NEW ACADEMIC PROGRAM –REQUEST FORM

I. PROGRAM NAME, DESCRIPTION AND CIP CODE
Ph.D. Applied Ethnomusicology and Intercultural Arts Research (EIAR)

People-centered research concerning music and related arts in society, education, human health and well-being in global contexts.

30.9999 (Multi-Interdisciplinary Studies, Other)

A. PROPOSER’S NAME, TITLE, EMAIL AND PHONE NUMBER

Janet Sturman, Associate Dean, Graduate College, Sturman@email.arizona.edu
520-621-0420; 520-245-3362

B. PROPOSED PROGRAM NAME AND DEGREE TO BE OFFERED – for PhD programs indicate whether a terminal Master’s degree will also be offered. Indicate whether a minor will also be offered and provide the curriculum as an addendum to the proposal.

Ph.D. Applied Ethnomusicology and Intercultural Arts Research
The MA will also be offered, for admission and as a terminal master’s option.

C. CIP CODE – go to the National Statistics for Education web site (http://nces.ed.gov/ipeds/cipcode/browse.aspx?y=55) to select an appropriate CIP Code or contact Martin Marquez (martinmarquez@email.arizona.edu) for assistance.

30.9999 (Multi-Interdisciplinary Studies, Other)

D. DEPARTMENT/UNIT AND COLLEGE – indicate the managing dept/unit and college for multi-interdisciplinary programs with multiple participating units/colleges.

Ethnomusicology and Intercultural Arts Research Graduate Interdisciplinary Program (GIDP) in the Graduate College.

Campus and Location Offering – indicate by highlighting in yellow the campus(es) and location(s) where this program will be offered.

UA South Campus  UA Main  UA Online
II. PURPOSE AND NATURE OF PROGRAM—describe the purpose and nature of your proposed program. Compare and contrast the purpose and nature of your proposed program to similar programs at two peer institutions. Complete the appropriate comparison chart to assist you. List of UA peer institutions can be found here. Comparison of additional relevant programs may be requested.

Comparable Curricula at Peer Institutions for Graduate Curriculum Requests

Please use this chart to provide comparison program data to support implementation requests for new graduate programs, degrees and certificates at the University of Arizona. Please attach as appendices detailed curricula (typically available from a peer university program’s website).

<table>
<thead>
<tr>
<th>Program Name/University</th>
<th>Proposed UA Program</th>
<th>Ph.D. Interdisciplinary Arts, Ohio University</th>
<th>Ph.D. in Cognitive and Systematic Musicology at Ohio State U</th>
<th>UCLA Ph.D. in Systematic Musicology</th>
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</thead>
<tbody>
<tr>
<td>Currently enrolled students</td>
<td>N/A</td>
<td>27 (16 with GA support)</td>
<td>8</td>
<td>33 (Fall 2016)</td>
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<tr>
<td>Number of Faculty for program</td>
<td>14 – interdisciplinary core faculty</td>
<td>7</td>
<td>3</td>
<td>15</td>
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<tr>
<td>Focus</td>
<td>To equip scholars with the interdisciplinary training, skills, and research experience necessary to address contemporary concerns through understanding the arts in society, education, human health and well-being in global contexts. The interdisciplinary partnerships facilitated by this degree include Interdisciplinary Arts is a consortium of scholars and scholar-artists in the following areas: African Arts and Literatures, Art and Architectural History, Ethnomusicology/Musicology, Film Studies, Performance Studies, Philosophy of Art, and Theater. Each faculty member poses a distinct perspective on the interrelationships, Comprehensive and thorough training in ethnomusicological theory, history, methods, and analytical skills through diverse courses, field and lab research projects, and performance. The program carries a special focus on current developments in ethnomusicology, emphasizing humanistic, social scientific, and cognitive approaches.</td>
<td>Instruction in ethnomusicology tries to achieve a balance between understanding the important intellectual issues in ethnomusicology and depth of specialization in one or more of the world's music-culture areas including Africa, Europe, the Americas, west, east, south, and southeast Asia. The sounds and structure of music and musical performance are central features of faculty research and teaching, along with interpretations of the complexities of musical sound in social and cultural terms. Underlying the curriculum is a commitment to the theoretical and analytical study of music as well as to the performance of the music and involvement in its cultural context. In systematic</td>
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<td>science, public health, cognition, social and behavioral sciences, humanities, and education, along multiple arts disciplines. The emphasis lies on uncovering the contributions of ethnomusicology to other disciplines.</td>
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<td>interdependencies and interactions among the arts, critical studies, and history.</td>
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<td>musicology, laboratory research in acoustics, psychoacoustics, and psychology of music has focused on musical communication and expression; music, film, and animation; natural and synthetic instrument timbres; gamelan acoustics and tuning; music perception and cognition; and computer applications in music research. Philosophical work in the program is applying the insights of continental philosophers such as Hans-Georg Gadamer, Martin Heidegger, and Paul Ricoeur to music and to concepts of musical culture and tradition. Further information: <a href="https://ethnomusicology">https://ethnomusicology</a> site-ym.com/?GtP_UCLA</td>
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<td><strong>Starting framework</strong></td>
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<td>The program builds on the interdisciplinary, intercultural legacy and promise of the discipline of ethnomusicology enhanced and strengthened by research and instructional collaborations supported by the UA’s graduate interdisciplinary programs.</td>
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<td>Strong education in a primary and secondary discipline. The centerpiece of the program is a series of interdisciplinary, team-taught seminars. Faculty and students come together to investigate intensively a selected topic and/or period from multiple perspectives and disciplines. Students take courses from faculty across the College of Fine Arts, as well as in disciplines outside the fine arts.</td>
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<td>Through a significant ongoing university grant to the ethnomusicology program, funding is available to support student field research, offer graduate research associateships, maintain a state-of-the-art research laboratory; and support conferences and residencies of visiting artists and scholars.</td>
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<td>The graduate program includes a specialization in systematic musicology, which is currently the only one of its kind in the United States. Since its inception under the leadership of Charles Seeger, systematic musicology has created a distinguished record of scholarship, noted for its scholastic depth and innovation.</td>
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<td><strong>Methodological Approaches</strong></td>
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<td>While students have the chance to pursue either philosophical or empirical lines of study, the program will emphasize the identification of ethnomusicology’s ethnographic, inter-cultural, people-centered findings and perspectives with</td>
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<td>Students in the ethnomusicology/musicology track have two options: Option 1 is to write a dissertation that explores music and its connections with one secondary area. There are five potential secondary areas: African Arts and Literatures</td>
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<td>Regular interdisciplinary study within the College of Arts and Sciences, with course offerings in anthropology, linguistics, psychology, music cognition, speech and hearing science, neuroscience, philosophy, comparative studies, theater, and dance studies.</td>
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<td>The specialization in Systematic Musicology has three goals: to provide students with a multidisciplinary curriculum that includes a cross-cultural perspective; to encourage critical awareness of current and historical approaches to the study of music; and to develop interdisciplinary research. The specialization offers the Master of Arts (M.A.) and Doctor of Philosophy (Ph.D.) degrees in ethnomusicology. Though the M.A. degree is offered,</td>
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the aim of advancing research beyond the realm of music as art and particularly towards addressing current contemporary problems and concerns in the domains of human rights, healthy human and natural environments, and in deepening understanding of the human mind and body.

Art and Architectural History
Film Studies
Philosophy of Art
Theater

Option 2 is called the "scholar/artist track." Here, the student's secondary area is private study with one of the professors in the School of Music. Option 2 tends to appeal to students who are completing their MA degree in performance or composition but also have an interest in scholarship. The culminating component of the scholar/artist track is an integrated scholarly/creative dissertation.

Exemplary Question(s)
What role might music play in sustaining the environment and natural resources?
In developing therapies using music for aphasia, does it matter if the musical materials reflect the patient’s native culture?
How can teachers use music to
Do the existing historical and contemporary approaches to aesthetics do justice to the uniqueness and complexity of music—philosophical theorizing in the cultures of, for example, India, China, or Bali? What kind of an approach would allow us to avoid the pitfalls of comparativism.

Of particular interest is the program’s sub-specialization in Cognitive Ethnomusicology, unique in the nation. Cognitive ethnomusicology relates cultural and biological factors of music making and experience. It aims to understand how and to what extent cognitive processes in music production and perception are influenced by cultural factors. The program is oriented toward a broad and thorough training in theory and methods (field as well as laboratory) in cognitive ethnomusicology. Studies emphasize affective-emotional factors and the embodiment of musical knowledge, cognition, and experience. Research facilities include our own Ethnomusicology Laboratory, as well as other associated university labs (such as the music cognition lab and EEG lab).

