assessments and course material to support learning outcomes.

Learning Outcome 2: Students will use command-line and other bioinformatics tools, and they will write simple computer scripts to find, retrieve, and organize various types of biological data.

- **Concepts:** Bioinformatics tools, methods for analyzing computational-life-sciences data, and biological data.

- **Competencies:** Students will have the ability to identify and apply the appropriate methods for analyzing diverse computational life sciences data — for example, choosing the correct tool for DNA, RNA, protein, metabolomic, or ecological data. Students will be able to understand the unique features of different types of computational life sciences data, and apply tools and approaches for analyzing these data appropriately and reproducibly.

- **Assessment Methods:** These concepts and competencies will be assessed via relevant quizzes and assignments in BIO/EVO 539 Computing for Research, NEU 591 Data Analysis in Neuroscience, and BIO 514 Statistical Models for Biology. Students will be assessed on how they apply the tools and approaches for analyzing data reproducibly. Students additionally will be assessed on how they apply these skills in their mentored-research project. The final assignment in the culminating experience of the program is a project-based learning assessment of the students' implementation of computational life sciences tools. The department will also evaluate quizzes, assignments, and the ePortfolio students submit, which summarizes their mentored-research project applying computational life sciences tools.

- **Measures:** Students will be evaluated on successful completion on the final assignment in BIO 439 Computing for Research in which students will demonstrate competency in the use of bioinformatics tools, command-line- bioinformatics tools, and simple computer scripts to find, retrieve, and organize various types of biological data. Students will also be evaluated using a faculty-developed rubric on their final portfolio project. The portfolio of findings will be reviewed along with course feedback and an improvement plan will be developed in conjunction with discussions with faculty teaching the program's coursework. The results will be summarized and shared each year with faculty, who will provide guidance on how to adjust assessments and course material to support our learning outcomes.

Learning Outcome 3: Students will interpret the ethical, legal, medical, and social implications of biological data.

- **Concepts:** Ethical, legal, medical, and social implications of biological data.

- **Competencies:** Students will be able to contextualize the social and ethical implications of data collection, analysis, and sharing computational-life-sciences data. Students will be able to describe the ethical issues with the use of computational data in the life sciences and the sharing of computational data in the life sciences.

- **Assessment Methods:** Students will be evaluated on classroom presentations and written assignments in the program's core coursework such as BIO 611 Current Topics in Responsible Conduct of Research in Life Sciences. Students should successfully present their projects and complete their written assignments showing competency in the areas of ethical, legal, medical, and social implications of

biological data.

- **Measures:** The School of Life Sciences will use a rubric evaluation of in-class presentations to assess whether students can critically describe ethical issues of data use, and data sharing in computational life sciences. The results will be summarized and shared each year with faculty, who will provide guidance on how to adjust assessments and course material to support our learning outcomes.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1: 15
Year 2: 40
Year 3: 80

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin these projections. If job-market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

Glassdoor.com ranks data scientists at the top of its "50 Best Jobs in America." The US Bureau of Labor Statistics lists the median pay for Computer and Information Research Scientists as $126,830/year, with 32,700 jobs open in 2020. The Salary Finder reports that the median annual salary for computational biologists in the Phoenix area is even higher, $131,550. The job outlook for the next decade is 15%, which is much faster than average: (https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.htm).

According to the US Bureau of Labor Statistics job data, from 2020 to 2030, data scientists and statisticians are both projected to be within the top 20 fastest growing jobs, (https://www.visualcapitalist.com/the-20-fastest-growing-jobs-in-the-next-decade/; https://www.bls.gov/emp/tables.htm). The Computational Life Sciences MS trains students in the application of data science and statistics to computational life sciences data, preparing them for these rapidly growing job opportunities. Job prospects for people with training in computational life sciences span academic institutions and growing life-sciences companies like 23andMe, Monsanto, and GlaxoSmithKline — with respective medians of $105,048, $105,113, and $101,452 per year.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

At ASU:

- Computer Science | Big Data Systems (MCS) | This degree does not specifically focus on how to apply computing to the kind of data generated in the life sciences and it does not incorporate ethics.
- Health Informatics (MAS) | This degree does not incorporate ethics and is focused only on human health rather than the broader scope of life-sciences data (e.g., comparative genomics, population genetics, ecological research).
- Computational Life Sciences (Graduate Certificate) | This certificate does overlap with the MS proposal at an introductory level. It is 16 credits compared to 30 credits and intended as a supplement to another graduate degree for PhD students in Chemistry, Physics, Biology, and Engineering. The proposed program's targets professionals who have a degree and recent undergraduates seeking a career-relevant graduate degree.

At UArizona:

- Nursing Informatics (DNP) | This program is directed specifically at nursing-related data and does not focus on learning data skills.
- Biosystems Analytics and Technology (MS) | This program focuses on "biological systems and water-related issues such as irrigation and water quality, and biosystems applications, including computer modeling, sensors and controls, and systems design and evaluation." In contrast, the MS in Computational Life Sciences does not focus on water-related issues, sensors, or systems design. Rather, it focuses on teaching students the statistical, ethical, and programming skills needed to analyze and interpret quantitative life sciences data, focusing primarily on genetics and genomics.

At NAU:

- Informatics and Computing (PhD), Health and Bioinformatics emphasis | The MS in Computational Life Sciences and the PhD in Informatics and Computing have modest overlap in content (bioinformatics, population health). However, the MS in Computational Life Sciences is focused on applying computational and statistical tools to address life sciences problems.

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension

of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

Outside of the request program fee, no additional resources are needed as the School of Life Sciences will adjust resources internally to support this program.

Plan to Request Program Fee/Differentiated Tuition? **YES** NO

Estimated Amount: $260

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

This fee will pay for maintaining the online delivery of the program, and the storage of large data sets that students can use for class assignments and capstone projects.

Specialized Accreditation? YES **NO**

Accreditor:
The name of the agency or entity from which accreditation will be sought

None

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: Master of Leadership and Management
Academic Department: *The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).* Thunderbird School of Global Management
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.* Downtown, Polytechnic, Tempe, West campus and Online
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Immersion and Online
Total Credit Hours: *The number of credit hours required to complete the academic program* 30
Proposed Inception Term: *The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).* Fall 2022
Brief Program Description: *A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.* More than ever, organizations in all sectors need versatile leaders with high management acumen. The Master of Leadership and Management (MLM) is designed to deliver mastery in 21st-century leadership and management principles and practices. It prepares leaders to take on additional managerial responsibilities in global organizations or to make a career change across industries or sectors. This management program focuses on cross-cultural communication, finance, data analytics, marketing, and working in diverse, global teams. The

real-world curriculum combines Thunderbird's prestigious tradition of graduate education with cutting-edge technology to deliver a transformative graduate degree.

The program is designed to deliver the highest quality graduate education in an affordable, flexible format. This program allows Thunderbird to extend its reach to learners around the world, making a significant impact to advance many of the Sustainable Development Goals. Through this program and others, Thunderbird continues to focus on ASU's design aspiration to "Engage Globally" by reaching a global audience with its programs and by training students to be global leaders.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will develop applied global leadership skills.

- **Concepts:** Global strategic analysis and decision making, change management, competitive landscape analysis, self-awareness, personal leadership development, managing virtual and collocated global teams

- **Competencies:** Graduates in this program will develop leadership versatility to manage the paradox and fast-paced change encountered in the global environment. Graduates will develop the ability to adjust their behavior and select appropriate leadership approaches for the circumstances in a variety of global contexts.

- **Assessment Methods:** Students will complete a Personal Leadership Development Plan as part of the required capstone course, TAM 542 Global Leadership and Personal Development. They will be evaluated through a faculty-developed rubric. The data will be used by the faculty for continuous improvement. Students will complete a graduation exit survey to evaluate the extent to which the program increased/improved the graduating student's global leadership skills. The Assurance of Learning committee will compare the survey results to relevant historical data.

- **Measures:** Students will illustrate global leadership development through the required Personal Leadership Development Plan, as measured by a faculty-developed rubric, and demonstrate enhancement in global leadership skills, as measured by the graduation exit survey. The data will be used for continuous improvement.

Learning Outcome 2: Students will develop intellectual capital and be able to articulate and analyze information about global organizations, global affairs, global trade and global business

- **Concepts:** Cross-cultural communication, financial decision making, data analytics, marketing management, competitive strategy, global leadership, working in diverse global teams

- **Competencies:** Students will develop intellectual capital, which is the cognitive aspect of global mindset. It refers to how much and what the manager knows about the global organization, industry and its broader macro, environment, and how easy it is for him/her to analyze, digest, and interpret this information. Graduates will articulate knowledge of global organizations, global affairs, global trade, and global business.

- **Assessment Methods:** Students will complete two five-point Likert scale global mindset inventory (GMI) surveys — one, at the start of the degree program, and the other, during the student's final semester — to evaluate the extent to which the program increased/improved the graduating student's intellectual capital. The Assurance of Learning committee will compare the survey results to relevant historical mindset inventory data. Students will complete a graduation exit survey to evaluate the extent to which the program increased and/or improved the graduating student's global management skills. The Assurance of Learning committee will compare the survey results to relevant historical data.

- **Measures:** Students will show competence in intellectual capital via the Global Mindset Inventory assessment and demonstrate enhancement in global management skills, as measured by the graduation exit survey. Assessment data will be measured using faculty designed rubrics and results will be used for continuous improvement.

Learning Outcome 3: Students will examine the impact of cultural differences on managerial communication and negotiation, and develop the ability to be an effective communicator and negotiator in a cross-cultural setting.

- **Concepts:** Cross-cultural communication strategies, situational learning, global negotiation skills, empathy, bridging strategies, cultural intelligence, diversity, equity, inclusion

- **Competencies:** Students will develop the ability to communicate and negotiate effectively in competitive and diverse global business settings, allowing them to implement strategies to solve problems and take advantage of opportunities in a multicultural world.

- **Assessment Methods:** The student will complete two five-point Likert scale Global Mindset Inventory surveys — one, at the start of the degree program, and the other, during the student's final semester — to evaluate the extent to which the program increased and/or improved the graduating student's cross-cultural and negotiation skills as measured by the social capital aspect of the inventory. The Assurance of Learning committee will compare the survey results to relevant historical inventory data. Students will complete a graduation exit survey to evaluate the extent to which the program increased/improved the graduating student's cross-cultural communication and negotiation skills. The Assurance of Learning committee will

compare the survey results to relevant historical data.

- **Measures:** Students will show improvement in cross-cultural communication and negotiation skills as measured via the social capital aspect of the Global Mindset Inventory assessment and demonstrate enhancement in cross-cultural and negotiation abilities, as measured by the graduation exit survey. Assessment data will be measured using faculty designed rubrics and results will be used for continuous improvement.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1: 400
Year 2: 600
Year 3: 800

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin these projections. If job-market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

Thunderbird's MLM in Leadership and Management degree is projected to grow expeditiously. According to data from Emsi, from 2012 to 2019 there was 11% programmatic growth in leadership and management programs. This includes all universities offering these subject areas in bachelor, master's, and certificate programs. Of the programs offered, there was also a 37% increase in distance-learning options offered in those subject areas.

Also, according to Emsi, from Dec 2019 to February 2021, there were 5.73 million job postings in occupations that require a degree in leadership and management such as global management analyst, global marketing manager, global operations analyst, global finance managers, or international human resource managers.

According to the US Bureau of Labor Statistics, employment in management occupations is projected to grow 5% from 2019 to 2029, faster than the average for all occupations, and will result in approximately 505,000 new jobs. More specifically, the job outlook from 2019 to 2029 for management analysts is expected to grow at 11% (much faster than average) and marketing managers is expected to grow at 6% (faster than average).

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

Arizona public universities have master's degrees with "leadership" or "management" in the degree title but Thunderbird's MLM in Leadership and Management is unique with its focus on *global* management skills.

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No additional resources are required to launch this degree program.

Plan to Request Program Fee/Differentiated Tuition? **YES** NO

Estimated Amount: $5,103

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

The fee is based on $567 per credit (the currently approved rate for the Master of Applied Leadership and Management) and 9 credits per semester. The fee is used for translating program contents into different languages, expenses associated with class modules, and costs associated with an international field seminar or global challenge lab (our applied learning, international consulting course).

Specialized Accreditation? **YES** NO

Accreditor:
The name of the agency or entity from which accreditation will be sought

The MLM in Leadership and Management will be accredited by The Association to Advance Collegiate Schools of Business (AACSB) along with Thunderbird's other degree programs. There is no specialized-professional-licensing requirement for students, though students may still seek their own certifications (e.g. PMP, CFP, CPA).

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program:

Master of Arts in Narrative and Emerging Media

Academic Department:
The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).

Walter Cronkite School of Journalism and Mass Communication and Herberger Institute for Design and the Arts

Geographic Site:
The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.

Downtown, Polytechnic, Tempe, West, and Los Angeles campus; Online

Instructional Modality:
The primary modality of the academic program (i.e. immersion, online, hybrid).

Immersion and Online

Total Credit Hours:
The number of credit hours required to complete the academic program

30

Proposed Inception Term:
The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).

Fall 2022

Brief Program Description:
A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.

This joint degree between the Cronkite School and Herberger Institute seeks to merge the disciplines of journalism, art, and media production to elevate digital storytelling. Students will learn how to create compelling narrative arcs; master advanced skills in video and virtual production (uses software tools to combine live-action footage and computer graphics in real-time productions); implement business and funding models for emerging media projects; and

create narrative content with ethical and inclusive practices. Graduates will go on to enjoy careers in brand/client storytelling, filmmaking, journalism, strategic communications, media leadership, project management, and more. ASU's charter directs us to advance discovery of public value, and take responsibility for the communities we serve; this program seeks to develop media professionals who can tell our community's stories with care, creativity, and impact.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will be able to identify, understand, and create compelling, independent, and original narrative arcs for emerging media — placing emerging technology and narrative in connective dialogue — with an ability to work across disciplines.

- **Concepts:** Emerging media pre-production, conceptualization and production workflows, including Augmented Reality/Virtual Reality/Extended Reality (AR/VR/XR), 360 film and the agile process; narrative arc; virtual production; project management and evaluation; social impact.

- **Competencies:** Students will be able to demonstrate self-direction and originality in the interpretation and application of emerging-media techniques and technology to the conceptualization, development, articulation, and creation of an original new-media piece from ideation to evaluation. Students will be able to identify, understand, and create compelling, independent, and original narrative arcs for emerging media — placing emerging technology and narrative in connective dialogue — with an ability to work across disciplines. Evaluation and critique include aesthetics, narrative frame, social impact, and ethical representation.

- **Assessment Methods:** Students will complete an applied project as the culminating experience of their program. The applied project will allow students to demonstrate competency in identifying, understanding, and creating compelling, independent, and original narrative arcs for emerging media as well as demonstrating self-direction and originality in the interpretation and application of emerging-media techniques and technology to the conceptualization, development, articulation, and creation of an original new-media piece. In addition, students who graduated from the program during the assessment period will receive a link to a survey created by the program chair/program committee to inquire about preparedness for employment or contract work. Survey results should indicate that the student was prepared to seek employment and has a competitive portfolio for contract work. Data will be collected and analyzed by the degree-program chair/director.

- **Measures:** Student success on the applied project will be based on a faculty-designed rubric evaluating the applied project on five areas of performance (originality, technological literacy, narrative technique, ethical representation, and audience development) with associated rubric rankings for each area. In addition, the

survey results should indicate that the student was prepared to seek employment and has a competitive portfolio for contract work. The program director and/or program committee will look at average rubric scores compared to historical data. The program will be refined based on assessment outcomes and feedback.