How are gamelans tuned and what do those tunings reveal about human perception? How do various listeners perceive the Indian modes, or the acoustics of gamelan modes?

students with the desire and ability to attain the Ph.D. are sought. At UCLA, systematic musicology consists of two streams, one scientific and empirical, the other philosophical and critical. In a third stream, the specialization includes Adler's interest in comparative musicology through intimate contact with the Ethnomusicology specialization. The empirical stream, taught by Roger Kendall, concentrates on musical perception and cognition, instrument acoustics, tuning systems, analysis of timbre, and the relationship between music and other modalities, such as film and animation. Computer skills and statistics are crucial parts of this stream, and students and faculty are working on issues and techniques related to reporting their findings on the World Wide Web.

The philosophical stream, taught by Roger Savage, concentrates on musical aesthetics, sociology of music, semiotics, hermeneutics, and critical theory. Reading in continental philosophy is particularly important for this stream. Students and faculty ask questions about the specific ways that music serves social and cultural needs.
<table>
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<tr>
<th><strong>sustain or revitalize native languages?</strong></th>
<th><strong>Orientalism, and distorting biases in general? What kind of a philosophical perspective can assure at once a meaningful multilateral dialogue among world musical cultures, and their resistance to the leveling effects of globalization?</strong></th>
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</table>

| **Sample Course(s) or attach detailed curricula, as above** | **See pp 9-19 of this proposal** | **https://www.ohio.edu/finearts/interarts/academics/graduate-courses.cfm**  
**iART 5401 World Aesthetic Ideas**  
**IART 7000 Research Skills** | **https://music.osu.edu/sites/music.osu.edu/files/PhD%20with%20MA%20Semesters.pdf** | **http://catalog.registrar.ucla.edu/ucla-catalog2017-444.html** |
|---|---|---|---|---|
| **Target Careers** | **Educational settings (pre-college, public schools, community, universities)  
US Governmental Agencies;  
(Smithsonian Institution, Library of Congress, National Endowment for the Arts);  
Publishing; Recording Companies  
Folkways or Rounder Records  
Media providers such as Alexander Street Press  
Museums and resource centers  
Health Consultants (Music Therapy)** | **A variety of professional careers, especially college and university teaching. The program prepares students for scholarly research, while also valuing creative activity in the arts.** | **Careers related to ethnomusicology, emphasizing in humanistic, social scientific, and cognitive approaches.** | **University teaching careers, as well as careers in library science and archiving, the music industry, public service, and music technology.** |
| Total Units Required | Master’s degree. Units not specified. Requirements stated in courses, not units. The total is 14 courses: 2 Interdisciplinary Arts seminars. 4 seminars in primary area. 2 seminars in secondary area. 1 seminar in Philosophy of Art. 1 Critical Theory seminar. 1 Transnational and Global Theories seminar. 2 research/pedagogy courses 1 dissertation proposal course. | 30 units in Master’s degree 24 units in major area of concentration 16 units in supportive and related studies 10 units in dissertation | Master’s degree (48 units) Students must take a minimum of 24 quarter units of graduate and upper division courses (normally six courses). A minimum of 12 units (normally three courses) must be in the department and a minimum of 16 units (normally four courses) must be graduate level seminars. |

| Pre-Admissions expectations (i.e. academic training to be Completed Prior to Admission) | Earned bachelor’s degree; musical training; statement of purpose | Diagnostic and qualifying examinations. | Preliminary Examination required. | Written and Oral Qualifying Examinations are required. |
| **Research Methods, Data Analysis, and Methodology Requirements** | 12 units of theory and method, including work in the ethnomusicology core, and from elective areas | The centerpiece of the program is a series of interdisciplinary, team-taught seminars. Faculty and students come together to investigate intensively a selected topic and/or period from multiple perspectives and disciplines. Students are also required to take courses from faculty across the College of Fine Arts, as well as in disciplines outside of the fine arts. The School emphasizes pedagogical training and thus plays a vital a role in the university by engaging undergraduates in the interdisciplinary study of the arts through general education courses. | Training in ethnomusicological theory, history, methods, and analytical skills through diverse courses, field and lab research projects, and performance. Cognitive ethnomusicology is an important area of focus. | Course choices is determined by the student, who must demonstrate knowledge in the following areas in their written comprehensive exams: (1) History, theory, and method in systematic musicology; (2) One of the theoretical approaches to systematic musicology: psychology, sociology, organology, ethnomusicology, acoustics, or aesthetics; (3) General western music theory and history; (4) A topic outside of systematic musicology or another of the theoretical approaches to systematic musicology listed in (2) above. |
| Internship, Practicum, Applied Course Requirements. (Yes/no. If yes, please describe.) | Yes 3 units. | No | No | No |
| Master Thesis or dissertation required (Yes/No) | YES | Yes | Yes | Yes |
| Additional Requirements (Please Describe.) | Written and oral comprehensive examinations  
Final Oral Examination (Defense of the Dissertation)  
Demonstrated expertise in a language other than English required as | Comprehensive examination  
Final Oral Examination (Defense of the Dissertation)  
Reading of second language proficiency examination. | Candidacy Examination  
necessary for research specialization, 18 units

All courses are chosen from several options depending on the primary and secondary areas of study

16 units

Six elective courses

The minor area is critical to the development of a secondary area of expertise and in contributing to the research specialization. Options are open, just a few of the recommended options are:

- Anthropology
- Library Science
- Cognitive Science
- Public Health
- American Indian Studies
- Environmental Studies
- Cognitive Science
- Social, Cultural, and Critical Theory (Minor)

African Arts and Literatures; Art and Architectural History; Film Studies; Philosophy of Art; Theater

Program does not have required minors. However, it requires 16 units in supportive studies not included in the major area of concentration.

Program does not have required minors.

Sources

UCLA
http://www.apb.ucla.edu/campus-statistics/enrollment
https://www.ethnomusic.ucla.edu/ethnomusicology
https://www.ethnomusic.ucla.edu/graduate-program-systematic-musicology-specialization-1
http://catalog.registrar.ucla.edu/ucla-catalog2017-441.html
https://grad.ucla.edu/programs/herb-alpert-school-of-music/ethnomusicology/
OSU
https://music.osu.edu/ethnomusicology
https://ethnomusicology.site-ym.com/?GP_OSU
https://music.osu.edu/sites/music.osu.edu/files/PhD%20with%20MA%20Semesters.pdf
Ohio University
https://www.ohio.edu/finearts/interarts/academics/graduate-courses.cfm
http://www.catalogs.ohio.edu/preview_program.php?catoid=47&poid=12444&returnto=3309
https://www.ohio.edu/finearts/interarts/admission/index.cfm

The purpose of the program and the Ph.D. is to equip scholars with the interdisciplinary training, skills, and research experience necessary to address contemporary concerns from an intercultural understanding of the arts in society, education, human health and well-being in global contexts. The interdisciplinary partnerships facilitated by this degree will advance the discipline of
ethnomusicology and intercultural arts research, connecting scholarship in the field to a range of disciplines and applications.

III. PROGRAM REQUIREMENTS—list the program requirements, including minimum number of credit hours, required core, electives, and any special requirements, including subspecializations, subplans, theses, internships, etc. on the appropriate comparison chart. Use your completed comparison chart to explain how your requirements are: 1. similar and 2. unique from the compared public institutions.

PROGRAM REQUIREMENTS –
66 graduate total credits, including 18 units of dissertation.

CURRICULUM OUTLINE

12 units of core courses
6 units of fine arts electives
18 units in Major specialization, including:
  3 units of internship, practicum or management experience
  6 units of ethnological or cultural study
  6 units of area study (defined by region, i.e. Mexico, or thematic topic, i.e. ecology, health)
  3 units of research methodology, analytical theory or research design
12-18 units in Minor Area
18 units of dissertation

66 minimum credits to earn the degree

Language Requirement: candidates will be required to demonstrate fluency in relevant research language.

Doctoral Minor in Ethnomusicology (15 units) will require:

9 units of core ethnomusicology courses; 3 units of arts elective options; 3 units from cultural study, area study or research area elective options.

A. CURRENT COURSES AND EXISTING PROGRAMS–
The courses in the lists were compiled in discussion with the GIDP Executive Board, and in consultation with faculty in the relevant units. Support letters from participating departments are appended at the end of the proposal.