Learning Outcome 2: Students will develop an advanced and systematic critical and entrepreneurial understanding of the business, funding, and distribution models for emerging-media production and demonstrate a practice-led ability to assess and apply a variety of methodologies for production logistics.

- **Concepts:** Business plans; hiring documents; funding campaigns with pitch decks; production and artistic team building and management; budgeting and finance for production; production logistics and distribution planning; and marketing narratives and professional writing.

- **Competencies:** Graduates will be able to develop, produce, and revise a production portfolio showcasing an in-depth understanding of production logistics and problem solving, business planning, marketing materials and critical written and verbal literacies necessary for continuing professional development — including an ability to critique their own and their peers' work, and to assess the potential and progress of immersive projects at various stages of production as well as potential risks, liabilities, and challenges. Graduates will develop an advanced and systematic, critical and entrepreneurial understanding of the business, funding, and distribution models for emerging-media production and demonstrate a practice-led ability to assess and apply a variety of methodologies for problem solving.

- **Assessment Methods:** Students will complete a professional portfolio as a supplemental document to their applied project culminating experience. All coursework undertaken and completed during study will produce artifacts for use in the portfolio. Students will undergo a portfolio review at the end of their second quarter, fourth quarter, and as a part of their applied-project defense. The successful completion of the portfolio (and artifacts) will show the students understanding of the competencies listed above. Students will also complete a structured student self-analysis and goal setting/attainment written assignment at the end of each full semester. Students will narratively analyze their work to date, using formative self-analysis reflection and set achievement and learning goals for the next semester's work. Data will be collected from both methods and analyzed by the degree-program director and the program will be reviewed based on the results and ongoing feedback from industry contacts.

- **Measures:** Portfolios will be both developmental and cumulative and will be assessed using a faculty-and-industry-partner-developed rubric. The faculty-and- industry-developed rubric will evaluate the portfolio on five areas of performance (functional knowledge, research and critical analysis, presentation, industry-standard communication literacies, business logistics, and operational competencies) with

associated rubric rankings for each area. The professional-portfolio requirements will always adapt to the ongoing needs of the full curriculum and developments in industry expectations as well as technological advances. The structured narrative self-analysis will use a similar rubric to assess progress to date and set developmental goals. Additionally, the program director will consult students' self-evaluations to analyze how coursework inspires and furthers students' lifelong learning competencies. Students' professional goals will become a formative part of the formal and informal mentorship processes. Data will be collected and analyzed by the degree-program director. The program director and/or program committee will specifically look at average rubric scores compared to historical data, as well as industry feedback on portfolio materials. Sustained dips in scores will prompt faculty to examine teaching methods and the relevancy of class assignments and portfolio inclusions.

Learning Outcome 3: Graduates will be able to analyze industry-specific-representational practices and to evaluate their own ethical and inclusive practices in narrative development, artistic practice, and collaboration frameworks, demonstrating a comprehensive understanding of techniques of research and inquiry to interpret and create ethical processes and products.

- **Concepts:** Representational ethics; social impact; ethical communication; an understanding of how mass communication materials impact cultural frames; global awareness; multicultural awareness.

- **Competencies:** Graduates will be able to articulate an ethical stance toward new-media creation and critical awareness of how representational practices relate to cultural understandings of otherness, power, and positionality within a multicultural democracy.

- **Assessment Methods:** Students will complete a final project in the Diversity and Ethics in Emerging Media course that will show their understanding of current ethical and inclusive practices in narrative development, artistic practice, and collaboration frameworks — also, demonstrating a comprehensive understanding of techniques of research and inquiry to interpret and create ethical methodologies. The final project will be assessed by the faculty responsible for the course. Students will also complete a product in the Emerging Media for Clients course that will be evaluated in cooperation with community partners who will participate in satisfaction surveys. This course functions as a studio, producing media to meet community-partner needs. At the conclusion of this course, community partners will be provided a link to a feedback form that will assess partner satisfaction with the partnership, including student professionalism and ethical communication/collaboration, and evaluate the final product provided to the partner. Data collected will be used to adjust the curriculum as needed for improvement.

- **Measures:** The final project in the Diversity and Ethics in Emerging Media course will be assessed with a faculty-developed rubric consisting of four areas of performance: 1. Identification and Framing of Representational Ethics Problems/Issues; 2.

Professional Conduct and Ethical Communication/Collaboration; 3. Communication of Complex Ideas to Diverse Audiences; 4. Diversity in Characters/Narratives. Rubrics will be updated and/or revised periodically by a faculty panel and invited industry professionals. For the final product in the Emerging Media for Clients course, community partners will evaluate each component on a Likert scale from Below Expectation, Borderline Meets Expectation, Satisfactory, and Exceeds Expectations. Data will be collected and analyzed by the degree-program director. The program director and/or program committee will specifically look at average rubric scores compared to historical data as well as community partner feedback on partnerships and project outcomes. Sustained dips in scores will prompt faculty to examine teaching methods and the relevancy of class assignments.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1: 20
Year 2: 25
Year 3: 30

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin these projections. If job-market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

According to Emsi data, jobs in arts, entertainment, and recreation rose 8.6% between 2016 and 2020 and are projected to continue growing through 2029. An Emsi job-posting analysis unearthed 584,654 job postings requiring a master's degree in entertainment and arts business management roles; California is the top state hiring these roles, suggesting a strong market for graduates of this Los Angeles–based program. According to US Bureau of Labor Statistics data, there were 272,300 jobs for public relations specialists in 2020; in the next ten years, the Bureau of Labor Statistics projects jobs to rise 11%, which the firm labels "faster than average" growth among all U.S. occupations.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

At ASU, the Cronkite School offers a Master of Mass Communication that includes some production, but does not focus on emerging media, project management, or client work. The Herberger Institute offers several graduate programs that emphasize media creation, but none that focus on emerging media projects, production, and the business behind them.

The University of Arizona has the Journalism (MA), Digital Journalism (https://grad.arizona.edu/catalog/programinfo/JOURMADGTL) program. This is not similar to the

MA in Narrative and Emerging Media. While both include storytelling, the UArizona journalism and digital journalism program focuses on traditional journalism and producing news content with traditional multimedia techniques (writing, photo and video). The MA in Narrative and Emerging Media focuses on both fiction and nonfiction narratives using new media techniques including virtual reality, augmented reality, and 360 video. The MA in Narrative and Emerging Media also focuses on client-based work and project management.

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No new resources will be required to launch the program.

Plan to Request Program Fee/Differentiated Tuition? YES **NO**

Estimated Amount: None

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

None requested.

Specialized Accreditation? YES **NO**

Accreditor:
The name of the agency or entity from which accreditation will be sought

None.

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: Master of Arts in Strategic Communication
Academic Department: *The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).* Walter Cronkite School of Journalism and Mass Communication
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.* Downtown, Polytechnic, Tempe, West, and Los Angeles campus; Online
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Immersion and Online
Total Credit Hours: *The number of credit hours required to complete the academic program* 30
Proposed Inception Term: *The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).* Fall 2023
Brief Program Description: *A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.* The Master of Arts in Strategic Communication will teach students the skills, techniques, critical thinking, and leadership capacity to advance careers across strategic communication in communication agencies, corporations, government agencies, and nonprofit organizations. Courses in strategy development, research methods, content creation, crisis communication, ethics, campaign planning, and more will teach students how to strategically address communication challenges; courses in communication management, project management,

finance, and leadership will nurture the next generation of communication leaders. Students will begin their experience developing anchors in communication history, theory, and ethics. An emphasis on content creation prepares students to produce both traditional public-relations campaigns, persuasive writing, and media-relations plans, as well as innovative strategic content from client-video storytelling to digital content hubs. Then, via the Cronkite School's teaching hospital model, students will receive immersive, hands-on training in advanced tools, cutting-edge techniques, and real client work across our faculty-led, student-run agencies. Students will emerge prepared to take on PR and communication roles both at public agencies and private companies. The program connects directly to ASU's charter and design aspirations by preparing students to engage audiences, communities, and global citizens with communication that effectively advances research and discovery of public value.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will be able to create compelling, original content for strategic communication campaigns and initiatives that adhere to accepted professional standards.

- **Concepts:** Videography and photography; video editing; audio storytelling; social media content creation; writing for strategic communication; content performance and analytics; campaign creation and performance; content/campaign goal setting and tracking; feedback and critique; creative workflows; media pitching; client communication

- **Competencies:** Students will have the ability to research, strategize, direct and create content individually and within teams that align with client and campaign goals. Graduates will harness techniques and technology to the conceptualization, development, articulation, and creation of media content from ideation to evaluation, and they will be able to quantify and qualify the impact of their content/campaigns.

- **Assessment Methods:** At the beginning of their program, students will participate in a Strategic Communication Skills course, in which students learn how to create written, digital and video "content" according to professional standards and practices. Students use these skills throughout their program and showcase them in a nine-credit, professional-immersion culminating experience where they will complete a series of client-driven, strategic communication work. In the professional-immersion program, students are assessed in many areas, but the content and campaigns they create are referred to as the “work product.” In both courses, faculty will evaluate students' "content" and "work product," to determine whether the work reflects the level of skill necessary to obtain a professional role in a strategic communication environment. Both rubrics will use a Likert scale. Data will be collected and analyzed by the degree-program director. Sustained dips in scores will prompt faculty to examine teaching methods and the relevancy of class assignments, and encourage leadership to optimize professional immersion experiences.

- **Measures:** Student strategic communication content (also called the "work product") will be evaluated by faculty using a rubric in both the Strategic Communication Skills course and the capstone immersion experience. Data collected and analyzed will be used to adjust the curriculum as needed for improvement.

Learning Outcome 2: Students will be able to apply tools, technologies and strategies appropriate for the communication professions in which they work.

- **Concepts:** Industry, client and audience research methods; audience funnel and journey; diversity and inclusion in mass communication; ethical decision-making; written, digital and video content creation; paid and organic social media; media relations; public-relations practices, client development and account management; goal setting and tracking.

- **Competencies:** Students will have the ability to develop, produce and revise a production portfolio, showcasing an in-depth understanding of strategic communication research, planning, problem-solving, campaigns, and content creation for continuing professional development — including the ability to critique their own and their peers' work, and to assess the potential and progress of their work as well as potential risks, liabilities, and challenges.

- **Assessment Methods:** Students will complete a nine-credit capstone experience in a combination of one or more of the Cronkite School's professional immersion programs. In the capstone, they will complete a series of client-driven, strategic communication work. Students will be evaluated by capstone faculty on their portfolio of work from the course. Then, a sample of student portfolios representing work across the students' entire program experience will be evaluated by a panel of professionals to determine whether the work reflects the level of skill necessary to obtain a professional role in a strategic communication environment. Both portfolio rubrics will use a Likert scale. Data will be collected and analyzed by the degree program director. Sustained dips in scores will prompt faculty to examine teaching methods and the relevancy of class assignments, and encourage leadership to optimize professional immersion experiences.

- **Measures:** Student capstone immersion work will be evaluated by capstone immersion faculty using a rubric designed to measure the students' ability to demonstrate the competencies listed above. Student portfolios of work from across the degree program will also be evaluated by a professional reviewer panel using a faculty-designed rubric. Data collected will be used to adjust the curriculum as needed for improvement.

Learning Outcome 3:.Students will be able to analyze industry-specific, representational practices and evaluate their own ethical and inclusive practices in their communication work and collaboration, demonstrating a comprehensive understanding of practice and inquiry to interpret and create ethical processes and content.

- **Concepts:** Representational ethics; social impact; ethical communication; an understanding of how mass communication materials impact culture and the media industry; multicultural awareness.

- **Competencies:** Students will have the ability to articulate an ethical stance toward communication work and a critical awareness of how representational practices relate to cultural understandings of otherness, power, and positionality within a multicultural democracy.

- **Assessment Methods:** Faculty teaching the required course, Ethics and Diversity in Strategic Communication, will conduct an end-of-class assessment on students' ability to analyze industry-specific representational practices and to evaluate their own ethical and inclusive practices in their communication work. Reviewers will evaluate students using a Likert scale. Students will learn to hone a personal diversity statement, now a common element of job application. Students will include the diversity statement in their professional portfolios, a selection of which will be evaluated by reviewers. As part of their analysis, reviewers will evaluate the diversity statements by professional standards, using a Likert scale. Sustained dips in scores will prompt faculty to examine teaching methods and the relevancy of class assignments and topical coverage and pedagogy.

- **Measures:** Ethics and Diversity in Strategic Communication faculty will evaluate student practices in the areas of ethics and diversity using a rubric designed to measure the students' ability to demonstrate the competencies listed above. As part of a portfolio review, a professional review panel will use a faculty-designed rubric to evaluate students' diversity statements. Data collected will be used to adjust the curriculum as needed for improvement.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1: 20
Year 2: 25
Year 3: 30

Evidence of Market Demand:
Please provide an estimate of the future state-wide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce demand data and detail the assumptions that underpin these projections. If job market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

There is statewide, nationwide, and global demand for strategic communication professionals — that is, professionals who can perform mass communication work across the sectors of public relations, social media, digital marketing, creative campaigns, brand storytelling, and

media relations. Professionals go on to work in those specific sectors in specialized roles, or across them in communication agencies or in communication departments at large organizations. According to the U.S. Bureau of Labor Statistics, careers in this realm are well compensated. The annual mean wage for Media and Communication Workers is $82,550; Public Relations Specialists is $83,200; and Advertising, Marketing, Promotions, Public Relations, and Sales Managers is $163,470. These three roles alone comprise nearly 25% of the U.S. Bureau of Labor Statistics' (BLS) "Advertising, Public Relations, and Related Services" major career category, indicating high demand. Emsi economic data also indicates a healthy employment market: Jobs in communication roles are up 268% year-over-year, with significant growth in industries beyond the media, namely healthcare and education.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

The Cronkite School's Master of Mass Communication degree currently includes a strategic communication emphasis; the proposed degree would focus on strategic communication specifically. These are not similar degrees to the NAU and UArizona programs listed below. The Cronkite School focuses exclusively on mass communication; the UA communication degrees highlighted here are human communication degrees (akin to those in our Hugh Downs School), which have little to no overlap with mass communication strategy, content or audience studies.

Programs at NAU:

Communication (MA)
https://catalog.nau.edu/Catalog/details?plan=APCOMMA&catalogYear=2122

Communication Studies (graduate certificate)
https://catalog.nau.edu/Catalog/details?plan=COMMSTCT&catalogYear=2122

Programs at UArizona:

Communication (MA)
https://grad.arizona.edu/catalog/programinfo/COMMMA

Communication (PhD)
https://grad.arizona.edu/catalog/programinfo/COMMPHD

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No new resources will be required.

Plan to Request Program Fee/Differentiated Tuition? YES **NO**

Estimated Amount: None

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

None requested.

Specialized Accreditation? YES **NO**

Accreditor:
The name of the agency or entity from which accreditation will be sought

Not applicable.

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program:

Bachelor of Arts in Education in Elementary Multilingual Education

Academic Department:
The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).

Mary Lou Fulton Teachers College

Division of Teacher Preparation

Geographic Site:
The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.

Downtown, Polytechnic, Tempe, West campus

Instructional Modality:
The primary modality of the academic program (i.e. immersion, online, hybrid).

Immersion and Online

Total Credit Hours:
The number of credit hours required to complete the academic program

120

Proposed Inception Term:
The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).

Fall 2022

Brief Program Description:
A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.

The BAE in Elementary Multilingual Education will prepare future teachers to become transformational leaders and practitioners in our increasingly culturally and linguistically diverse communities. The program supports bilingual/dual-language, English as a Second Language (ESL), and other multilingual classrooms and culturally and linguistically sustaining

pedagogies toward serving and advocating for children, families, and communities. This program meets Arizona certification requirements for Elementary Education Certification and Bilingual and ESL endorsements, and will be clinically embedded during the junior and senior years. The primary goal of all clinical experiences is to provide interns and student teachers with multiple opportunities to apply knowledge learned in coursework to practice in K-8 classrooms and in linguistically diverse communities in context outside of formal schools. Students will have opportunities to specialize in several areas, including Indigenous education, transborder and cultural studies, and Spanish, with additional specializations being explored.

Arizona has ranked at the bottom of all states in graduation rates for emergent bilinguals in the past 15 years. Preparing critically conscious, bilingual teachers who are skilled to reach this population and cultivate their multilingual abilities in AZ public and charter schools addresses an urgent social imperative, our ASU charter, and overall commitments to equity. Through this program, we will be able to create unique and innovative curriculum and opportunities for social embeddedness; linguistically sustaining and culturally responsive pedagogies; and the necessary assets-based orientations and teaching dispositions to advance the educational goals of one of our most vulnerable populations.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will be able to apply instructional practices and strategies that engage students' identities by validating the cultural and linguistic assets and the community.

- **Concepts:** knowledge of community and funds of knowledge to support classroom learning; ethnographic approaches to understanding the community and incorporating practices that build on teacher knowledge of students and their community; American educational systems.

- **Competencies:** Graduates will have the knowledge, skills to recognize their dispositions and positionality in relation to the communities they are engaging with and interact with students and school communities to sustain their linguistic and cultural assets

- **Assessment:** Students will complete an ethnographically-informed study on students, classroom environment, and the school community to make explicit connections between the community they study and its supportive role in classroom learning including the roles, interactions, and influences of all students, families, and communities. Students will also complete performance assessments that demonstrate knowledge of understanding for topics related to socio-historical and political contexts. During each semester of the undergraduate program, the National Institute for Excellence in Teaching (NIET) Aspiring Teacher Rubric (ATR) will be used to score teaching videos submitted by our students. According to NIET, "The Aspiring Teacher Rubric provides a streamlined set of performance indicators to be used with teacher candidates to define effective instruction. These twelve indicators, which are based on and aligned to NIET's research-based Teaching Standards Rubric, describe the key

skills and abilities that aspiring teachers must have to be prepared for the classroom. The descriptions within NIET's Aspiring Teacher Rubric create common language for observation, feedback, and support as well as foster collaboration between an aspiring teacher and peers or faculty around instructional practices. The vision represented within the rubric maximizes instructional excellence and correlates with student achievement," (2020). The Aspiring Teacher Rubric aligns with the NIET Teaching Standards and the Interstate Teacher Assessment and Support Consortium (InTASC) Standards. In addition, in BLE 220, students will analyze a lesson plan for ways in which the lesson does and does not support language learning for English learners, connections between the lesson plan and language acquisition theories and provide an analysis of how the lesson plan fits a model of English language instruction approved in Arizona. Paper will require synthesizing strategies explored during the course, English Language Proficiency Standards, ideas of differentiation and assessment, theories of language acquisition, and Arizona's language development approach and will be evaluated by a faculty-developed rubric.

- **Measures:** Mary Lou Fulton Teachers College Division 1 Continuous Improvement Topical Action Group (TAG) members and undergraduate-program strategists will work collaboratively to develop processes for program faculty to examine the multiple outcomes articulated in the assessment plan over time, and will appraise the evidence collected for each outcome to determine progress toward overall goals. The Continuous Improvement TAG and undergraduate-program strategists will articulate specific questions that are crucial for the faculty to examine to inform improvements to program curriculum, instruction, and student support.

Learning Outcome 2: Students will be able to create learning experiences that support language development and value linguistic diversity, proficiencies, and varieties of languages present in the classroom.

- **Concepts:** sound theory of language and terminology to counter deficit thinking about language minoritized learners; support of bi/multilingual development; he dynamicity of language and language development from an asset-based perspective; theories of language and proficiency levels to best linguistically support emergent bilinguals

- **Competencies:** Graduates will engage K–8 learners in accessible, relevant and meaningful content to ensure critical thinking, appropriate language development, and mastery of the content. Graduates will be able to describe, recognize, and differentiate various types of multilingual learners. In addition, Elementary Multilingual Education graduates will articulate, compare, contrast, and critique theories of language acquisition and bilingualism, and characteristics of proficiency levels to best inform their development of curriculum, pedagogy, and assessment.

- **Assessment:** Student work will focus on determining language proficiency development, growth, and learner's linguistic practices. Students will complete Student Language Observation Matrix Protocol and sociolinguistic observation. They will also engage in discourse and conversational analysis of specific language interactions. During each semester of the undergraduate program, the National Institute for Excellence in Teaching (NIET) Aspiring Teacher Rubric (ATR) will be used

to score teaching videos submitted by students. The descriptions within NIET's Aspiring Teacher Rubric create common language for observation, feedback, and support as well as foster collaboration between an aspiring teacher and peers or faculty around instructional practices. The vision represented within the rubric maximizes instructional excellence and correlates with student achievement," (2020). The Aspiring Teacher Rubric aligns with the NIET Teaching Standards and the InTASC Standards.

- **Measures:** The Mary Lou Fulton Teachers College Division 1 Continuous Improvement (TAG) members and undergraduate program strategists will work collaboratively to develop processes for program faculty to examine the multiple outcomes articulated in the assessment plan over time, and will appraise the evidence collected for each outcome to determine progress toward overall goals. The Continuous Improvement TAG and undergraduate program strategists will articulate specific questions that are crucial for the faculty to examine to inform improvements to program curriculum, instruction, and student support. Continuous Improvement Assessment information will be disseminated to the Continuous Improvement Topical Action Group (TAG).

Learning Outcome 3: Graduates will be able to create and maintain inclusive, equitable learning environments that support individual and collaborative learning experiences, utilize high leverage practices, and foster critical thinking, active engagement, and well-being for all learners.

- **Concepts:** sociohistorical and political knowledge needed to best serve diverse communities; historical and theoretical underpinnings of bilingual education history; layers of intersectionality experienced by minority learners.

- **Competencies:** Graduates will provide evidence of understanding the history of bilingualism and bilingual education and the intersections of histories of colonialism and how these areas inform current and future learning conditions. Graduates will produce lessons that recognize and examine the relationship between language, identity, and power and the ways in which it manifests in language ideologies, practices, and current issues and policies in language education.

- **Assessment:** Students will submit a field-applicable lesson plan informed by the Culturally Sustaining Transformative Pedagogy, along with observations and reflections of classroom practices. Rubric scores will be used for data collection to examine patterns in proficiency on the criteria and will be analyzed for continuous program improvement. Lessons should provide examples of practices shaped to foster community-centric, equity-oriented, and multilingual/multicultural interactions between students and teacher(s) in the context of field placement. In the observation and reflection, students will be expected to observe and provide evidence of a normative (regular, allowed, expected) social happening or series of consecutive social practices within the school setting and note inferences about the school's cultural norm(s) from the observation(s). Additionally, in BLE 220, students will research the legal history of English language education. Students will select from among a list of topics (Lau v. Nichols, Castaneda v. Pickard, Flores v. Arizona, Plyler v. Doe, ESSA, Title III, Title VI, OCR/DOJ, Prop 203, HB 2010, HB 2064, SB 1014)

and present a research-based written and oral analysis of the legal topic's impact on the instruction of English learners. The purpose of this assignment is for students to dive deeply into one element of the legal history but gain an understanding of the entire legal history by reviewing each other's presentations. Both the presentation and the written analysis will be evaluated by faculty-developed rubrics.

- **Measures:** Continuous Improvement Assessment information will be disseminated to the Continuous Improvement Topical Action Group (TAG). The Mary Lou Fulton Teachers College Division 1 Continuous Improvement (TAG) members and undergraduate -program strategists will work collaboratively to develop processes for program faculty to use to examine the multiple outcomes articulated in the assessment plan over time, and will appraise the evidence collected for each outcome to determine progress toward overall goals. The Continuous Improvement TAG and undergraduate program strategists will articulate specific questions that are crucial for the faculty to examine in order to inform improvements to program curriculum, instruction, and student support.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1: 30
Year 2: 40
Year 3: 60

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin these projections. If job-market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

The market demand for teachers who can teach in dual-language programs is on the rise. Populations continue to diversify, leading to an increase in the number of students identified as English language learners. According to the most recent report by the National Center for Education Statistics, the percentage of public-school students in the United States who were English language learners was higher in fall 2017 (10.1%, or 5.0 million students) than in fall 2000 (8.1%, or 3.8 million students).

Despite the restrictive language policies of the last two decades in Arizona, at least 26 school districts in the state offer dual-language programs, all of which have Spanish programs and a few in French and Mandarin (Center for Applied Linguistics). Further, the Dual Language Schools Organization has identified nine programs in Tucson and 23 programs in the Phoenix-metropolitan area alone. Other dual-language programs also exist, which teach in more than two languages. While Arizona dual-language programs have generally excluded emergent bilinguals in the past two decades, in the past two years, new changes to the law have released restrictions allowing emergent bilinguals to enroll in dual-language immersion programs as well. Such changes will further increase the demand for these programs, as well as for bilingual educators who are able to teach in them. Given that bilingual/ESL teacher

shortage is among the most persistent in the state, this comprises one of the most critical limitations for expanding dual-language programs. The U.S. Department of Education reports the subject of "English as a Second Language" is a teacher-shortage area for the 2021-2022 school year in 32 states, including Arizona.

Graduates of the Mary Lou Fulton Teacher College current program are highly sought out teachers in public, charter, and private-education institutions, including in growing dual-language programs. The current iteration of the Educating Multilingual Learners program as a specialization in the Elementary Education parent-degree program has allowed us to test the market and interest, yielding very positive results. The current program has maintained the most consistent and steady growth among all concentrations of the Elementary Education major. However, because the program is embedded in a generalist degree, it remains largely hidden from the target communities for recruitment. Reshaping it into an autonomous program will provide greater visibility that we anticipate will further increase growth.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

Northern Arizona University:

- BSEd in Elementary Education, Bilingual Endorsement, English as a Second Language Endorsement
- English as a Second Language Undergraduate Certificate
- BSEd in Special and Elementary Education

University of Arizona:

- BAE in Elementary Education with Bilingual Endorsement
- BAE in Elementary Education with English as a Second Language Endorsement

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No additional resources will be required to offer this program. Staff that support current elementary education certification, including admissions specialists, advisors, university and instructional designers, will continue their current role and shift focus to the BAE in Elementary Multilingual Education.

Plan to Request Program Fee/Differentiated Tuition? YES **NO**

Estimated Amount: N/A

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

None Required

Specialized Accreditation? **YES** NO

Accreditor:
The name of the agency or entity from which accreditation will be sought

The Arizona Department of Education approves programs leading to state certification. The approval allows the university to provide institutional recommendations to students upon successful program completion. This eliminates the need for the Arizona Department of Education to conduct a transcript analysis to examine if certification requirements for education and clinical experience are met.

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: Bachelor of Science in Global Health
Academic Department: *The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).* The College of Liberal Arts and Sciences *School of Human Evolution & Social Change*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.* Downtown, Polytechnic, Tempe, West campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Immersion and Online
Total Credit Hours: *The number of credit hours required to complete the academic program* 120
Proposed Inception Term: *The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).* Fall 2022
Brief Program Description: *A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.* The BS in Global Health is an interdisciplinary degree designed for students who seek a broad and flexible set of skills to understand contemporary health challenges and to develop and implement solutions. "Global" is understood in the anthropological sense, meaning ways

of understanding and addressing disease, health, and well-being that can incorporate all cultures, places, and time, and that can integrate knowledge of health's social, historical, biological, and ecological dimensions. The curriculum emphasizes developing core skills in critical thinking and problem solving, especially using the scientific method, and the importance of direct experience (research, study abroad, service learning, and advocacy). The degree cultivates capacities to deal with any complex problem with biosocial components: how to identify the critical issues, ask the right questions, and create solutions that are meaningful and effective.

The BS in Global Health is oriented toward the holistic and integrated study of the medical, biological, public health, biochemical, physiological, genetic, and evolutionary aspects of health, and includes emphasis on epidemiological and statistical applications to describe and analyze complex health-related phenomena.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will be able to evaluate the global burden of disease and examine social and environmental determinants of disease

- **Concepts:** global burden of disease, major causes of morbidity and mortality, and their variations among high-, middle- and low-income regions, major public health efforts to improve human health globally; social and environmental determinants of health: social, economic, and environmental factors of health across generations; health as more than the absence of disease; constructs of health and well-being situated within cultural context(s); the role that American and global institutions have in preventing disease and improving the overall health of world populations.

- **Competencies:** 1) Students will be able to validate, compare, and contrast the health status of populations using available data (e.g., public health surveillance data, vital statistics, registries, surveys, electronic health records). 2) Students will be able to evaluate elements of major public health efforts to reduce disparities in global health (such as Sustainable Development Goals and Global Fund to Fight AIDS, TB, and Malaria) and conceptually combine, refine, and apply to specific global health contexts and applications. 3) Students will be able to connect access to and quality of water, sanitation, food, and air to individual and population health. 4) Students will be able to justify from evidence the major social and economic determinants of health, their effects on the access to and quality of health services, and contributions to differences in morbidity and mortality between and within countries.

- **Assessment:** In ASB 403 Evolutionary Medicine and Global Health, ASB 305 Poverty and Global Health and ASB 448 Maternal and Child Health students will be assessed using the principle or capstone assignment (such as essay or project). The assessment team will request that course instructors for these courses evaluate student performance on their primary course project/essay according to faculty-developed rubric. Based on the percentage of majors meeting expectations, department leadership will collaborate with instructors on refining course design

(topics covered, pedagogical approaches, and assessment techniques) to better position students for successful attainment of program learning outcomes. Results will be shared with departmental faculty and used for continuous improvement.

- **Measures**: Direct, summative measures of student knowledge will be used to evaluate student knowledge of global burden of disease and the social and environmental determinants of health through faculty-developed rubrics for performance on key, integrative assignments (final paper, major essay, final project, and/or written reflection) within upper-division global health courses and their international Global Health Study Abroad Program, specifically courses ASB 443 Cross-Cultural Studies in Global Health, ASM 414 Urban and Environmental Health, ASB 403 Evolutionary Medicine and Global Health, ASB 305 Poverty and Global Health, and ASB 448 Maternal and Child Health.

Learning Outcome 2: Students will apply skills in global health through their community-based public health activities in domestic and international settings.

- **Concepts:** applied global health; the programs and process(es) by which global health practitioners, including scholars, clinicians, and policy-makers, engage in global health initiatives; measuring aspects of the global burden of disease, supporting and assessing interventions within specific populations, writing, supporting, and stewarding global health policy, and facilitating collaboration and health messaging to diverse stakeholders.

- **Competencies:** At the completion of Global Health Study Abroad and Research Practicum Courses (two required), Global Health BS students will have actively engaged in applied global health, community-based activities in at least one international setting to develop specific global health skills. The skills students will develop include the ability to collaborate within diverse global health teams; recruit survey participants and conduct research interviews; engage in data entry, data quality control, data analysis, and data interpretation. Students will understand ethics, research and compliance and human subjects research ethics.