Courses for Ph.D. in Applied Ethnomusicology and Intercultural Arts Research (EIAR)
Asterisk* indicates courses to be developed
CORE COURSES (12 units)

*Eiar 601 (3 units) — Intercultural and Interdisciplinary Research Methods [this would be a new course]
MUS 696F (3 units) — Seminar in Ethnomusicology (Foundations, theory and method in ethnomusicology)
MUS 695B (6 units) — Special Topics in Ethnomusicology (Course exists; Theories of Performance; *additional topics proposed: Social Change and Performance; Sound Studies; Music and Development; Children’s Music Cultures; Music and Cognition; Music and Healing; Organology; Music and Tourism; Music, Gender, and Sexuality; various Regional Music Studies, such as Music of Ireland; Music of Zimbabwe; Music in the Celtic World)

FINE ARTS ELECTIVES (6 units required; choices will depend on student qualifications, plans for specialization, and availability of course. Other courses in these areas may be substituted with the approval of the program advisor and course instructor.)

Music Theory
MUS 696C (3) Seminar in Music Theory
MUS 625A (3) Current Trends in Music Theory
MUS 625B (3) Specialized Trends in Music Theory

Music Education
MUS 654 (3) Psychology of Music

Performance Study — ensemble, class or individual study
MUSI 580 (2) Individual Study; also available as MUS 699
MUS 501 (1) Coached Ensemble (Options include: Chipa Mbira Ensemble; Purple Bamboo Chinese Traditional Silk and Bamboo Ensemble; Tíolacadh Irish Ensemble; Mariachi Arizona; Steel Drum Ensemble; other options may become available
DNC 596E (3) Seminar in Music and Dance Collaboration

Art
ARE 520 (3) Community, Culture, and Art Education
ARE 530 (3) Introduction to Research in Art Education
ARE 631 (3) Arts-based Research (also under Methodology)
ARE 576 (3) Art and Cultural Criticism in Art Education
ARE 633 (3) Issues and Recent Research in Art and Visual Cultural Education (flexible – topics vary)
ARE 562 (3) Teaching Art in Higher Education
ARH 500 (3) Topics in Museum Studies (good to include; theory & prof. practice)
ARH 511 (3) Methods in Art History [put also in Theory & Method section]
ARH 530 (3) Queer Cinema [list with gender and women’s studies]
ARH 596 (3) Seminar in Art History (Topic vary, examples include - Issues in Contemporary Theory and Criticism)
ARH 596V (3) Issues in Native American Art
ART 587 (3) Global Trends in Visual Literature
ART 596F (3) Design, Art, and the Environment

Dance
DNC 500 (3) Dance and Culture
DNC 555 (3) Biomechanics for Dancers

Film, Theater, Television
FTV 504 (3)  Topics in Film and TV Production
FTV 533 (3)  Digital Media Today
FTV 554 (3)  Representing Culture in the Media
FTV 696T (3)  Seminar in Media History and Theory
TAR 524 (3)  African American Drama and Performance

MAJOR SPECIALIZATION ELECTIVES (18 units total, + modules)
+Internship, Practicum or Management Experience (3 units)

Internship Options include (substitutions from other departments permitted with approval from the advisory committee):
* EIAR 599 (1-6) Independent Study
* EIAR 699 (1-6) Independent Study
* EIAR 693 (1-6) Internship
* EIAR 694 (1-6) Practicum

Management Course options include:
AIS 541A (3)  Natural Resource Management in Native Communities
ANTH 537 (3)  Data Management and Analysis
ANTH 540A (3)  Cultural Resource Management
DVP 630 (3)  Essential Management Principles for Development
LIS 530 (3)  Cataloguing and Metadata Management
LIS 608 (3)  Managing the Information Organization
LIS 673 (3)  Managing the Digital Information Environment
PHPM 574 (3)  Public Health Policy and Management

+Cultural Study (6 units) options include:
AIS 503 (3)  Globalization and Indigenous People
AIS 504A (3)  Fundamentals of American Indian Studies
AIS 505 (3)  Traditional Indian Medicine: Health, Healing, and Well Being
AIS 515 (3)  American Indians and the Urban Experience
AIS/ANTH 549A (3)  Folklore
AIS 552A (3)  Mixed Media Stories: Stories in Text and Film
AIS 575 (3)  Contemporary Federal Indian Policy
AIS 581A (3)  Issues in Native American Health
AIS 590 (3)  Indian Religions and Spirituality
AIS 595 (3)  American Indian Studies
AIS 596M (3)  Studies in the Oral Traditions
AIS 596V (3)  Issues in Native American Art
AIS 631 (1-3)  Law and Culture
AIS 646 (3)  Ancient and Contemporary Voices
AIS 676 (3)  Exploring Critical Issues in Native American Curricular Development
AIS 697B (3)  Globalization and Transformation of Culture

AFAS/TAR 524 (3)  Art, Propaganda, Protest: African American Performance from the Nineteenth Century to the Present
ANTH 503 (3)  Disease and Human Evolution
ANTH 506 (3)  Gender and Social Identity
ANTH 507 (3)  Intellectual Foundations of Applied Anthropology
ANTH/LAS 508 (3)  The Mexican-American: A Cultural Perspective
ANTH 511 (3)  Anthropology of Religion
ANTH 515 (3)  American Indians and the Urban Experience
ANTH 516 (3)  Contemporary Indian America
ANTH 517A (3)  North African Societies: History, Culture & Politics
ANTH 524A (3)  Political Ecology
ANTH 528A (3)  Globalization, the Environment, and Indigenous Religions
ANTH 531A (3) Traditional Ecological Knowledge
ANTH 545B (3) Embodying Inequality
ANTH 548 (3) Writing Culture
ANTH 573 (3) Semiotics and Language
ANTH 576 (3) Language in Culture
ANTH 582 (3) Hopi Language in Culture
ANTH 583 (3) Sociolinguistics
ANTH 586 (3) Transnational Feminisms
ANTH 595B (3) Special Topics in Cultural Anthropology
ANTH 595E (3) Anthropology and Education
ANTH 595F (3) Special Topics in Applied Anthropology
ANTH 595G (3) Special Topics in Biological Anthropology
ANTH 595I (3) The Anthropology of Law and Nation States
ANTH 595N (3) Environment and Conflict in Latin America
ANTH 595P (3) Anthropology Colloquium
ANTH 596N (3) Archaeology of Performance
ANTH 596P (3) Women’s Life Writing
ANTH 596F (3) Technology and Social Theory
ANTH 597A (3) Global Change Workshop
ANTH 601 (3) Conservation and Community
ANTH 603J (3) Sustainability and Environmental Policy
ANTH 608B (3) History of Anthropological Theory
ANTH 612 (3) Anthropology of Modernity
ANTH 613 (3) Culture and Power
ANTH/LAS 631 (3) Anthropology of Development
ANTH 638 (3) Culture Contact and Colonialism
ANTH 672 (3) Adolescence in a Global Context

ARL518 (3) Arid Lands and Society
DNC 500 (3) Dance and Culture
DVP 600 (1) Foundations of Development
DVP 602 (3) Role of Culture in Sustainable Development
DVP 611 (3) Global Health Case Studies and Community Responses
EAS 556 (3) Humanities and the Global Creative Economy
ENG/GWS 696J (3) Sexuality and Aesthetics
GEOG 696B (3) Cultural Geography
GEOG 696N (3) Geography and Social Theory
GEOG 696R (3) International Environmental Policy
HED 623 (3) Disability, Community, Culture and Identity
HED 628 (3) Theories of Inequality, Oppression, and Stratification
LRC 564 (3) Literacy and the Arts
LRC 581 (3) Multicultural Literature and the Arts
LRC 795A (3) Theory and Research in Language, Reading and Culture
MAS 570 (3) The Feminization of Migration: Global Perspectives
MAS 566 (3) Decolonial Chicana Theory
RUS 696A (3) Topics in Slavic Literature and Culture
Area Study (defined by region or theme; 6 units) options include:

AIS/ANTH 513 Ethnology of the Southwest
AIS/MAS 523 Anthropology of Rural Mexico
AIS 524 (3) Studies in Southwest Literature
AIS 525 (3) Native Economic Development
AIS 526A (3) Principles of Indigenous Economics
AIS 527 (3) Introduction to Linguistics for Native Communities for Graduate Students
AIS 531A (3) Traditional Ecological Knowledge
AIS 535 (3) Mexican Traditional Medicine
AIS 537A (3) National Building
ANTH 500 (3) Topics of Egyptology
ANTH 508A (3) Islamic Movements in the Contemporary Muslim World
ANTH 510A (3) Ethnic Diversity in China
ANTH 501B (3) The Anthropology of Contemporary China
ANTH/MENA 517A (3) North African Societies: History, Culture & Politics
ANTH 518 (3) Southwest Land and Society
ANTH 521 (3) Ethnology North America
ANTH/LAS 523 (3) Anthropology of Rural Mexico
ANTH 525A (3) Anthropology of Japan: Images and Realities
ANTH/EAS 536 (3) Japanese Sociolinguistics
ANTH 551 (3) Gender and Violence in the Middle East
ANTH/MENA 559A (3) Turkey: Culture, Power and History
ANTH 575A (3) The Education of Latinas/Latinos
ANTH 590 (3) Women in Middle Eastern Society
ANTH/LAS 596B (3) Special Topics in Caribbean Studies
ANTH 596M (3) Special Topics in Arabic Linguistics
ANTH 596T (3) Queer, Lesbian, Gay, Bisexual, Transgender, Histories of North America
ANTH 604 (3) Power and Violence in Central America
ANTH 611 (3) Ecological Anthropology
ANTH 536A (3) Medical Anthropology
ANTH 536B (3) Ethnomedicine
ANTH 538A (3) Women’s Health in Global Perspective
ANTH 571A (3) Applied Medical Anthropology in Western Contexts
ANTH 673 (3) Stress, Development and Health
ANTH 675A (3) Anthropology and Global Health

AFAS 543 (3) Francophone Literature and Cinema
AFAS 563 (3) Doing Business in and with Africa
AFAS 597P (3) Global Africana Studies Experience

ARE 535 (3) Theory in Art and Visual Education
ARE 520 (3) Community, Art, and Culture
ARE 576 (3) Art and Cultural Criticism in Art Education
ARE 633 (3) Issues and Recent Research in Art and Visual Cultural Education

ARH 500 (3) Topics in Museum Studies

CHN 529 (3) Chinese Immigrant Literature and Film
CHN 544 (3) Chinese Media and Culture
CHN 576 (3) Modern China

EAS 522 (3) Asian American Literature
EAS 566 (3) Japanese and Chinese Nationalism
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EAS 582</td>
<td>Tantric Buddhism</td>
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<tr>
<td>EAS 596A</td>
<td>Topics in East Asian Buddhism</td>
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<tr>
<td>EAS 596C</td>
<td>Special Topics in East Asian Studies</td>
</tr>
<tr>
<td>EAS 596J</td>
<td>Second Language Acquisition Research</td>
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<tr>
<td>EAS 695K</td>
<td>Special Topics in Korea</td>
</tr>
<tr>
<td>EAS 695A</td>
<td>Introduction to East Asian Studies</td>
</tr>
<tr>
<td>LAS 500</td>
<td>Introduction to Latin American Studies</td>
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<tr>
<td>LAS 518</td>
<td>Southwest Land and Society</td>
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<tr>
<td>LAS 524</td>
<td>Federalism, Democracy and Decentralization</td>
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<td>LAS 535</td>
<td>Mexican Traditional Medicine: An Overview of Indigenous Curing Cultures</td>
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<tr>
<td>LAS 560</td>
<td>Women in Latin America: Through Novels and Film</td>
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<tr>
<td>LAS 562</td>
<td>Special Topics in Contemporary Latin America</td>
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<tr>
<td>LAS 563</td>
<td>Topics in Luso-Brazilian Literature</td>
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<tr>
<td>LAS 595D</td>
<td>Latin American Studies Special Topics</td>
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<td>LAS 595E</td>
<td>Contemporary Latin American Exonomyc</td>
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<td>LAS 595F</td>
<td>Colloquium in Latin American Studies</td>
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<tr>
<td>LAS 595N</td>
<td>Environment and Conflict in Latin America</td>
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<tr>
<td>LAS/MAS 596N</td>
<td>Hemispheric Indigenous Consciousness</td>
</tr>
<tr>
<td>LAS/MAS 604</td>
<td>Power and Violence in Central America and Mexico</td>
</tr>
<tr>
<td>LAS 659</td>
<td>International Human Rights</td>
</tr>
<tr>
<td>LAS 666</td>
<td>Regional Trade Agreements: NAFTA, Brexit and the Challenges of Further Trade Liberalization</td>
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<td>LAS 670</td>
<td>Public International Law</td>
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<tr>
<td>LAS 696E</td>
<td>Economic, Environmental, and Social Issues Along the Border</td>
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<tr>
<td>LAS 696J</td>
<td>Latin America: Modern Period</td>
</tr>
<tr>
<td>LAS 696K</td>
<td>Development and the Latin American Experience</td>
</tr>
<tr>
<td>LAS 696L</td>
<td>International Trade Law</td>
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<td>LING 500</td>
<td>Linguistics for Non-Majors</td>
</tr>
<tr>
<td>LING 521</td>
<td>Language Maintenance, Preservation, and Revitalizations</td>
</tr>
<tr>
<td>MAS 587</td>
<td>Chicana Gender Perspectives</td>
</tr>
<tr>
<td>MAS 695</td>
<td>Special Topics in Mexican American Studies</td>
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<tr>
<td>MAS 695A</td>
<td>Mexican American Studies PhD Colloquium</td>
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<tr>
<td>MAS 696A</td>
<td>Latina/o Literary and Cultural Studies</td>
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<tr>
<td>MENA 503</td>
<td>Art and Architecture of the Islamic World</td>
</tr>
<tr>
<td>MENA 508A</td>
<td>Islamic Movements in the Contemporary Muslim World</td>
</tr>
<tr>
<td>MENA 509A</td>
<td>Biblical Hebrew: Poetry</td>
</tr>
<tr>
<td>MENA 517A</td>
<td>North African Societies</td>
</tr>
<tr>
<td>MENA 530A</td>
<td>Language and Society in the Middle East</td>
</tr>
<tr>
<td>MENA 538</td>
<td>The Book of Psalms</td>
</tr>
<tr>
<td>MENA 544</td>
<td>Islamic Mysticism</td>
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<tr>
<td>MENA 551</td>
<td>Gender and Violence in the Middle East</td>
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<tr>
<td>MENA 552</td>
<td>Israeli Women</td>
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<tr>
<td>MENA 556</td>
<td>Jews of the Islamic World in the Modern Period</td>
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<tr>
<td>MENA 563</td>
<td>Gender Issues and Women’s Literature in the Middle East</td>
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<tr>
<td>MENA 566</td>
<td>The Middle Eastern City and Islamic Urbanism</td>
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<tr>
<td>MENA 571</td>
<td>Iranian Cinema, Gender Issues, and Social Change</td>
</tr>
<tr>
<td>MENA 573</td>
<td>History of Modern India and Pakistan: 1750-present</td>
</tr>
<tr>
<td>MENA 585A</td>
<td>History of the Arab-Israeli Conflict, 1800-present</td>
</tr>
<tr>
<td>MENA 590</td>
<td>Women in Middle Eastern Society</td>
</tr>
<tr>
<td>MENA 595E</td>
<td>Struggle and Survival: Modern Mid East and North Africa</td>
</tr>
<tr>
<td>MENA 596B</td>
<td>Special Topics in Middle Eastern and North African Studies</td>
</tr>
</tbody>
</table>
MENA 596C (3) The Literature of Identity in the Modern Middle East
MENA 596G (3) Islamic Law and Society
MENA 596S (3) Colonialism and the Critique of Modernity
MENA 695I (3) Special Topics: Advanced Islamic Studies
MENA 696Y (3) Nationalism and Islam
MENA 699 Independent Study

MUS/LAS/MAS 568 Studies in Latin American Music
MUS 595B (3) Art Music in the United States
MUS 568 (3) European Literary-Political Cabaret
MUS 699 (1-3) Independent Study

SPAN 521 (3) Topics in 18th, 19th, 20th & 21st Century Literature
SPAN 541 (3) Topics in Spanish-American Nineteenth, Twentieth & Twenty-first Century Literature
SPAN 551 (3) Topics in Mexican and Mexican-American Literature

+ Analytical Theory/Research Methodology, including Field Methods, Research Design (3 units)

ANTH 620 (3) Linguistic Field Techniques
ENVS 595F (3) Conservation Biology: Field Studies in Developing Countries
*MUS 698F (3) Field Methods in Ethnomusicology (new course)

AIS 548 (3) Research Design and Methodology
AIS 697C (3) Research Design for American Indian Communities

ANTH 588 (3) Linguistic Elicitation and Documentation
ANTH 597D (3) Experimental Methods in Biological Anthropology
ANTH 605 (3) Qualitative Research Methods and Proposal Writing
ANTH 609 (3) Mixed Methods in Applied Anthropology
ANTH 678 (3) Ethnographic Discourse Analysis

ARE 631 (3) Arts-based Research
DVP 631 (3) Methods II: Research and Data Analysis Tools & Applications for Development Practice
DVP 603 (3) Macro- and Micro-Economic Tools for Development Practice
DVP 640 (3) Methods in Development Practice