- **Assessment:** Students will be assessed on performance during active research, clinical, or public health initiative during internship, international global health study abroad, practicum, or community partnership activities. The unit will evaluate student performance on active research, clinical, or public health initiative during internship, international global health study abroad, practicum, or community partnership activities according to faculty-developed rubric. Based on the percentage of majors meeting expectations, the school leadership will collaborate with instructors on refining course design (student activities, pedagogical approaches, and assessment techniques) to better position students for successful attainment of program learning outcomes. Results will be shared with departmental faculty and used for continuous improvement. Students in ASB 443 Cross-cultural studies in Global Health and ASM 414 Urban and Environmental Health (principle Global Health Study Abroad Courses) will be sent a post-program mixed methods survey by the Global Health Approach

convener to evaluate student perception that their Collaborative Institutional Training Initiative (CITI) Research, Ethics, and Compliance Training for Human Subjects Research in Social and Behavioral Research and their applied experiences conducting research during international study abroad provided them important tools and skills for conducting real-world global health participant interviews and surveys. Based on the percentage of majors agreeing with their degree of preparation and the thematic analysis of free-write answers, leadership will collaborate with global health faculty directors of study abroad programs on refining course design (research methods used, research training approach, and assessment techniques) to better position students for successful attainment of program learning outcomes. Results will be shared with departmental faculty and used for continuous improvement.

- **Measures:** Both the exam and the final project will be assessed based on faculty-developed rubrics. The rubrics will be continually refined based on assessment outcomes and feedback for whether students were able to perform competently while engaged in applied global health, community-based activities, demonstrating skills in the ability to collaborate within diverse global health teams; recruit survey participants and conduct research interviews; and/or engage in data entry, data quality control, data analysis, and data interpretation. The post-program student survey will be used to evaluate student perception that that their CITI Research, Ethics, and Compliance Training for Human Subjects Research in Social and Behavioral Research and their applied experiences conducting research during international study abroad provided them important tools and skills for conducting real-world global health participant interviews and surveys.

Learning Outcome 3: Students will be able to conduct epidemiological investigations or quantitatively analyze global health data, using quantitative social science research methods, including statistics and epidemiology.

- **Concepts:** quantitative social science research; systematic methods for research, epidemiology approaches for the prevention and reduction of conditions such as infectious and chronic diseases; community and environmental health hazards and unintentional injuries; the quantitative aspects of epidemiology including sources of data, measures of morbidity and mortality, causality, and study design, the social, economic, environmental, and structural dimensions of epidemics and pandemics, as well as the ethical questions raised by how they are addressed globally.

- **Competencies:** Students will be able to 1) calculate and interpret measures of disease frequency (prevalence and incidence), measures of effect (e.g. rate/risk ratios and rate/risk differences) and measures of public health impact (e.g. population attributable risk fraction); 2) differentiate between the concepts of association and causation, identify observational and experimental study designs in the scientific literature, and explain advantages and limitations of observational research in epidemiology; 3) interpret and present accurately and effectively demographic, statistical, and scientific information for professional and lay audiences; 4) apply the

basic public health sciences, including behavioral and social sciences, biostatistics, epidemiology, environmental public health, toward the prevention of chronic and infectious diseases and injuries.

- **Assessment:** Graduates of the global health degree program will be sent a post-program mixed-methods survey by the Global Health Approach convener to evaluate student perception that the program prepared them with instrumental knowledge, tools, and skills for conducting epidemiological investigations and/or to quantitatively analyze global health data using quantitative social sciences methods. In ASM 201 Epidemics and Outbreaks and ASB 484 Student Outbreak Response, performance on problem sets and case discussions in ASM 201 and/or the tasks of epidemiological investigation in ASB 484 Student Outbreak Response will be assessed based on the percentage of majors meeting expectations. School leadership will collaborate with instructors on refining course design (student activities, pedagogical approaches, and assessment techniques) to better position students for successful attainment of program learning outcomes. Results will be shared with departmental faculty and used for continuous improvement.

- **Measures:** Leveraging the program exit survey and the course outcomes, leadership will collaborate with faculty on refining course design (statistical and epidemiological content, practice and assessment methods) to better position students for successful attainment of program learning outcomes.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1: 20
Year 2: 40
Year 3: 60

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin these projections. If job market-data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

Demand for professionals equipped with a global-health skill set has grown in recent years (3) and participation in comprehensive, university-based, global-health programs increased 351% from 2005 to 2011 (4,5). ASU currently offers the largest and longest-running undergraduate degree program in global health and has played a key role in developing and disseminating competencies for undergraduate degrees in global health (6).

The promise of global health requires us to address some of the most complex and difficult challenges facing humans. Preparing a global-health workforce with expertise in social-science disciplines can help support national, regional, and global security interests by

fostering political stability, diplomacy, and economic growth worldwide. As exposed most recently by the COVID-19 pandemic, there is an unmet need for global- and public-health professionals who can assess and interpret biological health trends in concert with policy measures and their overlapping biobehavioral implications. International health bodies are increasingly looking to incorporate cultural context to address persistent global-health challenges (1).

Funding for global health programs nearly doubled from $22B in 2005 to $41B in 2019 (2), commensurately increasing demand in the global health workforce to staff and manage these programs (3). This has led to more than a three-fold increase in university-based, global-health programs and student enrollment in the U.S. from 2005-2011 (4). However, a common critique of these programs is that they fail to prepare students for taking local context into account (3). ASU not only offers the largest undergraduate degree program in global health (7), but also leverages a top-tier research ranking in anthropology (1) and social sciences (3) to offer a program intensely focused on the cultural contexts and seeming nuances that have multiplicative effects in global-health outcomes. ASU added the online option for the BA in Global Health in 2014; enrollment in the online degree now makes up 39% of all BA in Global Health degrees conferred while on-campus enrollment has remained steady.

Degree assessments include eliciting regular feedback from our seniors, recent graduates, and more distant alumni. In 2019, many identified that focused and formalized training in epidemiological-evolutionary aspects of disease (especially recognized in a BS qualification specifically) would not only provide additional employment opportunities but also would have accelerated their professional advancement once employed. This is particularly the case for many graduates who continue onto Master of Public Health (MPH) programs at ASU and elsewhere, and most especially those now working in government and NGO agencies like Medicins Sans Frontiers, Arizona Department of Health Services, and the CDC.

To meet this need, the BS leverages the School of Human Evolution and Social Change strengths in human biology, evolutionary medicine, and epidemiology to provide opportunities to students more oriented towards the holistic and integrated study of medical, biological, public health, biochemical, physiological, genetic, and evolutionary aspects. It also includes greater emphasis on epidemiological and statistical applications as a means to describe and analyze complex, health-related phenomena.

1 WHO. 2019. Antibiotic resistance: using a cultural contexts of health approach to address a global health challenge. Accessed 9 July 2020 from https://www.euro.who.int/__data/assets/pdf_file/0006/394503/WHO_ABR-Policy_8th-Feb_Spreads_HiRes.pdf
2 Institute for Health Metrics and Evaluation. 2020. Financing Global Health. https://vizhub.healthdata.org/fgh/
3 Eichbaum. 2015. Acad Med. ;90:414â€“417. doi:10.1097/ACM.0000000000000665
4 Matheson et al., 2014. Sustainability and growth of university global health programs. Center for Strategic and International Studies.
5 Withers et al. 2016 Globalization and Health, 12:34 doi:10.1186/s12992-016-0162-z
6 Drain et al. 2017. Am. J. Trop. Med. Hyg., 96(1): 16-23. doi:10.4269/ajtmh.16-0687
7 Ruth, A., Brewis, A., Blasco, D., & Wutich, A. (2019). Long-term benefits of short-term research-integrated study abroad. Journal of Studies in International Education, 23(2), 265-280.

Similar Programs Offered at Arizona Public Universities:

List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

There is currently no BS in Global Health offered at any Arizona university. The closest degrees are the BS degrees in Public Health at ASU, NAU, and U of Arizona, which include an emphasis area in Global Health and adhere to curricular guidelines from the Center for Education for Public Health (which is why these three degrees are extremely similar to each other, and very different from this one).

Public-health competencies emphasize the behavior-change model of health intervention; privilege biomedical perspectives on health; are based almost entirely on evidence from the global north and higher income economies and assumptions of bio-normality of Western bodies, and add international public health as one small subset of this approach. The existing BA in Global Health, however, is based on approaches from the social and natural sciences. It highlights perspectives critical of traditional biomedicine by including alternate theoretical models of health that counter behavior change, recognize the body as a product of human evolution, recognize disease as an inherently global and interconnected phenomena, and balance perspectives and knowledge from the global south and other historically non-dominant perspectives.

The BS in Health Sciences in the College of Health Solutions at ASU is another degree in this area, and the degree curriculum is based in more similar pedagogy to the Public Health degrees. The other potentially similar degree is the highly individualized BS in Biology concentration in Biology and Society offered by ASU's School of Life Sciences, but that focuses particularly on policy/philosophy.

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No additional resources are needed to support this program. Current faculty will support the course offerings for this degree. Current advising staff will assist with course registration, the progress through the degree, and any other academic needs.

Plan to Request Program Fee/Differentiated Tuition? **YES** NO

Estimated Amount: $525 per semester

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

The fee listed above is part of ASU's existing college-fee tier system. Sciences in The College of Liberal Arts and Sciences is assessed the tier 4 fee above.

Specialized Accreditation? YES **NO**
Accreditor:
The name of the agency or entity from which accreditation will be sought
None.

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: Bachelor of Science in Engineering Science
Academic Department: *The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).* Ira A. Fulton Schools of Engineering *Dean, Ira A. Fulton Schools of Engineering*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.* Downtown, Polytechnic, Tempe, West campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Immersion and Online
Total Credit Hours: *The number of credit hours required to complete the academic program* 120
Proposed Inception Term: *The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).* Fall 2022
Brief Program Description: *A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.* The BS in Engineering Science is a flexible, multidisciplinary degree that integrates a broad foundation in math, science and engineering across traditional disciplines with a specialization in a chosen engineering concentration to enable graduates to develop innovative solutions to the most demanding, modern problems facing our society. Graduates

of the program will have broad mathematical, scientific and engineering problem-solving skills as well as a specialized knowledge in their chosen engineering concentration. Graduates will be prepared for careers in engineering or science as well as business professions that interface with technical specialists. Engineering Science is a flexible STEM degree that fits well in ASU's portfolio of degree programs addressing the economic, social, cultural, and overall health of the communities ASU serves. The program is being developed as an agile degree that can be offered across ASU's global network of academic partnerships using specialized, relevant interdisciplinary coursework in the concentration to adapt to local engineering needs and social priorities.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will have an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

- **Concepts:** mathematical concepts including calculus, probability and statistics; engineering and science principles including the engineering design process
- **Competencies:** Students will be able to identify problems, formulate solutions, and apply math, science and engineering principles to execute work plans.
- **Assessment Methods:** Assessment will be based on student work products created in a capstone course and assessed by faculty and industry project evaluators. Students will create a problem identification document and design a solution. The documents will be assessed by a faculty-designed rubric that measures how well students identified all of the factors governing the problem they are addressing and how well students addressed the problem statement in their design solution. For both measures, the Undergraduate Program Committee will evaluate average rubric scores to ensure the learning outcomes are being met. Summary data will be used in continuous evolution of the curricular materials and teaching methods.
- **Measures:** Comprehensive design documentation will be generated that captures the student's ability to identify and formulate problem solutions. Faculty-designed rubrics will be utilized to assess student competencies and identify areas for improvements of the program.

Learning Outcome 2: Students will consider public health, safety, welfare, sustainability and other cultural, social, environmental and economic factors in applying engineering design to produce solutions that meet customer-specified needs.

- **Concepts:** Public health, safety and welfare, sustainability, global, cultural, social, environmental and economic factors contributing to engineering design solutions
- **Competencies:** Students will be able to design an engineering solution that considers impacts on public health, safety, welfare, and sustainability as well as global, cultural,

social, environmental, and economic factors in the design.

- **Assessment Methods:** Assessment will be based on student work products and assessed by faculty and industry project evaluators. Students will create a design consideration document that will be assessed by a faculty-designed rubric that measures how well students identified all the constraints governing the problem they are addressing. Students will also create a project design solutions document which will be assessed by a faculty-designed rubric that measures how well students addressed the problem statement in their design solution. For both measures, the Undergraduate Program Committee will evaluate average rubric scores to ensure the learning outcomes are being met. Results will be used to inform curricular modifications.

- **Measures:** Comprehensive design documentation will be generated that captures the student's ability to create a design solution that addresses all the factors in Outcome 2. Faculty-designed rubrics will be utilized to assess student competencies and identify areas for improvements of the program.

Learning Outcome 3: Graduates will recognize ethical and professional responsibilities in engineering situations and make informed judgments.

- **Concepts:** Ethical and professional responsibilities, rules of practice, professional obligations within the established Engineering Code of Ethics.

- **Competencies:** Students will make project decisions based on ethical and professional considerations as reflected in the engineering society code of ethics. Students will recognize ethical and professional responsibilities in engineering situations and will consider the impact of engineering solutions in global, economic, environmental, and societal contexts

- **Assessment Methods:** Assessment will be based on student assignments in the engineering design course assessed by the instructor. Students will be assessed by a faculty-designed rubric that measures how well students understand and apply the Engineering Code of Ethics rules of practice. Students will also be assessed by a faculty-designed rubric that measures how well the decisions students made reflect the impact of engineering solutions in global, economic, environmental, and societal contexts. For both measures, the Undergraduate Program Committee will evaluate average rubric scores to ensure the learning outcomes are being met. Results will be used to guide continuous improvement of the program.

- **Measures:** Assignments in the engineering design course will be based on case studies that explore ethical and professional engineering responsibilities. Faculty-designed rubrics will be utilized to assess student competencies and identify areas for program improvement.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1: 100
Year 2: 210
Year 3: 320

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin these projections. If job-market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.
Graduates from the Engineering Science program will have career opportunities in both the private and public sectors. Demand for graduates is expected to grow by over 10% over the next 5 years with up to 20% growth in concentrations related to computing and data science. Depending on their chosen concentration, graduates will be able to pursue careers in engineering or science involving research, development, design and manufacturing involving materials, human behavior, computation, analytics, devices, and processes. They will also be prepared to pursue advanced degrees in science and engineering disciplines.
According to the NACE Salary Guide, the mean salary for Engineering Science graduates is currently $61,347.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

None

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections: Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No additional resources will be needed to launch the program.

Plan to Request Program Fee/Differentiated Tuition? **YES** NO

Estimated Amount: $525 per semester

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

The fee listed above is part of ASU's existing college-fee tier system. Programs in the Ira A. Fulton Schools of Engineering are assessed the tier 4 fee above.

Specialized Accreditation? YES **NO**

Accreditor:
The name of the agency or entity from which accreditation will be sought

Not applicable.

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program:

Bachelor of Science in Emergency Management and Homeland Security

Academic Department:
The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).

Watts College of Public Service & Community Solutions

School of Public Affairs

Geographic Site:
The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.

Downtown, Polytechnic, Tempe, West campus

Instructional Modality:
The primary modality of the academic program (i.e. immersion, online, hybrid).

Immersion and Online

Total Credit Hours:
The number of credit hours required to complete the academic program

120

Proposed Inception Term:
The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022).

Fall 2023

Brief Program Description:
A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.

Emergency management and issues related to homeland security are increasingly important areas requiring professionals with a broad range of skills and expertise. The BS in Emergency Management and Homeland Security will provide students with an understanding of the political and social implications of disasters, terrorism, and national security. It will also

address practical skills such as operations continuity management, oversight of emergency operations centers, and techniques/best practices for developing prevention programs against cyber terrorism and promoting security and protection of critical assets.
The School of Public Affairs currently offers an Emergency Management and Homeland Security concentration under the BS in Public Service and Public Policy. An Emergency Management and Homeland Security degree program has been requested by prospective students, as other institutions have offered a more complete curricular focus on Emergency Management and Homeland Security.