EAS 577 (3) Qualitative Research in Applied Linguistics: East Asia and Beyond

ECOL 547 (3) Introduction to Theoretical Ecology
ECOL 579 (3) Art of Scientific Discovery
ECOL 596A (3) Evolutionary Ecology
ECOL 596G (3) Complex Systems: Networks and Self-Organization in Biology

ECOL 600A (3) Fundamentals of Evolution
ECOL 600B (3) Fundamentals of Ecology

GEOG 567 (3) Geographic Analysis of Population

GWS 539A (3) Feminist Theories I
GWS 539B (3) Feminist Theories II
GWS 586 (3) Transnational Feminisms

LAS 550 (3) Qualitative Research Methods and Methodology
LING 507 (3) Statistical Analysis for Linguistics
LING 588 (3) Linguistic elicitation and documentation
LING 597A (3) Descriptive linguistics for Native American languages (Fall only)

JOUR 508 (3) Journalism Theory and Practice

MAS 580A (3) Advanced Research Methods
MAS 565 (3) Critical Race Theories for Policy and Practice

MENA 696J (3) Ethnography of the Middle East: Issues and Methods

MUS 551 (3) Behavioral Research in the Arts
MUS 603 (3) Qualitative Research in Music
MUS 604 (3) Historical Research in Music
MUS 655 (3) Quantitative Analysis in Music Education

SCT 500 (3) Introduction to Social, Cultural, and Critical Theory
SCT 510 (3) Problems in Social, Cultural, and Critical Theory

**Dissertation and Research**

*Eiar 900 (1-6) Research in Applied Ethnomusicology
*Eiar 910 (1-6) Thesis in Applied Ethnomusicology
*Eiar 920 (1-9) Dissertation in Applied Ethnomusicology

**SAMPLE EXTERNAL MINOR AREA COURSES**

Below are some sample and recommended minors to complement the ethnomusicology major that the Executive Committee for the Applied Ethnomusicology and Intercultural Arts Research GIDP compiled for the purposes of clarifying degree options. While it may seem unnecessary to include details on potential minor areas of study, an important strength of the proposed Ph.D. is the integration of the chosen minor as a solid area of expertise, contributing to the viability of a graduate’s interdisciplinary research profile and skill set.

All the sample minors, except for Documentary – which is in development – are existing minors. Details are offered here to illustrate but a few options and to point to the depth of training the minor might provide for the ethnomusicology Ph.D.

We are not asking approval for the curriculum of the minors, which are already established, just recognition of their potential role in the shaping of the plan of study for a student in the GIDP Ph.D. in Applied Ethnomusicology and Intercultural Arts Research.

These samples are not exclusive, students may choose other minors as relevant to their research goals and professional aims.

**For a Minor in Library Science (18 units, will also earn grad certificate):**

LIS 504,(3) Foundations of Library & Info Services
LIS 515 (3) Organization of Information
LIS 520 (3) Ethics for Library and Information Professionals
LIS 530 (3) Cataloguing and Metadata Management
LIS 541 (3) Preservation

Plus one management course, selected from:
LIS 557 (3) Documenting Diverse Cultures and Communities
LIS 608 (3) Managing the Information Organization
LIS 673 (3) Managing the Digital Information Environment
LIS 540, (3) Introduction to Archives
LIS 640, (3) Archival Appraisal & Description
LIS 671, (3) Digital Curation and Preservation

For Minor in Cognitive Science (12 units)

COGS 517 (3) Introduction to Cognitive Science
COGS 595 (1) Cognitive Science Colloquium (for three semesters, for a total of 3 credits)
Plus two additional graduate level COGS courses.

For Minor in Documentary (12 units)

*FTV 537 (3) Ethnographic Documentary
*FTV 510 (3) Documentary Production Techniques
FTV 504 (3) Topics in Film and TV Production
FTV 533 (3) Digital Media Today
FTV 554 (3) Representing Culture in the Media
FTV 696T (3) Seminar in Media History and Theory

For Minor in Journalism (12 units)

JOUR 506 (3) Introductory and Advanced Reporting
JOUR 560 (3) International Media Systems
JOUR 509 (3) International and U.S. Media
JOUR 507 (3) Reporting with Multimedia
JOUR 511 (3) Feature Writing

For a Minor in Public Health (15 units)

EPID 573A (3) Basic Principles of Epidemiology
PHPM 574 (3) Public Health Policy and Management
EHS 575 (3) Environmental and Occupational Health
BIOS 576A (3) Biostatistics for Public Health
HPS 577 (3) Sociocultural and Behavioral Aspects of Public Health

Plus internship with prefix of HPS, EHS, EPID, BIO, PHP or PHPM

For a Minor in American Indian Studies (12 units)

AIS 631B (3) Tribal Courts and Tribal Law;
AIS 631F (3) Law and Culture, OR
AIS 696D (2-6) Indigenous Peoples Law Clinic

Plus 3 additional AIS courses (see lists above for cultural and area studies)

For Minor in Environmental Studies (12 units)

ENVS 530L (1) Environmental monitoring
ENVS 541A (3) Natural Resource management in native communities
ENVS 596B (3) Water Policy in Arizona and Semi-Arid Regions
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 697S</td>
<td>Economics Law and the Environment</td>
</tr>
<tr>
<td>ANTH 531A</td>
<td>Traditional Ecological Knowledge</td>
</tr>
<tr>
<td>ENVS 595F</td>
<td>Conservation Biology: Field Studies in Developing Countries</td>
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<tr>
<td>ART596F</td>
<td>Design, Art and the Environment</td>
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</tbody>
</table>

**For Minor in Cognitive Science (12 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>COGS 517</td>
<td>Introduction to Cognitive Science</td>
</tr>
<tr>
<td>COGS 595</td>
<td>Cognitive Science Colloquium</td>
</tr>
</tbody>
</table>

An additional 6 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGS 541</td>
<td>Theory of Knowledge</td>
</tr>
<tr>
<td>COG 549A</td>
<td>Biolinguistics</td>
</tr>
<tr>
<td>COG 550</td>
<td>Philosophy of Mind</td>
</tr>
<tr>
<td>COG 555</td>
<td>Philosophy and Artificial Intelligence</td>
</tr>
<tr>
<td>COG 583</td>
<td>Sociolinguistics</td>
</tr>
<tr>
<td>COG 696D</td>
<td>Judgment and Decision Making</td>
</tr>
<tr>
<td>PSY 504A</td>
<td>Human Brain-Behavior Relationships</td>
</tr>
<tr>
<td>PSY 524</td>
<td>Gerontology: A Multidisciplinary Perspective</td>
</tr>
<tr>
<td>PSY 528</td>
<td>Cognitive Neuroscience</td>
</tr>
<tr>
<td>PSY 536</td>
<td>Visual Cognition</td>
</tr>
<tr>
<td>PSY 596F</td>
<td>Cognitive Psychology</td>
</tr>
<tr>
<td>SLHS 544</td>
<td>Adult Language Disorders: Aphasia and Right Hemisphere Disorders</td>
</tr>
<tr>
<td>SLHS 555</td>
<td>Developmental Language Disorders</td>
</tr>
</tbody>
</table>

**B. SPECIAL CONDITIONS FOR ADMISSION TO/DECLARATION OF THIS MAJOR**—explain, in detail, the criteria to join this major, including GPA requirements, completion of courses prior to declaration, application process, interviews, etc. These conditions must be approved by faculty governance to be enforced.

The standard requirements for admission to the Graduate College apply. The degree will require demonstrated training and expertise in music or other fine arts, and an earned bachelor’s or master’s degree, but not necessarily a bachelor’s degree in the field of music. Individual courses may require particular prerequisite skills.

**C. NEW COURSES NEEDED** – list any new courses which must be added to initiate the program; include a course prefix, course number, title, catalog description and number of units for each of these courses.

EIAR 602 – Intercultural and Interdisciplinary Research Methods (3 units) (Dr. Jennifer Post, or new hire) Introduction to methods in intercultural arts research, including field recording and documentation, ethnographic analysis and interview strategies.

*The following course can be added at a later date if needed.*

MUS 695B Music and Healing in Global Contexts.
The study of healing rituals and practices using music in the world’s cultures.

We propose EIAR as the course prefix for house-numbered courses in this GIDP. This would be the prefix used for the 920 dissertation course for example.
D. REQUIREMENTS FOR ACCREDITATION – describe the requirements for accreditation if the program will seek to become accredited. Assess the eligibility of the proposed program for accreditation.

The School of Music has an accrediting body (NASM), but our understanding is that that accreditation is not applicable here because this is not a stand-alone music degree and the GIDP is not limited to studies in music (other Fine arts can be studied too). Furthermore, accreditation is usually requested after a program has demonstrated outcomes.

IV. STUDENT LEARNING OUTCOMES AND ASSESSMENT

A. STUDENT OUTCOMES – describe what students should know, understand, and/or be able to do at the conclusion of this program of study. Note: student outcomes should be measurable.

1. Ability to identify relationships of musical practice with social, biological and environmental dynamics
2. Recognition of human diversity and universals through musical and related arts
3. Ability to document practice in various media: audio, visual, historical (oral history), digital
4. Assess techniques of cultural promotion, preservation, curation
5. Apply analytical modalities in the major and minor fields, research design, and techniques for qualitative and quantitative study
6. Readiness to act as leaders in academic or public-sector workplace

B. STUDENT ASSESSMENT – provide a plan for assessing intended student outcomes 1) while students are in the program and 2) after they have completed the degree.

Learning objectives will be evaluated by the Executive Committee of the GIDP and by students’ comprehensive exam and defense committees to ascertain the achievement of each of the above learning goals. This will be accomplished by (1) annual student evaluations conducted by the executive committee; (2) a survey of faculty after each student’s oral comprehensive and again after the defense, with questions asking if the student has demonstrated mastery of the key outcomes as listed.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Curricular Component or Requirement</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ability to identify relationships between musical practice with social,</td>
<td>MUS 696F; MUS 695B; Area studies requirement; area study requirement;</td>
<td>Rubrics for class projects, papers, discussions</td>
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<tr>
<td>biological and environmental dynamics</td>
<td>minor specialization</td>
<td>Confirmed via comprehensive exams and dissertation</td>
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<tr>
<td>2. Recognition of human diversity and universals through musical and related arts</td>
<td>EIAR 601, MUS 696F; MUS 695B; Music and fine arts electives; Cultural Study requirement; Area study requirement</td>
<td>Rubrics for class projects, papers, discussions</td>
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<tr>
<td></td>
<td></td>
<td>Confirmed on comprehensives and dissertation</td>
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<tr>
<td>3. Ability to document practice in various media: audio, visual, historical (oral history), digital</td>
<td>Research Methodology requirement; minor specialization; area study specialization</td>
<td>Demonstrated in class assignments, project design and realization, and dissertation</td>
</tr>
<tr>
<td>4. Facility with techniques of cultural promotion, preservation, curation</td>
<td>Internship, practicum, or management experience; Additional options in cultural study</td>
<td>Rubrics for class projects, papers, discussions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confirmed on comprehensives</td>
</tr>
<tr>
<td>5. Knowledge of analytical modalities, research design, and techniques for qualitative and quantitative study</td>
<td>Core ethnomusicology courses; Research methodology, analytical theory or research design requirement</td>
<td>Demonstrated in class projects, papers, discussions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confirmed on comprehensives and dissertation proposal and realization</td>
</tr>
<tr>
<td>6. Readiness to act as leaders in academic or public-sector workplace</td>
<td>Internship or management requirement; dissertation;</td>
<td>Demonstrated in practical settings or in class on projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confirmed in professional development activities (conference presentations, organizing activities, internships)</td>
</tr>
</tbody>
</table>

To a different end, to assess the value of the program, the program coordinator will administer exit interviews at the end of the student’s career to gather information about the value of the program and help collect information to improve achievement of learning outcomes. Each year data from alumni will be collected to determine employment success and graduate application of the degree outcomes. Data will be used to further improve instruction, job placement, and gather longitudinal information.

V. STATE'S NEED FOR THE PROGRAM

There is always a need for the creation of knowledge that address the value of multicultural perspectives on human experience and on the role of the arts in transforming individual and social behavior. This doctorate will advance research in this domain and train graduates to connect this research to issues of critical concern – like migration, education, improving cognitive understanding and function, cultural equity and environmental sustainability, to name but a few – in Arizona, the United States, and our shared world. Despite our government’s withdrawal from UNESCO, the value of intercultural cooperation remains important to the security and well-being of our state and nation and musical practice is a proven tool for establishing recognition, exchange, and respect. Apart from the fundamental value of the knowledge produced by EIAR research, there is a need to apply these perspectives for the general greater good in the state of Arizona and beyond.

There is no independent Ph.D. (distinct from a subplan) in ethnomusicology in the state of Arizona, nor is there a multidisciplinary Ph.D. addressing comparative behaviors in the arts. The proposed EIAR degree is distinguished by its focus on application—on building productive interdisciplinary partnerships that incorporate intercultural music scholarship to address on-going and current concerns regarding the arts in society, education, human health and well-being in global contexts. The impetus for this program grew from a desire to develop a Ph.D. in ethnomusicology and to build stronger interdisciplinary collaborations with other programs that employ ethnographic (people-centered) perspectives on the arts to advance the understanding of human beings and their behavior as individuals, and in society.

The UA has supported a master’s program in ethnomusicology and this new PhD should boost interest in that degree and will expand the courses available to those master’s students. Advisors will continue to encourage students with degrees in music (BM, BMusEd) to pursue the MM in Ethnomusicology as a preferred route to the Ph.D. The current Master of Music degree (MM), requires applicants to have an earned bachelor’s degree in music, and is focused more decisively on music studies rather than on interdisciplinary collaboration. The Ph.D. in EIAR complements this degree and offers an independent Ph.D. option not currently available in music or any single department on campus. Given the inherent interdisciplinary nature of the field, and increasing demands for academic partnerships for 21st-century scholars, the proposed EIAR Ph.D. requires partnerships with several academic units on campus. It is our intention that the EIAR Ph.D. pave new directions for the field of ethnomusicology and its partners, and to accomplish that goal it cannot be limited only to music students. The GIDP in EIAR will thus open enrollment to qualified applicants with bachelor’s or master’s degrees from accredited universities and colleges in all fields, not solely those with music degrees. Students who are accepted will need to demonstrate relevant education and skills to enroll in core classes and to pursue a degree that offers routes for blending music, arts, humanities, with scholarship in social, behavioral and physical sciences.

The proposed Ph.D. in EIAR will emphasize research and the application of intercultural arts scholarship toward problem solving in disciplines beyond music. This proposed program therefore will not duplicate any existing programs; instead it will enhance and strengthen options for many existing programs available across the university.

There are a few similar programs in the United States: a rather new Ph.D. in Interdisciplinary Arts at Ohio University and the program in Cognitive and Systematic Musicology at The Ohio
State University which is supported by the Center for Cognitive and Brain Sciences. The largest program in ethnomusicology in the United States, and in the world, is that at UCLA. The comparison chart on p. 2 includes these programs. They all build on the foundational philosophies and legacies of the discipline ethnomusicology, as will the GIDP at the University of Arizona. However, the resources and tradition of support for broad interdisciplinary partnerships are stronger at the University of Arizona.

The University of Alberta hosts the Canadian Centre for Ethnomusicology with the self-described mission of promoting “musical sound for the public good” through five ethnomusicological activities: archiving, dissemination, research, teaching, and outreach. While the success of the center’s research endeavors offers inspiring models for the GIDP in EIAR at the University of Arizona, the U. Alberta’s degree program remains tied to the School of Music.

The lines of inquiry encouraged by the discipline of ethnomusicology demand the kind of truly interdisciplinary support best provided by the University of Arizona’s Graduate Interdisciplinary Program structure.

The UA is particularly well suited to train scholars and assume national and international leadership for interdisciplinary partnership in several lines of research, combining the minor area of study with a research topic in areas such as:

1) Cognitive and Structural Analysis
2) Intercultural Understanding (Ethnographic Culture and Area Studies; Communication; Heritage and Place; Education)
3) Documentary Studies (including Audio, Film and Television)
4) Biomedical and Human Health (Healthy Human Environments)
5) Sustainability and Place (Institute for the Environment; Southwest Institute; Arid Lands)
6) Performance (Fine Arts; Critical and Sociocultural Studies)

While there are virtually no other fully-interdisciplinary programs like our new GIDP in Applied Ethnomusicology and Intercultural Arts Research, there is a long record of interdisciplinary scholarship in ethnomusicology, including examples of work accomplished on our campus. In 2013, Professor Andrew Lotto, formerly professor in Speech, Language and Hearing at the UA, collaborated with Dan Kruse, MM ethnomusicology, and Donald Traut, Associate Professor of Music, on the Ear Worm project, supported by a grant from the Confluence Center. In the past 20 years, ethnomusicologists have increasingly partnered with professionals in the health and environmental sciences. Some samples of research combining ethnomusicological and scientific research include: Elizabeth Tolbert “An ethnomusicological perspective on animal ‘music’ and human music: the paradox of ‘the paradox of rhythm’” in Language and Music as Cognitive Systems, Eds. Rebuschat, Rohrmeier, Hawkins and Cross (2012). Music Language and the Brain, by Aniruddh Patel (2008) on his investigation of linguistic and musical syntactic processing via the study of aphasia (research supported by the Neuroscience Research Foundation), as well as David Huron’s cognition studies Sweet Anticipation: Music and the Psychology of Expectation (2006, MIT Press) and Voice Leading: The Science Behind a Musical Art (2016). The Oxford Handbook on Medical Ethnomusicology (2004) provides broader overview, showing how ethnomusicologists have partnered with medical professionals, scientists and local health
officials to develop therapeutic responses to dementia, improve HIV education in developing countries, advance community health protocols, and improve conditions for individuals and families held in refugee camps. Another recent publication, Current Directions in Ecomusicology edited by Aaron Allen and Kevin Dawe (2016) documents a new branch of the field exploring music’s role in sustaining the environment and natural resources.