A new Emergency Management and Homeland Security degree will be especially appealing to first responders; active-duty military and veterans; the disaster nonprofit community and other safety and security professionals; as well as underrepresented groups. The program will create a new, inclusive educational pathway that reflects ASU's charter and enables students to contribute better to their communities.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will demonstrate competency in analyzing and drawing connections between disparate risks and vulnerabilities within complex systems

- **Concepts:** Critical Infrastructure/Key Resources (CIKR), complex systems, systems theory, actuarial sciences, system interdependencies, complex vulnerabilities, security gaps, natural and man-made disasters, extreme weather/ geological events, climate-related risk, urbanization, grand challenges, risk assessment, risk mitigation, risk reduction, hazard mitigation, community resilience, disaster preparedness, disaster response, mitigation strategies

- **Competencies:** Students will be able to produce meaningful written analysis of disparate risks and vulnerabilities. Students will demonstrate proficient communication of research findings in assessments. Evaluation of organization, governance, and risk mitigation strategies will promote student mastery of rhetorical devices and composition.

- **Assessment:** In 300-level courses, students will take a final-course examination to measure the extent to which they understand the changing nature of emerging threats and vulnerabilities, mastery of which will be judged by a rubric. In a different course, students will complete a risk assessment designed to gauge their understanding of vulnerabilities faced by cities and/or regions.

- **Measures:** Student mastery will meet the requisites required for competency in understanding emerging risks and vulnerabilities. Both the risk assessment and exam will be assessed using faculty-developed rubrics. These data will be used for the improvement of future course design. Rubrics will be continually refined based on assessment outcomes and feedback.

Learning Outcome 2: Students will demonstrate competency in evaluating the performance of emergency management and homeland-security organizations and governance systems across sectors by appraising their management and approaches to risk mitigation, as well as making conclusions about their opportunities and challenges, and ultimately their impact.

- **Concepts:** Organizations, organizational structure; organizational culture; internal and external stakeholders; power, legitimacy, and authority; bureaucracy, policymaking process, governance, collaborative governance, public-private partnerships.

- **Competencies:** Students will be able to evaluate the performance of emergency management and homeland-security governance structures and organizations, including their management, approaches, opportunities, challenges, and impact. Students will gain an in-depth understanding of the changing philosophy of preparedness and resiliency and how it contrasts with traditional law-enforcement-related conceptions of homeland security in America. Analysis of organizational performance and effectiveness, governance, and response, will emphasize an understanding of social, political, and economic factors that contribute to these issues.

- **Process:** Students will meet the requisites required for competency for understanding and analyzing effectiveness within organizations and related governance structures, including their response to specific hazards and events. To gauge this, students will complete a final exam in Emergency Management and Homeland Security Organizations and Governance, mastery of which is judged by their rubric score. Students will also write a final paper that analyzes the extent to which an organization or governance structure responds (or responded) to a specific disaster or event, mastery of which is judged by a grading rubric.

- **Measures:** Student scoring will be assessed against faculty-directed rubrics, which will be used for the improvement of future course design. Rubrics will be continually refined based on assessment outcomes and feedback.

Learning Outcome 3: Students will draw connections between emerging risks and vulnerabilities in society and the challenges and opportunities within organizations and governance systems. Students will apply this connective knowledge to improve extant policies, programs, and governance systems to mitigate risk and manage disruption.

- **Concepts:** Key products produced by Emergency Management and Homeland Security (EMHS) analysts, including tables, figures, and maps; organizational and governance mapping and evaluation; application of technology applicable to risk analysis; connection of risk analysis to risk-mitigation strategies

- **Competencies:** Interpretation and production of risk-analysis materials using state-of-the-art technology and methods including an understanding of data management and data visualizations. Significant emphasis will be placed throughout the degree and its constituent courses on the role of community organizations, volunteers, and civil society in community resiliency and risk-mitigation responses. Specifically, students will learn and apply community understanding, outreach, understanding, and

collaborative-governance structures to enrich risk-mitigation strategies.

- **Process:** Students will meet the requisites required for competency in utilizing the methods and technologies required for risk analysis and mitigation. Students will take a final course examination in the Risk Analysis and Mitigation Strategies course and will complete a final applied project to combine the evaluation of a specific threat with efforts to improve and construct policies and programs to address a specific area of vulnerability for a city or region.

- **Measures:** Both the exam and the final project will be assessed based on faculty-developed rubrics. These data will be used for the improvement of future course design. Rubrics will be continually refined based on assessment outcomes and feedback.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

Year 1: 150
Year 2: 200
Year 3: 250

Evidence of Market Demand:
Please provide an estimate of the future statewide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce-demand data and detail the assumptions that underpin these projections. If job-market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

According to the Bureau of Labor Statistics, employment in the field of emergency management and other disaster-relief services has grown significantly and is projected to continue to grow. In 1990, there were 66,800 positions in this domain, and by 2017 there were 168,500. In 2026, there are projected to be over 180,000. Many of the careers highlighted in this field require a bachelor's degree (https://www.bls.gov/careeroutlook/2018/article/disaster-relief-careers.htm). Employment of managers in the area of emergency management is anticipated to grow 4% by 2029 (https://www.bls.gov/ooh/management/emergency-management-directors.htm#tab-6). One of the substantive focus areas for the degree will be cybersecurity within the homeland security domain. The Bureau of Labor Statistics expects that employment in this area will grow 31% between 2019 and 2029 (https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm#tab-6).

The International Association of Emergency Managers Bulletin (a monthly publication), in various installments from 2018 forward (Volumes 35 - 39), notes general employment trends in the emergency-management-professional domain, as well as specific sub-areas such as cybersecurity, consistent with the bureau projections (source: https://www.iaem.org/). Similarly, the Center of Excellence for Homeland Security and Emergency Management (source: https://www.coehsem.com/trendsresearch/) provides a more focused version of employment and career trends. Their analysis of specific sub-area occupations also points to

steady and consistent growth in employment opportunities. These analyses provide consistent confirmation of relevant employment projections in this area; these analyses also suggest that Arizona's employment in this sector is likely to mirror national trends — roughly proportional growth is anticipated.

The School of Public Affairs currently has an undergraduate degree in Public Service and Public Policy with an Emergency Management and Homeland Security concentration which, as of Spring 2021, had 220 ASU Online students and 74 campus-immersion students, plus a campus-immersion BAS Applied Science Emergency Management degree with 3 students (297 students total). According to the EdPlus Marketing Pipeline Report for 1/2020 to 11/2020, there were 2,676 requests for information about the emergency-management concentration. Anecdotal evidence from the Enrollment Advisers suggested that students who are interested in emergency management were deterred by having to pursue a degree in public policy and that the School of Public Affairs would enroll more students with a standalone Emergency Management and Homeland Security undergraduate degree.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

- Public Service and Public Policy - Emergency Management and Homeland Security Concentration (ASU)
- Applied Science (Emergency Management) BAS (ASU)
- Emergency Management, Undergraduate Certificate (NAU)
- Emergency Management, Minor (NAU)
- Interdisciplinary Studies - Emergency Management (NAU)

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections: Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No state resources will be required. Existing funds will be reallocated as needed.

Plan to Request Program Fee/Differentiated Tuition? **YES** NO

Estimated Amount: $105 per semester

Program Fee Justification:
If levying a program fee, please justify the estimated amount.

The fee listed above is part of ASU's existing college-fee tier system. Watts College of Public Service and Community Solutions is assessed the tier 2 fee above.

Specialized Accreditation? YES **NO**

Accreditor:
The name of the agency or entity from which accreditation will be sought

None required.

Academic Plan 2022-2023: Disestablishments & Name Changes

Undergraduate Programs	College	Page Number
Undergraduate - Disestablishments		
BS in Community Sports Management	Watts College of Public Service and Community Solutions	3
Graduate Disestablishments		
MA in Digital Culture	Herberger Institute for Design and the Arts	5
Professional Science Master's (PSM) in Solar Energy Engineering and Commercialization	Ira A. Fulton Schools of Engineering	7
PhD in Educational Psychology	Mary Lou Fulton Teachers College	9
Undergraduate Name Changes		
From: BS in Parks and Recreation Management To: BS in Parks, Recreation and Sport Management	Watts College of Public Service and Community Solutions	11
From: BS in Science of Health Care Delivery To: BS in Health Care Administration and Policy	College of Health Solutions	13
From: BA in History of Science, Ideas and Innovation	College of Integrative Sciences and Arts	15

To: BA in History of Science, Technology and Innovation		
From: BA in Women and Gender Studies To: BA in Gender, Women and Sexuality Studies	The College of Liberal Arts and Sciences	17
Graduate Name Changes		
From: MS in Digital Culture To: MS in Media Arts and Sciences	Herberger Institute for Design and the Arts	19
From: MA in Women and Gender Studies To: MA in Gender, Women and Sexuality Studies	The College of Liberal Arts and Sciences	21
From: MAcc in Accountancy To: MAcc in Accountancy and Data Analytics	W. P. Carey School of Business	23
From: MTax in Taxation To: MTax in Taxation and Data Analytics	W. P. Carey School of Business	25

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Request to Disestablish Academic Program

University: Arizona State University

Name of Academic Program: BS in Community Sports Management
Academic Department: *The name of the academic department or unit that currently primarily administers the academic program. If the proposed program is jointly administered across more than one department, please list the(se) additional department(s).* Watts College of Public Service and Community Solutions *School of Community Resources and Development*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program is currently primarily delivered or administered.* Downtown Phoenix campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Campus immersion only
Last Term of operation: *The term and year in which the last enrolled student will graduate from the program (i.e. Spring 2022; Fall 2023).* Spring 2025
Brief Program Description: *A short outline of the content and skills that the program delivers.* The BS program in community sports management focuses on preparing individuals with an interest in managing sport programs and activities for children, youth, adults and seniors in nonprofit, municipal and for-profit organizations. The program emphasizes the many roles community sports play within the community, including as a mechanism to improve overall quality of life, youth development, sport tourism and community development. Both program delivery and managerial functions are targeted. Specific areas of opportunity include work with youth sports, adaptive sports, sports tourism, sport events and adult recreational sports.

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Reason for Disestablishing the Program:
Please briefly explain why the program is being disestablished.

The Watts College of Public Service and Community Solutions is merging two of our degrees — the BS in Parks and Recreation Management and the BS in Community Sports Management — into one degree titled BS in Parks, Recreation and Sport Management. The current programs are quite similar, and there is a great deal of synergy between them. A somewhat broader degree will be appealing to students and will streamline our curriculum.

Disestablishment Plan
Please explain how any students affected by the planned disestablishment of the program will be supported to earn their degree.

The change will have minimal impact on students. Those in the existing majors will be able to finish in the Community Sports Management degree or will be given the option to move to the renamed Parks, Recreation and Sports Management degree. For new students, the new name expands their career options by adding more areas of expertise.

How will program resources be reallocated? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide information about how personnel and infrastructure presently employed to deliver the disestablished program will be reallocated.

Personnel and infrastructure will be reallocated from the Community Sports Management degree and utilized by the Parks, Recreation and Sports Management program.

Is this program in an ABOR designated high demand field ? YES **NO**
Is the discontinued program in education, health, science, technology, engineering or math (STEM)?

Executive Director Signature: _____

Date: 12/3/2021

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Request to Disestablish Academic Program

University: Arizona State University

Name of Academic Program: MA in Digital Culture
Academic Department: *The name of the academic department or unit that currently primarily administers the academic program. If the proposed program is jointly administered across more than one department, please list the(se) additional department(s).* Herberger Institute for Design and the Arts *School of Arts, Media and Engineering*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program is currently primarily delivered or administered.* Tempe campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Campus immersion only
Last Term of operation: *The term and year in which the last enrolled student will graduate from the program (i.e. Spring 2022; Fall 2023).* Fall 2027
Brief Program Description: *A short outline of the content and skills that the program delivers.* The MA in Digital Culture program is geared toward practitioners of design and the arts who have an interest in engaging in scholarly knowledge creation at the intersection of computational arts and sciences and seek to enhance their practice through expanded engagement with interactive and embodied media theory and design. The degree program allows artists and designers to explore new avenues for real-time media creation that seek to go beyond current paradigms.

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Reason for Disestablishing the Program:
Please briefly explain why the program is being disestablished.

The Herberger Institute for Design and the Arts was approved to establish the MS in Digital Culture (also requested to be renamed to MS in Media Arts and Sciences in the rename section below), which replaces the MA in Digital Culture. The MS designation is more appropriate for the computational and technical research that our students and faculty practice. Now that the unit has established the MS, and it is open to applicants, Herberger is requesting to disestablish the MA.

Disestablishment Plan
Please explain how any students affected by the planned disestablishment of the program will be supported to earn their degree.

Herberger will give current students the opportunity to switch into the MS in Digital Culture or complete the MA degree until it is phased out.

How will program resources be reallocated? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide information about how personnel and infrastructure presently employed to deliver the disestablished program will be reallocated.

Resources are shared by the MA and the MS in Digital Culture. No reallocation will be required.

Is this program in an ABOR designated high demand field ? YES **NO**
Is the discontinued program in education, health, science, technology, engineering or math (STEM)?

Digital Culture is a discipline that intersects the arts, science and technology.

Executive Director Signature: 

Date: 12/3/2021

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Request to Disestablish Academic Program

University: Arizona State University

Name of Academic Program: Professional Science Master's in Solar Energy Engineering and Commercialization
Academic Department: *The name of the academic department or unit that currently primarily administers the academic program. If the proposed program is jointly administered across more than one department, please list the(se) additional department(s).* Ira A. Fulton Schools of Engineering *School for Engineering of Matter, Transport and Energy*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program is currently primarily delivered or administered.* Tempe campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Campus immersion only
Last Term of operation: *The term and year in which the last enrolled student will graduate from the program (i.e. Spring 2022; Fall 2023).* Only three students are currently enrolled in the program. Anticipated graduation date of this cohort is Aug 2021.
Brief Program Description: *A short outline of the content and skills that the program delivers.* The PSM program in solar energy engineering and commercialization offers advanced, interdisciplinary education in solar energy to students with backgrounds in science, technology, engineering or mathematics. The objective of the program is to enable graduates to pursue careers that involve solar energy and its utilization in industry, government or the nonprofit sector.

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Reason for Disestablishing the Program:
Please briefly explain why the program is being disestablished.

In the proposal to the ABOR to establish this program, it stated that the program would have 30 students starting 2018. Unfortunately, the program has low enrollment starting in 2018 despite recruitment efforts and program modifications. Enrollment numbers were 2017-2018: 16, 2018-2019: 18, 2019-2020: 10, and 2020-2021: 5. The fee of $500 per credit hour covered many of the activities. However, this is based on an enrollment of at least 18 students to cover the total cost. The low number of students makes this program non-sustainable.

The new MS program, Modern Energy Production and Sustainable Use, covers much of the content that the PSM in Solar Energy Engineering and Commercialization covered, but expands students' subject matter to also include wind and nuclear energies, sustainability and battery storage. Students who have an interest in solar energy engineering and commercialization will be directed to this program.

Disestablishment Plan
Please explain how any students affected by the planned disestablishment of the program will be supported to earn their degree.

Students will be allowed to complete their program within Graduate College policy time limits.

How will program resources be reallocated? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide information about how personnel and infrastructure presently employed to deliver the disestablished program will be reallocated.

Resources will be reallocated to the MS in Modern Energy Production and Sustainable Use.

Is this program in an ABOR designated high demand field ? **YES** NO
Is the discontinued program in education, health, science, technology, engineering or math (STEM)?

This program is in science and technology, but Ira A. Fulton Schools of Engineering have programs better suited to meet the needs of students.