The College of Humanities has been a supporter of ethnomusicology and intercultural arts research in the past.¹ Praise Zenenga advised Mackenzie Pickard, MM (now a professor at Iowa Western Community College), and is currently supporting Prof. Dawn Corso in coaching the mbira (African “thumb piano”) ensemble she offers in the School of Music. Prof. Irene D’Almeida collaborated with Janet Sturman to bring kora (African harp-lute) player Papa Susso to Tucson for a week of workshops, as did Prof. Melissa Fitch with tango workshops and lectures. Languages and area studies have always been critical to the culture studies at the heart of ethnomusicology, and humanities recognition of the importance of popular music and dance in defining identity and shaping practice is manifest in the hip-hop minor and well as many other programs in the College of Humanities. Prof. Bryan Carter’s research and teaching in digital humanities represents another mutually productive line of collaboration for the EIAR GIDP.

The new Ph.D. in Applied Ethnomusicology and Intercultural Arts will support and enrich research and instruction in global humanities, as well as public and applied humanities. Excellent examples of this kind of applied scholarship can be found in Ian Peddie, Popular Music and Human Rights (2011) and Jon Ritter and Martin Daughtry’s Music in the Post 9/11 World (2007), and Michael Frishkopf’s Giving Voice to Hope: Music of Liberian Refugees project (2009).

1. Is there sufficient demand for the program? Provide student data indicating demand.

While demand is not extensive, it is sufficient. Every year, the UA Graduate College receives at least 4-5 inquiries regarding a Ph.D. in ethnomusicology or arts research, and this is without any listing for such a degree. With promotion of the new degree, the applicant pool will increase. Every year there are 4-5 graduate students on campus who have chosen ethnomusicology as a doctoral minor; this number is likely to increase with the establishment of the EIAR Ph.D. This degree will enhance the options and visibility of the minor for those students.

2. What is the anticipated student enrollment for this program? Complete the following table. How did you arrive at these numbers?

<table>
<thead>
<tr>
<th>5-YEAR PROJECTED ANNUAL ENROLLMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
</tr>
</tbody>
</table>

¹ Alumni who have incorporated training in the discipline of ethnomusicology into their degree programs, either as their major or doctoral minor, include: Mike Silvers (MM, who went on to earn his PhD at UCLA and is now Assoc. Professor, U. Illinois), Andrea Shaheen, DMA currently Assoc. Professor, UTEP), Mike Vercelli, DMA, currently Assoc. Professor West Virginia U.), Jaime Bofill (Ph.D. Theory-with Ethnomusicology emphasis, currently Assistant Professor, Conservatory of Music, Puerto Rico).
<table>
<thead>
<tr>
<th>Number of Majors</th>
<th>3</th>
<th>6</th>
<th>9</th>
<th>12</th>
<th>15</th>
</tr>
</thead>
</table>

While the UA guidelines for Academic Program Review state that Academic programs are expected to grant nine or more masters degrees and six or more doctoral degrees over a three-year period, GIDPs are not subject to that criteria. Nonetheless, we expect to be able to meet or exceed the minimum productivity levels. We have 3 students waiting to apply right now, before the program has even been established or promoted, and regular inquiries are received in the Graduate College asking about a Ph.D. option in ethnomusicology.

3. What is the local, regional and national need for this program? Provide market analysis data or other tangible evidence of the need for and interest in the proposed program. This might include results from surveys of current students, alumni, and/or employers or reference to student enrollments in similar programs in the state or region. Include an assessment of the employment opportunities for graduates of the program during the next three years.

The most important career option for ethnomusicologists remains the academy, and for those jobs the Ph.D. is typically required. Ninety percent of ethnomusicologists are employed by universities and colleges, according to Society for Ethnomusicology’s 2014 survey of members. In September 2017 alone, the Society for Ethnomusicology job board posted 18 announcements of job openings, with 10% of those in public sector positions. Public sector employment is growing and our graduates, with their truly interdisciplinary skills, should be stronger competitors for existing positions, and better able to create new options in the following areas:

- Educational settings (pre-college, public schools, community, universities)
- US Governmental Agencies (Smithsonian Institution, Library of Congress, National Endowment for the Arts)
- Publishing
- Recording Companies, especially those focusing on ethnographic recordings such as Smithsonian-Folkways or Rounder Records
- Media providers such as Alexander Street Press
- Museums and resource centers
- Health Consultants (Music Therapy)
- Hospitals and International Health Agencies
- Cultural Heritage Preservation
- Sound and media Archives
- Folklife Centers
- Film and stage production, (sound consultants; documentary and media production partners)
- Arts Management and Program Coordination (festival organization and heritage production)
Intellectual Property (international copyright consultants)
UNESCO Cultural Heritage
Sound studies, including scientific research on sound and environmental change

Ethnomusicologists with relevant research experience and training may work in many other fields, such as public health, communication, and policy consultants. We expect this new interdisciplinary Ph.D. to help shape the job field by increasing awareness of the value of ethnomusicology in contemporary applications.

A 2016 survey conducted by the Society of Ethnomusicology (SEM) Graduate Students Organization reports that of the 130 students who responded, 34% felt their current education did not prepare them for jobs beyond academia and 63% wanted more education in multiple career paths. This is precisely the need our proposed Ph.D. in Applied Ethnomusicology and Intercultural Arts Research seeks to address.

A contributor to a special careers issue of the 2017 SEM Student News wrote of his job as an ethnographer in a global design consultancy thinking agency, and argued that Ph.D. programs should provide education that prepares students for non-academic work, including education in management, archiving, recording technology, broadcasting, graphic design, and the practice of applying ethnographic skills to problem solving. In a report to the SEM in 2016, former Director of the National Endowment of the Arts, Folk Arts Agency, Terence Liu reminds us of the fundamental value of an intercultural understand of the arts: “Misunderstanding leading to fear and hatred today can only be placated by those who are able to mediate with clear understanding of how emotions of all sides arise and are expressed. In all these matters, ethnomusicologists must be among the first responders on the scene.”

Recent University of Arizona graduates who pursued individualized minors or majors in ethnomusicology and earned graduate degrees are now working in secondary and higher education (20+, with 5 currently working in the state of Arizona, including at Pima Community College, Cochise College, in the TUSD School system, and one was responsible for establishing the sound recording program at Central Arizona College), as museum education directors (1), as audiologists (1), in radio broadcasting (2), and as in state department international service (1).

4. Beginning with the first year in which degrees will be awarded, what is the anticipated number of degrees that will be awarded each year for the first five years? Complete the following table. Explain anticipated attrition rates.

<table>
<thead>
<tr>
<th>PROJECTED DEGREES AWARDED ANNUALLY</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Number of Degrees</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
VI. APPROPRIATENESS FOR THE UNIVERSITY – Explain how the proposed program is consistent with the UA mission and strategic direction. Why is the UA the most appropriate location within the Arizona University System for the proposed program? Explain how this proposed program is consistent with the College strategic plan. Refer to the website here regarding UA’s mission and strategic plan.

The UA’s demonstrated commitment to interdisciplinary collaboration in education and research makes it the most appropriate location for this degree. The aim of this degree to apply ethnomusicology scholarship to real world problems aligns with the UA’s priority to integrate scholarship with real-world experience. Finally, ethnomusicology embodies the recognition of cultural diversity valued at the UA and so important for promoting human rights and developing peaceful and productive interactions in the world today.

VII. EXISTING PROGRAMS WITHIN THE ARIZONA UNIVERSITY SYSTEM

A. ARIZONA UNIVERSITY SYSTEM – list all similar programs at the same academic level (Bachelor’s, Master’s, Doctoral) currently offered in the Arizona University System. Use the table below. Additional rows may be added, as needed.