Executive Director Signature: _____

Date: 12/3/2021

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Request to Disestablish Academic Program

University: Arizona State University

Name of Academic Program: PhD in Educational Psychology
Academic Department: *The name of the academic department or unit that currently primarily administers the academic program. If the proposed program is jointly administered across more than one department, please list the(se) additional department(s).* Mary Lou Fulton Teachers College *Dean, Mary Lou Fulton Teachers College*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program is currently primarily delivered or administered.* Tempe campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Campus immersion only
Last Term of operation: *The term and year in which the last enrolled student will graduate from the program (i.e. Spring 2022; Fall 2023).* No students are enrolled, so this program may cease immediately.
Brief Program Description: *A short outline of the content and skills that the program delivers.* The program offers a plan of study that reflects the field's increasingly interdisciplinary nature. The focus is on the application of scholarship in understanding real-world challenges and the cultural nature of development. The target populations studied include children and adults within the contexts of families and schools. An applied developmental science model is followed, with the aim of using research to inform policies and programs that further the positive development of individuals. Graduates of the program find work at universities and community colleges, state and local departments of education, K-12 schools and various community agencies.

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Reason for Disestablishing the Program:
Please briefly explain why the program is being disestablished.

Mary Lou Fulton Teachers College would like to request to disestablish this program. In reviewing our programs for accreditation, it has come to our attention that this program was closed many years ago, but was still listed on the books and not formally disestablished. Students are served by other Mary Lou Fulton Teachers College graduate programs that cover educational psychology so this program is no longer needed.

Disestablishment Plan
Please explain how any students affected by the planned disestablishment of the program will be supported to earn their degree.

There are no students enrolled that would be impacted by this disestablishment.

How will program resources be reallocated? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide information about how personnel and infrastructure presently employed to deliver the disestablished program will be reallocated.

No resources need be allocated as students have not been enrolled since 2011-2012.

Is this program in an ABOR designated high demand field ? **YES** NO
Is the discontinued program in education, health, science, technology, engineering or math (STEM)?

The PhD in Educational Psychology has not been offered in quite some time. Students have many other education-related graduate programs to choose from.

Executive Director Signature: 

Date: 12/3/2021

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Request to Rename Academic Program

University: Arizona State University

Current Name of Academic Program: BS in Parks and Recreation Management
New Name of Academic Program: BS in Parks, Recreation and Sport Management
Academic Department: *The name of the academic department or unit that primarily administers the academic program. If the renamed program is jointly administered across more than one department, please list the(se) additional department(s).* Watts College of Public Service and Community Solutions *School of Community Resources and Development*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program is primarily delivered or administered.* Downtown Phoenix campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Campus immersion only
Brief Program Description: *A short outline of the content and skills that the program delivered.* The BS program in parks and recreation management provides a transdisciplinary education in the management of parks, protected areas, community-based recreation services and special event management. Students learn through classroom instruction and field experiences to integrate the managerial, natural and social sciences to make informed decisions for recreation services, both community-based and natural resources-based. Topics include: wilderness, environmental communication, history, inclusive services, management, parks and recreation policy, assessment and evaluation, planning and programming.

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Reason for Renaming the Program:
Please briefly explain why the program is being renamed.

Watts College of Public Service and Community Solutions proposes to merge two degrees — the BS in Parks and Recreation Management and the BS in Community Sports Management — into the renamed BS in Parks, Recreation and Sport Management. The current programs are quite similar and there is a great deal of synergy between them. A somewhat broader, renamed degree will be appealing to students.

Executive Director Signature: _____

Date: 12/6/2021

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Request to Rename Academic Program

University: Arizona State University

Current Name of Academic Program: BS in Science of Health Care Delivery
New Name of Academic Program: BS in Health Care Administration and Policy
Academic Department: *The name of the academic department or unit that primarily administers the academic program. If the renamed program is jointly administered across more than one department, please list the(se) additional department(s).* College of Health Solutions
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program is primarily delivered or administered.* Downtown Phoenix campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Campus immersion only
Brief Program Description: *A short outline of the content and skills that the program delivered.* The science of health care delivery is the study and design of systems, processes, leadership and management. This knowledge and these practices can be used to optimize health care delivery and health for all. The BS in Science of Health Care Delivery provides undergraduate students foundational knowledge of health care administration and health policy grounded in concepts of leadership, social determinants of health, informatics, systems engineering and economics. Faculty are multidisciplinary, tenure-track and clinically trained professionals who work together to create, teach and disseminate knowledge.

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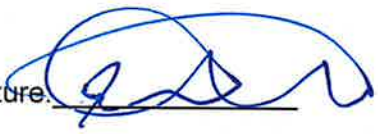
Reason for Renaming the Program:
Please briefly explain why the program is being renamed.

The 2025 ABOR Enterprise Plan calls for ASU to increase degrees awarded in high-demand fields, including health professions. The college has investigated avenues to increase enrollment in the BS in Science of Health Care Delivery program. According to a Pearson feasibility study, the current program title is not viable for online delivery due to low name recognition. "Health Care Administration and Policy" better reflects the program content for a broader audience while still aligning with the established health care delivery domains of leadership, population health, informatics, health care management, and health economics and policy.

By changing the degree name to one that is more broadly sought out and understood in the marketplace, the college anticipates both increased enrollment and a greater benefit to existing students entering the workforce.

Inquiries for the past twelve months for Health Care Administration/Management were 135,993, which is a 22.4% year-over-year increase. Google search trends over the past three months were 185,766, indicating a high search volume for this area. According to IPEDS, there were a total of 12,181 completions at 391 campuses, of which 53% were at the bachelor's degree level in 2018. Of those 391 institutions, 174 (47%) offer online degrees which account for 40% of all completions within Health Care Administration/Management. According to Burning Glass, there were 51,711 job postings related to this area in a twelve-month period which was a 3.9% year-over-year increase. The U.S. Bureau of Labor and Statistics reports the current employment for Health Care Administration/Management to be 136,209 which is a compound annual growth rate of 2.3% for year-over year employment, 6.6% for 3-year historic growth, and 5.3% for 5-year historic growth. The 10-year forecast for compound annual growth rate is 1.3%.

Emsi states that there were 1.08M total job postings between January 2019 to June 2019, of which 238,777 were unique. Emsi projects a +19.6% change in occupations (366,868 jobs in 2017 to 438,777 jobs in 2024) for Medical and Health Service Managers between 2017 to 2024.

Executive Director Signature: 

Date: 12/6/2021

ARIZONA BOARD OF REGENTS
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Request to Rename Academic Program

University: Arizona State University

Current Name of Academic Program: BA in History of Science, Ideas and Innovation
New Name of Academic Program: BA in History of Science, Technology and Innovation
Academic Department: *The name of the academic department or unit that primarily administers the academic program. If the renamed program is jointly administered across more than one department, please list the(se) additional department(s).* College of Integrative Sciences and Arts
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program is primarily delivered or administered.* Polytechnic campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Campus immersion only
Brief Program Description: *A short outline of the content and skills that the program delivered.* The BA program in the history of science, ideas and innovation provides students with a grounding in the social and intellectual issues central to understanding the role of science, technology and ideas from past to present. This transdisciplinary degree program encourages students to combine coursework in the natural and applied sciences with historical and philosophical approaches to social knowledge. Students majoring or minoring in the history of science, ideas and innovation program graduate with a foundation for advanced work either in the humanities, the sciences or in transdisciplinary fields bridging written and technical work.

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Reason for Renaming the Program:
Please briefly explain why the program is being renamed.

The College of Integrative Sciences and Arts requests to change the name of the BA in History of Science, Ideas and Innovation to History of Science, Technology and Innovation. Replacing the word "ideas" with "technology" fits the focus of the program's content and curriculum better while reflecting the strength of our existing faculty's work and expertise in the area of the history of technology. The Polytechnic campus is home to many technology-based programs including a variety of engineering, computer, and professional flight degrees. Many students coming to this campus are served by our History of Technology courses and faculty. This change allows for better clarity regarding the program's focus and service to the Polytechnic community. Graduates are prepared for successful careers in a wide range of fields, including science and technical writing, consulting, museum studies, the digital humanities and other fields that benefit from transdisciplinary exchange. Graduates are also prepared to enter advanced programs in history and science as well as law and medical schools.

Executive Director Signature: 

Date: 12/6/2021

ARIZONA BOARD OF REGENTS
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Request to Rename Academic Program

University: Arizona State University

Current Name of Academic Program:

MS in Digital Culture

New Name of Academic Program:

MS in Media Arts and Sciences

Academic Department:
The name of the academic department or unit that primarily administers the academic program. If the renamed program is jointly administered across more than one department, please list the(se) additional department(s).

Herberger Institute for Design and the Arts

School of Arts, Media and Engineering

Geographic Site:
The physical site (campus, extended campus, etc.) or modality where the academic program is primarily delivered or administered.

Tempe and Mesa City Center campus

Instructional Modality:
The primary modality of the academic program (i.e. immersion, online, hybrid).

Campus immersion only

Brief Program Description:
A short outline of the content and skills that the program delivered.

The MS program in digital culture is designed for practitioners and makers in design and the arts who have an interest in software and system development and seek to enhance their practice through expanded engagement with interactive, embodied media design in an interdisciplinary environment. The program allows artists and designers to explore new avenues for real-time media creation that seek to go beyond current paradigms.

Coursework also explores current practices in various contexts (performance environments, health and wellbeing, social media and communication) as well as engineering-based approaches to develop experiential systems with social impact.

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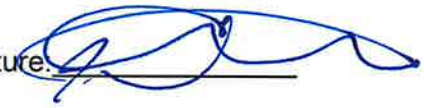
Reason for Renaming the Program:
Please briefly explain why the program is being renamed.

Herberger Institute for Design and the Arts requests to rename the MS in Digital Culture to MS in Media Arts and Sciences. The new title better describes the program, and we plan to use the MS in Media Arts and Sciences as a stepping stone toward our PhD in Media Arts and Sciences.

The most recent Emsi reports indicate demand for positions requiring a master's degree in the digital arts to increase 8.9% over five years (2018-23); the median salary is $35.02. Target occupations for applicants with a digital arts background include: software developers, 16.91% increase (93,198 openings), median hourly salary $48.50; graphic designers, 4.08% increase (31,384 openings), median hourly salary $20.62; web developers, increase of 9.81% (15,596 openings) and median hourly salary of $28.19; computer user support specialists, increase of 8.4% (65,490 openings), median hourly salary $24.22; and film and video editors, increase of 9.54% (5,110 openings), median hourly salary $27.10.

Top posting companies for digital arts master's programs include: Oracle Corporation, 130,607 unique listings; Anthem, Inc., 115,588 unique listings; Virtual Vocations, 81,035 unique listings; Cybercoders, 43,614 unique listings; and Amazon, 33,421 unique listings.

The new name change will be more marketable for employers and resumes. There is more defined meaning behind the studies of Media Arts and Sciences. Current students will be notified of the name change in advance and will be given a set timeframe to complete the program under the MS in Digital Culture. Once that timeframe has passed, any remaining students will move to the MS in Media Arts and Sciences.

Executive Director Signature: 

Date: 12/6/2021

ARIZONA BOARD OF REGENTS
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Request to Rename Academic Program

University: Arizona State University

Current Name of Academic Program: MAcc in Accountancy
New Name of Academic Program: MAcc in Accountancy and Data Analytics
Academic Department: *The name of the academic department or unit that primarily administers the academic program. If the renamed program is jointly administered across more than one department, please list the(se) additional department(s).* W. P. Carey School of Business *School of Accountancy*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program is primarily delivered or administered.* Tempe campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Campus immersion only
Brief Program Description: *A short outline of the content and skills that the program delivered.* Infused with a data and analytics emphasis, the cutting-edge curriculum is structured to provide students with an in-depth working knowledge of advanced accounting topics that are most relevant in today's business environment and reviewed every year with input from accounting professionals and alumni. Esteemed faculty experts bring real-world experience into each class, giving the degree even more long-term value.

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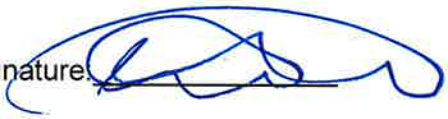
Reason for Renaming the Program:
Please briefly explain why the program is being renamed.

The accounting profession is in the midst of a major shift. No longer are entry-level accountants expected to work with financial accounting, auditing, and taxation issues. Today's professional accountants must be proficient with data analysis concepts and tools. The profession has fully embraced data analytics into its tax and audit practices. Schools across the country are lagging behind the profession in updating their curriculum. To address this issue, one major professional services firm, KPMG, with its 200,000+ employees, partnered with 10 universities including Arizona State to facilitate the development of data analytics into their Master of Accounting program. Over the past three years with our partnership with KPMG, we realized the importance of preparing our students to have a strong accounting/taxation foundation along with data analytics.

During the academic year 2019-2020, the ASU School of Accountancy undertook an extensive review of the Master of Accounting curriculum. As part of our due diligence, we sent questionnaires to our alumni as to their opinion of incorporating data analytics throughout the program. Also, we worked with our Professional Advisory Board which is comprised of our main employing firms (e.g., the Big Four and most national firms) to understand what their needs are for incoming accounting / taxation professionals. From our due diligence, along with initiatives from the American Accounting Association (AAA), the American Institute of Certified Public Accountants (AICPA) and the National Association of State Boards of Accountancy (NASBA), we shifted our Master of Accounting curriculum to include data analytics throughout the program courses. While our graduates are not data scientists, they will be well prepared to work in a data analytics environment. The 2021 Accounting Program Curriculum Gap Analysis prepared by the AICPA and NASBA highlights the need for data analytics to be more than a separate course that is bolted on. As stated in the Introduction, "The role of the CPA has evolved. Newly licensed CPAs need deeper skill sets, more competencies, and greater knowledge of emerging technologies."

Executive Director Signature: 

Date: 12/6/2021

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Request to Rename Academic Program

University: Arizona State University

Current Name of Academic Program:

MTax in Taxation

New Name of Academic Program:

MTax in Taxation and Data Analytics

Academic Department:
The name of the academic department or unit that primarily administers the academic program. If the renamed program is jointly administered across more than one department, please list the(se) additional department(s).

W. P. Carey School of Business

School of Accountancy

Geographic Site:
The physical site (campus, extended campus, etc.) or modality where the academic program is primarily delivered or administered.

Tempe campus

Instructional Modality:
The primary modality of the academic program (i.e. immersion, online, hybrid).

Campus immersion only

Brief Program Description:
A short outline of the content and skills that the program delivered.

The nine-month MTax program is delivered by the W. P. Carey School of Accountancy, and is highly ranked by the Public Accounting Report. The cutting-edge curriculum is structured to provide students with an in-depth working knowledge of the highly technical and demanding skills required to provide tax and business advice in the private and public sectors. Esteemed faculty experts bring real-world experience into each class, giving the degree even more long-term value. Students gain preparation for their career through case-based courses and team assignments. Students dive into taxation in greater depth. Half of the program's courses are technical, with small classes and personalized instruction. The Master of Taxation program is designed for individuals who want to immerse themselves in full-time graduate studies, take classes during the day and fulfill course requirements for the CPA exam in Arizona and in California. Because of the quality of the Master of Taxation program, students gain the skills and knowledge needed to launch their careers while opening the door to top hiring firms.

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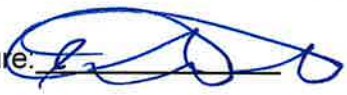
Reason for Renaming the Program:
Please briefly explain why the program is being renamed.

Today's professional accountants must be proficient with data analysis concepts and tools. The profession has fully embraced data analytics into its tax and audit practices. Schools across the country are lagging behind the profession in updating their curriculum. To address this issue, one major professional services firm, KPMG, with its 200,000+ employees, partnered with 10 universities including Arizona State to facilitate the development of data analytics into their Master of Taxation programs. Over the past three years with our partnership with KPMG, we realized the importance of preparing our students to have a strong accounting/taxation foundation along with data analytics.

The School of Accountancy sent questionnaires to our alumni as to their opinion of incorporating data analytics throughout the program. The school worked with the Professional Advisory Board, which is composed of the main employing firms (e.g., the Big Four and most national firms), to understand what their needs are for incoming taxation professionals. Along with initiatives from the American Accounting Association (AAA), the American Institute of Certified Public Accountants (AICPA), and the National Association of State Boards of Accountancy (NASBA), the school shifted the Master of Taxation curriculum to include data analytics throughout the core courses. While graduates are not data scientists, they will be well prepared to work in a data analytics environment.

The 2021 Accounting Program Curriculum Gap Analysis, prepared by the AICPA and NASBA, highlights the need for data analytics to be more than a separate course that is bolted on. As stated in the Introduction, "The role of today's CPA has evolved. Newly licensed CPAs need deeper skill sets, more competencies, and greater knowledge of emerging technologies."

The American Institute of Certified Public Accountants (AICPA) and the National Association of State Boards of Accountancy (NASBA) created a new CPA Licensure model: CPA Evolution. This licensure model will continue to sustain a strong core in accounting, audit, and tax, but will include data analytics as an essential skill component. The revised Master of Taxation will benefit our students by directly incorporating into our programs the following skills required for today's professional accountants.

Executive Director Signature: 

Date: 12/6/2021

ARIZONA BOARD OF REGENTS
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Request to Rename Academic Program

University: Arizona State University

Current Name of Academic Program:

BA in Women and Gender Studies

New Name of Academic Program:

BA in Gender, Women and Sexuality Studies

Academic Department:
The name of the academic department or unit that primarily administers the academic program. If the renamed program is jointly administered across more than one department, please list the(se) additional department(s).

The College of Liberal Arts and Sciences

School of Social Transformation

Geographic Site:
The physical site (campus, extended campus, etc.) or modality where the academic program is primarily delivered or administered.

Tempe campus

Instructional Modality:
The primary modality of the academic program (i.e. immersion, online, hybrid).

Both immersion and online

Brief Program Description:
A short outline of the content and skills that the program delivered.

Through coursework and scholarly research, students in the BA program in women and gender studies gain critical knowledge and a deeper understanding of feminist theory and practice. Students are offered the opportunity to challenge conventional wisdom about gender and explore new ways of viewing the world through the study of:

- culture
- economics
- film
- history
- literature
- politics
- science

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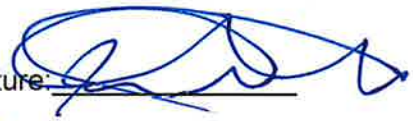
Reason for Renaming the Program:
Please briefly explain why the program is being renamed.

The School of Social Transformation is requesting to add sexuality to the title of this degree program to remain competitive, align with other women's studies programs nationwide and more closely reflect the work being done in the program and in the field.

Sexuality studies is of interest to many students, is embedded in our work and is built into our curriculum. This name change will help us further market the work of the program and potentially attract more students.

There are many divergent career paths available for our graduates. This degree allows the application of intersectionality in analysis. Companies and organizations in the nonprofit sector, education, health care, management, human resources, and analysts in market research and policy are just a few of many who will seek out graduates with degrees in Gender, Women and Sexuality Studies. These job sectors are in stable fields — not trends — and the outlook on these jobs is strong. Education professionals, health care and experts in workplace diversity and inclusion (https://www.bls.gov/ooh/management/training-and-development-managers.htm) are in high demand for 2021, and our graduates are well-prepared for jobs in these settings. (https://www.businessinsider.com/most-in-demand-jobs-according-to-linkedin-report-2021-1#2-loan-and-mortgage-experts-make-between-43700-and-60000-14) (https://www.cnbc.com/2020/01/02/demand-for-diversity-and-inclusion-professionals-set-to-rise-in-2020.html)

Executive Director Signature: 

Date: 12/6/2021

ARIZONA BOARD OF REGENTS
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Request to Rename Academic Program

University: Arizona State University

Current Name of Academic Program: MA in Women and Gender Studies
New Name of Academic Program: MA in Gender, Women and Sexuality Studies
Academic Department: *The name of the academic department or unit that primarily administers the academic program. If the renamed program is jointly administered across more than one department, please list the(se) additional department(s).* The College of Liberal Arts and Sciences *School of Social Transformation*
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program is primarily delivered or administered.* Tempe campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Campus immersion only
Brief Program Description: *A short outline of the content and skills that the program delivered.* The MA program in women and gender studies is designed for students who wish to gain research skills and knowledge about gender analysis and apply those tools to real-world problems and solutions. The program provides advanced training in feminist research, theory and methodologies.

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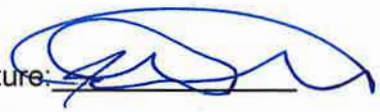
Reason for Renaming the Program:
Please briefly explain why the program is being renamed.

Adding sexuality to the title of this degree program will ensure that the program remains competitive, aligns with other women, gender and sexuality studies programs nationwide and more closely reflects the work being done in the program and in the field. Sexuality studies is of interest to many students, is embedded in the program's work and built into the curriculum. This name change will help us further market the work we are doing and potentially attract more students.

There are many divergent career paths available for our graduates both at the undergraduate and graduate level. As more companies grow into a global market, not many degrees prepare students the way that we do. Our degree allows the application of intersectionality in analysis. Companies and organizations in the nonprofit sector, education, health care, management and human resources, and analysts in market research and policy are just a few of many who will seek out graduates with degrees in our program. These job sectors are in stable fields — not trends — and the outlook on these jobs is strong. Education professionals, health care and experts in workplace diversity and inclusion are in high demand for 2021. The U.S. Bureau of Labor Statistics states that "employment of training and development managers is projected to grow 7 percent from 2019 to 2029, faster than the average for all occupations," (https://www.bls.gov/ooh/management/training-and-development-managers.htm) and our graduates are well-prepared for jobs in these settings. Other in-demand jobs our graduates would be well equipped for are as experts in workplace diversity (coordinators, aides and officers), particularly in relation to recent events such as #METOO and Black Lives Matter Movement, with literature suggesting diversity at the forefront to sustain companies.

According to Business Insider (The 15 Most In-demand Jobs, 2021), "LinkedIn found hiring for this group of jobs has grown by over 90% year-over-year" (https://www.businessinsider.com/most-in-demand-jobs-according-to-linkedin-report-2021-1#2-loan-and-mortgage-experts-make-between-43700-and-60000-14). Issues of diversity and inclusion are central to our curriculum and these positions are on the rise with Glassdoor (Hiring Experts, 2020) estimating anywhere between 30%-106% percent increase globally in demand (https://www.cnbc.com/2020/01/02/demand-for-diversity-and-inclusion-professionals-set-to-rise-in-2020.html), providing lucrative careers for many of our students upon graduation.

Executive Director Signature: 

Date: 12/06/2021

EXECUTIVE SUMMARY

Item Name: **Arizona State University's Request to Offer a Two-Year Academic Program in Military Studies in Conjunction with the United States Naval Community College**

☒ Action Item

Requested Action: Arizona State University asks the board to approve a new two-year academic program in Military Studies to be offered solely online in partnership with the United States Navy for enlisted service men and women.

Background

As provided in board policy, new program requests may be submitted throughout the year with the approval of the Academic Affairs and Educational Attainment Committee.

ASU requests the board approve a two-year Associate of Arts in Military Studies degree. ASU will offer this degree exclusively online in partnership with the United States Navy for enlisted sailors, marines and coast guards. The degree will not be offered at an Arizona location.

In recent years, public four-year institutions, including some state flagship universities, have joined community colleges and technical schools in offering Associate of Science and Associate of Arts degrees in a variety of disciplines.

Discussion

The new degree has been designed with and will be offered in partnership with the newly chartered U.S. Naval Community College. It has been designed for enlisted sailors, marines, and coast guards to gain a broad view of the historical and political contexts of contemporary U.S. national security and naval actions. The degree draws on ASU's strength in history, politics, global studies, interdisciplinary studies, and the causes and future of war with the USNCC providing specific military content and expertise, and ASU providing civilian framing and expertise.

Committee Review and Recommendation

The Academic Affairs and Educational Attainment Committee reviewed this item at its January 27, 2022 meeting and recommended forwarding the item to the full board for approval.

Contact Information:
Chad Sampson, ABOR chad.sampson@azregents.edu 602-229-2512
Nancy Gonzales, ASU nancy.gonzales@asu.edu 480-965-9585

Statutory/Policy Requirements

ABOR Policy 2-221 “Academic Degree Programs”

ABOR Policy 2-223 “Academic Locations, Degree Programs and Organizational Units”

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: Associate of Arts in Military Studies
Academic Department: *The name of the academic department or unit that will primarily administer the academic program. If the proposed program will be jointly administered across more than one department, please list the(se) additional department(s).* College of Integrative Sciences and Arts
Geographic Site: *The physical site (campus, extended campus, etc.) or modality where the academic program will be primarily delivered or administered.* Online modality administered by faculty on the Polytechnic campus
Instructional Modality: *The primary modality of the academic program (i.e. immersion, online, hybrid).* Online
Total Credit Hours: *The number of credit hours required to complete the academic program* 60
Proposed Inception Term: *The term and year in which the program will be first delivered (i.e. Spring 2021; Fall 2022)*. Fall 2022
Brief Program Description: *A short outline of the content and skills that the proposed program will deliver. A brief description of how the program fits into the institutional mission of the university. If relevant, please provide succinct information about existing related or complementary academic programming.* The Associate of Arts in Military Studies is designed for a partnership with the U.S. Naval Community College to provide training to enlisted personnel sailors, marines, and coast guards. The degree is a rigorous program that provides a comprehensive foundation of study in the history of war and warfare, history of regions identified in the National Defense

Strategy, the U.S. foreign policymaking process, International Relations theories, and U.S. political and military systems. Through the interdisciplinary curriculum, students will gain the tools to use historical analysis, demonstrate critical thinking, and develop strong written and verbal communication skills. The program includes capstone research or an applied project in which students explore the role of the U.S. Navy in advancing the goals of the nation in the past, present or future.

Learning Outcomes and Assessment Plan:
Define the core concepts and competencies that the program will convey and stipulate how these key learning outcomes will be measured and assessed.

Learning Outcome 1: Students will demonstrate associate degree-level proficiency in written communication.

- **Concepts**: Audience, Purpose, Genre
- **Competencies:** Ability to write effectively through clear and logical structure appropriate for the intended audience.
- **Assessment Methods**: Students' writing in the capstone project will be evaluated to determine proficiency. The project directions will identify purpose, audience and writing situation, and the project will involve sustained writing engagement. A standardized rubric considering context and purpose for writing, content development, conventions of organization and adherence to conventions of syntax and mechanics will be employed.
- **Measures**: Faculty-designed rubrics will be used to evaluate students' abilities to demonstrate the competencies identified to meet outcome 1. Performance metrics will be disseminated to program faculty to guide program revisions.

Learning Outcome 2: Students will identify sources and evaluate their applicability to a military studies research question.

- **Concepts**: Primary and secondary sources, source purpose, source bias
- **Competencies**: Ability to find sources to address a question and discriminate between them to identify strengths and weaknesses for addressing a particular question
- **Assessment Methods:** Final projects in the Introduction to Military Studies course will require students to identify a collection of historical sources, including primary sources, to address a question of military studies. Students will describe strengths and weaknesses of these sources in addressing their research question.
- **Measures:** Faculty will assess projects using custom rubrics designed for outcome 2 to identify patterns of competence and to revise curriculum to better meet student needs.

Learning Outcome 3: Students will define a justifiable position in response to a question in military studies using primary and secondary sources.

- **Concepts**: Critical thinking, point-of-view, assumptions, interpretation

- **Competencies:** Students will demonstrate critical thinking by defining a clear and justifiable position to a question of military studies using historical and political sources. They will select source information relevant to their position and use it to build the argument. They will also consider and refute simple counter-arguments.
- **Assessment Methods:** Students' capstone projects will be evaluated using the Critical Thinking VALUE rubric to determine proficiency.
- **Measures:** Faculty will assess results from the scoring rubrics to identify patterns of competence and to revise curriculum to better meet student needs.

Projected Enrollment for the First Three Years:
Please provide anticipated enrollment numbers for each of the first three years of the proposed program

First Year – 350 students
Second Year – 700 students
Third Year – 700 students

Evidence of Market Demand:
Please provide an estimate of the future state-wide and national demand for graduates of the proposed academic program. Please specify the source (e.g. Burning Glass; Jobs EQ; US Department of Labor) of workforce demand data and detail the assumptions that underpin these projections. If job market data is unavailable or not applicable please explain why and elaborate another justification for the proposed program.

The market demand for this degree has been determined via a partnership with the U.S. Navy.

Similar Programs Offered at Arizona Public Universities:
List existing programs at Arizona public universities that deliver similar concepts and competencies to the proposed new program.

Neither of the other Arizona public universities offers an undergraduate degree in this field. The Minor in Military Leadership at NAU is not focused on history, politics and global studies but rather on personal development of leadership competencies.

Objection(s) Raised by Another Arizona Public University? YES NO
Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?
If Yes, Response to Objections:
Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):
Please provide an estimate of the personnel and infrastructure requirements of the proposed new program and the corresponding costs. Please specify if the proposed program requires new resources (e.g. new faculty lines; a new laboratory; new teaching assistantships or scholarships) or whether resource needs may be met through the reassignment or extension of existing ones. If resource extension or reassignment will impact extant programs and/or operations, please make this clear.

No new resources will be required initially to support this program which will be managed by existing faculty.

Plan to Request Program Fee/Differentiated Tuition? NO

Estimated Amount: N/A
Program Fee Justification:
If planning to levy a program fee, please justify the estimated amount.
None

Note: The fee setting process requires additional steps, and forms need to be completed. Please work with your university and the ABOR Finance team (Leatta.McLaughlin@azregents.edu) to complete a fee request.

Specialized Accreditation? NO

Accreditor:
The name of the agency or entity from which accreditation will be sought

EXECUTIVE SUMMARY

Item Name: **Request for New Academic Organizational Unit for Arizona State University**

☒ Action Item

Requested Action: Arizona State University asks the board for approval of its new academic organizational unit requests effective in academic year 2022-2023.

Background/History of Previous Board Action

As provided in the board policy, new academic organizational unit requests may be submitted throughout the year with the approval of the Academic Affairs and Educational Attainment Committee.

Discussion

- ASU wishes to establish a new school under the College of Global Futures named the School of Ocean Futures.
- The new school will be the academic home for future programs in ocean sciences and related disciplines, supported by resources from the Bermuda Institute of Ocean Sciences.
- The new school will be funded through a combination of central university investment, existing grant support for the new faculty, tuition and program fees from new PhD and MS programs once created, and new support from philanthropy and additional federal grants.
- The School of Ocean Futures will position ASU and the College of Global Futures as leaders in transdisciplinary education and research.

Statutory/Policy Requirements

ABOR Policy 2-223 “Academic Locations, Degree Programs and Organizational Units”

Contact Information:
Nancy Gonzales, ASU nancy.gonzales@asu.edu 480-965-9585
Chad Sampson, ABOR chad.sampson@azregents.edu 602-229-2512

Request to Establish a New Academic Organizational Unit

University: Arizona State University

Name of Organizational Unit:

School of Ocean Futures

Academic Department:
The name of the academic department or college in which the organizational unit will be located

College of Global Futures

Geographic Site:
The physical site (campus, extended campus, etc.) where the organizational unit will be located

Tempe campus with learning experiences in Hawaii and Bermuda

Proposed Inception Term:
The term and year in which the new organizational unit will begin operating

Fall 2022

Brief Description:
A short outline of the activities that the organizational unit will perform. Please include, as applicable, a list of the degree and certificate programs that the unit will offer with estimates of the number of students served; an outline of research activities; public service and other significant activities.

The new school, established under the College of Global Futures, will be the academic home for programs in ocean sciences and related disciplines and will house research and educational opportunities on the Tempe Campus, at the Bermuda Institute of Ocean Sciences (BIOS) and in Hawaii. The school will advance ASU's student access and excellence missions by providing research, experiential learning, and educational activities at a world-class level with leading faculty in ocean futures-relevant areas such as physical oceanography, marine biology, ocean engineering, geographical sciences, data science, molecular biology, chemistry, environmental quality, optics, biogeochemistry, biodiversity, ecosystem function and services, ocean fluxes, and climate change. Graduate-level research degrees with coursework and research opportunities in Bermuda and Hawaii are currently in the planning stages.

The expected number of students served through field-based course experiences and future degree offerings includes 30 in a future PhD program in ocean sciences and 200 to 400 in the undergraduate programs, including experiential learning opportunities at sea, in ocean sciences.

The new school will help to further establish ASU as a global center for transdisciplinary research, education and solution-oriented activities.

Reason for Establishing the Organizational Unit:
Please briefly explain why the organizational unit is being created:

The School of Ocean Futures will expand our capacity to study the Earth system holistically (the ocean covers ca. 70 percent of the Earth's surface). It will address the role of the ocean in the Earth system at a time when human activities place increasing pressure upon the life supporting systems of our planet. Specifically, it will address the fundamental dynamics of the ocean as part of the Earth system, as well as its response to perturbations caused by global change. Changes in the ocean such as increasing sea surface temperatures and rising sea level have implications for the entire globe including its land surface. The school will provide the academic home for studies of future states of the ocean, and help establish ASU as a leader in field-based ocean research and learning opportunities. The transdisciplinary composition of the school and its connections to the College of Global Futures schools – School of Sustainability, School for the Future of Innovation in Society, and School of Complex Adaptive Systems – enable unique learning and training opportunities. These opportunities will allow students to explore solutions to some of the most pressing challenges, and will prepare them for professions dedicated to solving existing problems through application of the most advanced decision support tools.

Resources
Please provide information about the personnel and infrastructure required to create this new unit, and an estimate of the costs associated.

ASU has affiliated with BIOS (a 501c3) through an agreement that makes it a component unit of ASU. This agreement involved a change in governance structure from a board of directors to a sole member structure and includes a five-year services agreement that gives ASU control and custody of the BIOS facilities and services needed to conduct research and deliver educational programs and experiences in Bermuda.

ASU has committed centrally to fund eight tenure track faculty hires that will include BIOS faculty transfers. Adding to this group, seven to ten tenure track ASU faculty in the College of Global Futures and The College of Liberals Arts and Sciences will be appointed to the new school through unit transfers or joint appointments – seven of these faculty are working on ocean science-related problems centered around Hawaii. There will also be five fixed-term faculty appointments. Funding for faculty positions will be drawn from internal sources, including the existing grant and philanthropic support that the faculty members bring with them to the new school.

Faculty members will lead experiential learning and research opportunities for students on the Tempe campus, in Bermuda and in Hawaii. Infrastructure already exists in these locations, and the new school will be funded through a combination of central university investment, existing grant support for BIOS faculty and infrastructure, tuition and program fees from new PhD and MS programs once created, and new support from philanthropy and additional

federal grants.

To facilitate student success, three staff members will be necessary: a program manager, an instructional design specialist, and an advisor. Initially these staff will be shared with the other schools in the College of Global Futures through their existing collaborative organizational structure. New staff positions will be added as needed and will be supported through enrollment growth funding.

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Request to Rename Academic Program

University: Arizona State University

Current Name of Academic Program:

BS in Women and Gender Studies

New Name of Academic Program:

BS in Gender, Women and Sexuality Studies

Academic Department:
The name of the academic department or unit that primarily administers the academic program. If the renamed program is jointly administered across more than one department, please list the(se) additional department(s).

New College of Interdisciplinary Arts and Sciences

School of Humanities, Arts and Cultural Studies

Geographic Site:
The physical site (campus, extended campus, etc.) or modality where the academic program is primarily delivered or administered.

West campus

Instructional Modality:
The primary modality of the academic program (i.e. immersion, online, hybrid).

Both immersion and online

Brief Program Description:
A short outline of the content and skills that the program delivered.

Through coursework and scholarly research, students in the BS program in women and gender studies gain critical knowledge and a deeper understanding of feminist theory and practice. Students are offered the opportunity to challenge conventional wisdom about gender and explore new ways of viewing the world through the study of:

- culture
- economics
- film
- history
- literature
- politics
- science

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Reason for Renaming the Program:
Please briefly explain why the program is being renamed.

The School of Humanities, Arts and Cultural Studies is requesting to add sexuality to the title of this degree program to remain competitive, align with other women's studies programs nationwide and more closely reflect the work being done in the program and in the field, and to align with other university offerings.

Sexuality studies is of interest to many students, is embedded in our work and is built into our curriculum. This name change will help us further market the work of the program and potentially attract more students.

There are many divergent career paths available for our graduates. This degree allows the application of intersectionality in analysis. Companies and organizations in the nonprofit sector, education, health care, management, human resources, and analysts in market research and policy are just a few of many who will seek out graduates with degrees in Gender, Women and Sexuality Studies. These job sectors are in stable fields — not trends — and the outlook on these jobs is strong. Education professionals, health care and experts in workplace diversity and inclusion (https://www.bls.gov/ooh/management/training-and-development-managers.htm) are in high demand for 2021, and our graduates are well-prepared for jobs in these settings. (https://www.businessinsider.com/most-in-demand-jobs-according-to-linkedin-report-2021-1#2-loan-and-mortgage-experts-make-between-43700-and-60000-14) (https://www.cnbc.com/2020/01/02/demand-for-diversity-and-inclusion-professionals-set-to-rise-in-2020.html)

Executive Director Signature: _____

Date: 4/12/2022

EXECUTIVE SUMMARY

Item Name: **Request for New Academic Program for Arizona State University**

☒ Action Item

Requested Action: Arizona State University asks the board to approve its new academic program request effective in academic year 2022-2023.

Background/History of Previous Board Action

As provided in the board policy, new academic program requests may be submitted throughout the year with the approval of the Academic Affairs and Educational Attainment Committee.

Discussion

Arizona State University is requesting a new BA in Applied Business and Technology Solutions, a degree designed to provide immediate access to business coursework contextualized by the work experiences of students. The degree will be open to all who meet university admission requirements, provide a customizable program to meet individual learner goals, and offer upskilling opportunities to students already working.

Committee Review and Recommendation

The Academic Affairs and Educational Attainment Committee reviewed this item at its May 26, 2022 meeting and recommended forwarding the item to the full board for approval.

Statutory/Policy Requirements

ABOR Policy 2-223 “Academic Locations, Degree Programs and Organizational Units”

Contact Information:
Nancy Gonzales, ASU nancy.gonzales@asu.edu 480-965-9585
Chad Sampson, ABOR chad.sampson@azregents.edu 602-229-2512

Request to Establish New Academic Program in Arizona

University: Arizona State University

Name of Proposed Academic Program: BA in Applied Business and Technology Solutions
Academic Department: W. P. Carey School of Business *Dean, W. P. Carey School of Business*
Geographic Site: Downtown, Polytechnic, Tempe and West campus; Online
Instructional Modality: Immersion and Online
Total Credit Hours: 120
Proposed Inception Term: 2022
Brief Program Description: The BA in Applied Business and Technology Solutions is designed to meet the needs of workforce learners who wish to complete an undergraduate degree in business. In this degree program, students will immediately take accounting, business analytics, computer information systems, economics, finance, management, marketing, process management, and business ethics courses and directly connect what is taught in the classroom to their working environment. Applied internship courses will be built into the curriculum to enable students to put what they are learning into practice, and emphasis areas will be added to allow the student to further customize the degree to their working environment. This program meets employees' and employers' needs by improving accessibility to business classes by utilizing fewer prerequisites and scaffolding skill development in diverse academic and professional contexts. The degree will be open to all who meet university admission requirements while providing a customizable program to meet individual learner goals.
Learning Outcomes and Assessment Plan: **Learning Outcome 1:** Students will evaluate a business problem and apply an appropriate technology/business software solution.

- **Concepts:** problem identification, situational analysis, data analysis, decision-making, process improvement

- **Competencies:** Students will be able to identify and examine business threats, evaluate options/solutions, use appropriate technology/software to solve a problem and/or improve a business process, and draw conclusions using quantitative and qualitative analysis.

- **Process:** Students will complete an applied project in their capstone course WPC 494. Students will be assessed outside of the normal grading process on their ability to evaluate a business problem and apply business skills and technology to develop a solution. Faculty reviewers will be identified and assigned a portion of assignments for assessment (e.g. each faculty will be assigned and review 50 student assignments), using a 5-point rubric developed for assessment. This direct measure data, along with indirect measure data regarding critical thinking skills from ASU's Graduating Student Report Card and Undergraduate Alumni Survey will be aggregated for the degree program and overall results of this outcome will be shared with the academic unit as part of a continuous improvement effort. This information will also be employed by the administration as part of a school-wide assessment update and review. A faculty committee will use the assessment data and student and alumni survey data to determine whether curricular changes should be made and, if so, where in the curriculum that can and should happen.

- **Measures:** Students will complete an applied business project in WPC 494, the capstone course. They will be assessed on ability to evaluate a business problem and use technology in its solution. Assessment will be done using a 5-point rubric designed for assessment purposes, with a goal of 75% of students achieving 70% or higher. Additionally, on the Graduating Student Report Card and Undergraduate Alumni Survey, graduating students and alumni three-years post-graduation will evaluate how much their university experience equipped them with critical thinking skills. The goal is for 75% or more of respondents to select "quite a bit" or "very much."

Learning Outcome 2: Students will effectively communicate their understanding of a business situation in writing.

- **Concepts:** business communication, consideration of purpose and audience, organized and thorough presentation of ideas, readability

- **Competencies:** Students will demonstrate the ability to write organized, clear and concise business communication. Students' written work will demonstrate purpose, be designed for the intended audience, and employ accepted grammar and style. Students will present an evaluation of a business situation with appropriate description and evaluation based in business theory.

- **Process:** As a final project in the business capstone, students will complete a written analysis of a business situation and proposed solution. The written work will be reviewed for assessment separate from course grading using a 5-point rubric focused on business communication skills. Faculty reviewers will be identified and assigned a portion of assignments for assessment (e.g. each faculty will be assigned and review 50 student assignments), using a 5-point rubric developed for assessment of communication. Course faculty will be assigned student work randomly for assessment review. Data will be compiled along with indirect measure data from the Graduating Student Report Card and Undergraduate Alumni Survey regarding exiting student and alumni ratings of how their communication skills were impacted by their ASU experience. It will be shared with the academic department, including a committee engaged in reviewing college-wide curriculum requirements, as part of an annual review to determine whether changes need to be made to curriculum.

- **Measures:** Written communication skills will be evaluated in the capstone course WPC 494 based on a written analysis of a business problem and solution using a 5-point rubric. The target performance is that 75% of student work will be scored 70% or higher using the rubric created for communication skills. Students graduating and those who graduated three-years earlier will be asked to rate how well ASU prepared them with communication skills on the University's Graduating Student Report Card and Undergraduate Alumni Survey. The target is that 75% of respondents will indicate that their experience prepared them with necessary communication skills "quite a bit" or "very much."

Learning Outcome 3: Students will demonstrate ethical awareness by recognizing and responding to ethical issues presented in business scenarios.

- **Concepts:** behavioral ethics, ethical dilemma analysis, ethical theories and tests

- **Competencies:** Students will be able to identify unethical business behavior, stakeholders and impacts of unethical behaviors on them, and understand the process to follow when analyzing an ethical problem. Students will understand various ethical models and how to apply them.

- Process: Throughout the semester students enrolled in LES 305 will take a series of quizzes and tests through Canvas and will answer multiple questions from a larger question bank in each of these four categories: ethical issue spotting, steps to analyze ethical dilemmas, behavioral ethics, and ethical theories and tests. At the end of the semester, data for each student will be compiled to determine scores within each of the above categories. Additionally, indirect measures regarding ethics from ASU's Graduating Student Report Card and Undergraduate Alumni will be reported. The direct and indirect measures will be shared with the instructors of the LES course, assessment representatives for the program, and academic unit and school leadership to aid in annual review of curriculum.

- Measures: A series of quizzes and exams will be given via Canvas throughout the semester in LES 305. Students will answer questions tagged specifically for assessment. The performance target is that 75% of students will achieve 70% or greater on these questions. Additionally, graduating students and alumni will report on ASU's Graduating Student Report Card and Undergraduate Alumni Survey how much their ASU experience contributed to their ability to understand ethical standards in their field. The performance target is that 75% of respondents will select "Quite a bit" or "Very much."

Projected Enrollment for the First Three Years:

Year 1: 500
Year 2: 650
Year 3: 800

Evidence of Market Demand:

Corporate partners of the W. P. Carey School of Business regularly express interest in upskilling workers, indicating that employees need immediate access to critical business content including marketing, finance and management. Additionally, employers are stressing the need for data analytics skills which will be a cornerstone of this curriculum. This data analytics foundation, in lieu of calculus, will also be attractive to learners not coming directly from an educational institution who often seek to build math skills concomitant with completion of business coursework. This program will be open to all students who meet university admission criteria, creating greater access to students interested in business degrees.

According to the World Economic Forum, the rapid acceleration of automation and economic uncertainty will cause 85 million jobs to be displaced and 97 million new jobs to be created by 2025. Within Arizona, approximately 57% of the population has a high school diploma or some college but has not yet finished their bachelor's degree. For students pursuing business, the outlook is very positive. According to the

U.S. Bureau of Labor Statistics (BLS) Career outlook, employment in business occupations will grow 8% adding 750,800 jobs between 2020 – 2030. The Bureau of Labor Statistics also reports workers in the business field had an average earning of $72,250 which was higher than the median annual wage for all occupations of $41,950.

Similar Programs Offered at Arizona Public Universities:

ASU, Northern Arizona University, and the University of Arizona each have business degrees with a strict hierarchy of prerequisites. This program is differentiated from these programs by leveraging a data analytics foundation that develops critical thinking skills. The core program will be different from W. P. Carey's traditional BA/BS programs, given its different prerequisite structure; however, the content will not be less rigorous. Courses will be offered by scholarly academic faculty to enable this program to meet AACSB accreditation standards. Additionally, our Career Management and Employer Engagement group will tailor career preparation courses and programs specifically for students in this program to help them take the next step in their careers.

Objection(s) Raised by Another Arizona Public University? YES NO

Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:

Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):

Internal resources already allocated to the W. P. Carey School of Business will be reallocated to launch this program and student enrollment will support growth.

Program Fee/Differentiated Tuition Required? **YES** NO

Estimated Amount: $525 per semester

Program Fee Justification:

The fee listed above is part of ASU's existing college-fee tier system. Business programs are assessed the tier 4 fee.

Specialized Accreditation? **YES** NO

Accreditor:

This degree program would be accredited by AACSB, the Association to Advance Collegiate Schools of Business.