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Degree Type</th>
<th>Number of Students Enrolled</th>
<th>LOCATION University &amp; Site</th>
<th>PROGRAM ACCREDITATION?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Music</td>
<td>MM - Ethnomusicology</td>
<td>2*</td>
<td>UA</td>
<td>Yes</td>
</tr>
<tr>
<td>2 Music</td>
<td>MA - Ethnomusicology</td>
<td>2*</td>
<td>ASU</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*These numbers are small, in part because of the lack of the independent and well-defined Ph.D. program that this proposal seeks to remedy.

We anticipate that the honors program and other undergraduate programs at the UA, such as the BA in Human Rights, will produced graduates interested and well-educated to pursue the new Ph.D. in Applied Ethnomusicology and Intercultural Arts Research.

Curricular Affairs (and the Graduate College for graduate programs) will determine if you are required to complete additional comparison charts to discuss the ways in which the proposed program differs from University of Arizona programs.

VIII. EXPECTED FACULTY AND RESOURCE REQUIREMENTS

A. FACULTY
1. **Current Faculty**—list the name, rank, highest degree, primary department and estimation of the level of involvement of all current faculty members who will participate in the program. Attach a brief vita for each faculty member listed.

**Core Faculty (GIDP Executive Board):**

- Kathryn Alexander, Ph.D. (Ethnomusicology, Assistant Professor, Honors College)
- Katia Bezerra, Ph.D. (Spanish and Portuguese, College of Humanities)
- Janet Nicol, Ph.D. (Linguistics, Psychology, Cognitive Science; College of Science; College of Social and Behavioral Science)
- Jennifer Post, Ph.D. (Ethnomusicology, Music; College of Fine Arts)
- Dawn Corso, Ph.D. (Music Education & Ethnomusicology, College of Fine Arts)
- Jay Rosenblatt, Ph.D. (Musicology, College of Fine Arts)
- Sarah Moore, Ph.D. (School of Art, College of Fine Arts, Institute of the Environment)
- Zack Guido, Ph.D. (Institute for the Environment)
- Beverly Seckinger, Ph.D. (Theatre, Film & Television; College of Fine Arts)
- Carla Stoffle, Ph.D. (School of Information, College of Social and Behavioral Science)
- Brad Story, Ph.D. (College of Science)
- Douglas Taren, Ph.D. (Mel and Enid Zuckerman College of Public Health)
- Marcela Vazquez Leon, Ph.D. (Anthropology, Latin American Studies, College of Social and Behavioral Science)
- Praise Zenega, Ph.D. (Director, Africana Studies, College of Humanities)

**Additional Faculty/Anticipated members of the GIDP in Applied Ethnomusicology and Intercultural Arts Research**

- Maribel Alvarez, Ph.D., Associate Research Professor, Associate Research Social Scientist, Southwest Center; College of Social and Behavioral Sciences
- Diane Austin, Ph.D., Professor and Director, School of Anthropology; College of Social and Behavioral Sciences
- Jeff Banister, Ph.D., Assistant Research Social Scientist of Geography & Development; Social, Cultural & Critical Theory
- William Beezley, Ph.D., Professor, History, Mexican American Studies; College of Social and Behavioral Sciences
- Andrew Carnie, Ph.D., Professor, Linguistics; Dean Graduate College
- Guiseppe Cavatorta, Ph.D., Associate Professor, French and Italian, College of Humanities
- Jerome Dotson, Ph.D., Assistant Professor, Africana Studies, College of Humanities
- Katia Bezerra, Ph.D., Associate Professor of Spanish and Portuguese; Social, Cultural & Critical Theory
- Carol Brochin, Ph.D., Assistant Professor of Bilingual/Multicultural Education Teaching, Learning, & Sociocultural Studies
- Naomi Caffee, Ph.D., Visiting Associate Professor, Russian and Slavic Studies, College of Humanities
Monica Casper, Ph.D., Professor, Gender and Women’s Studies, Public Health; Associate Dean, College of Social and Behavioral Studies
David Chisholm, Ph.D., Professor, German Studies (literary and political cabaret), College of Humanities
Jennifer Croissant, Ph.D., Associate Professor of Gender and Women’s Studies; Social, Cultural & Critical Theory
Irene D’Almeida, Ph.D., Professor, Modern Languages
Alain-Philippe Durand, Professor, Humanities (hip hop studies), Dean, College of Humanities
John Ehiri, Ph.D., Public Health, Health Promotion Sciences
Melissa Fitch, Ph.D., Associate Professor, Spanish and Portuguese; Social, Cultural, and Critical Theory
Anna Garland Mahler, Ph.D., Assistant Professor of Spanish and Portuguese, College of Humanities
Greg Garfin, Ph.D., Geography
Perry Gilmore, Ph.D., Language, Learning and Culture, College of Education
David Gramling, Ph.D., Assistant Professor, German Studies, College of Humanities
Jeanette Hoit, Professor, Speech, Language and Hearing
Jennifer Jenkins, Ph.D., Associate Professor of English, College of Social and Behavioral Sciences
Kim Jones, Ph.D., Professor, East Asian Studies; Associate Dean, College of Humanities
Miranda Joseph, Professor of Gender and Women’s Studies
Suzanne Knosp, D.M.A., Professor, Dance and Music, School of Dance
Diana Liverman, Ph.D., Professor, School of Geography and Development; Global Change GIDP, and Arid Lands Resources Sciences GIDP
Ellen MacMahon, MFA, Professor of Art; Social, Cultural & Critical Theory
Anne-Garland Mahler, Ph.D. Assistant Professor of Spanish and Portuguese
Alex Nava, Ph.D., Professor, Religious Studies, College of Humanities
Sheilah E. Nicholas, Associate Professor, Teaching, Learning and Sociocultural Studies, College of Education
Janet Nicol, Ph.D., Associate Professor, Psycholinguistics, Cognitive Science
Michelle Perfect, Ph.D., Associate Professor, Disability and Psychoeducational Studies, College of Education
Jadwiga Pieper Mooney, Ph.D., Professor of Gender and Women’s Studies
Jennifer Post, Ph.D., Lecturer, Ethnomusicology, Fred Fox School of Music, College of Fine Arts
Denis Michael Provencher, Professor and Dept. Head, French and Italian Studies, COH
Jennifer Roth-Gordon, Ph.D., Associate Professor of Anthropology
Hai Ren, Associate Professor, East Asian Studies
Elaine Romero, Assistant Professor of Theatre, Film and Television, College of Fine Arts
Tani Sanchez, Associate Professor, Africana Studies, College of Fine Arts
Kenneth Schachter, Ph.D, Assistant Professor, Community, Environment & Policy, Mel and Enid Zuckerman College of Public Health
Beverly Seckinger, Ph.D., Professor, School of Theater, Film and Television
Nathaniel Smith, Assistant Professor, East Asian Studies (Japanese music and youth culture), College of Fine Arts
David Soren, Ph.D., Professor, Anthropology, College of Social and Behavioral Sciences
2. Additional Faculty – describe the additional faculty needed during the next three years for the initiation of the program and list the anticipated schedule for addition of these faculty members.

As in all GIDPs, this new hire will find their tenure home in an existing department on campus, most likely music, and if so this new hire will also teach one general education course for the School of Music.

This hire is critical since Jennifer Post is on a non-tenure-track temporary hire, and Janet Sturman is full-time Associate Dean in the Graduate College. Dawn Corso chairs the Music Education department, and while that opens exciting possibilities for research and instruction aligned with the Ph.D. in Applied Ethnomusicology and Intercultural Arts Research, she cannot be expected to be the major professor for the new degree.

3. Current and Projected Major headcount – give the current and projected (next three years) headcount of your undergraduate and graduate students enrolled in your existing degree/major programs. Add rows to the table, as needed.

<table>
<thead>
<tr>
<th>Program name(s) (include subplans, if applicable)</th>
<th>Current enrolled headcount</th>
<th>Year 1 Projected</th>
<th>Year 2 Projected</th>
<th>Year 3 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD Ethno</td>
<td>1*</td>
<td>3</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

*One student is currently pursuing a Ph.D. in musicology with an ethnomusicology emphasis. The limited enrollment may be explained by
the lack of the stand-alone program in the discipline of ethnomusicology. The practical value of the GIDP Ph.D. in Applied Ethnomusicology and Intercultural Arts Research will easily attract and serve more students.

4. Current and Projected Faculty FTE-give the present and projected (next three years) Faculty FTE in the department or unit in which the proposed program will be offered (include all instructional faculty).

This program is a GIDP, and all faculty will hold their FTE in other units.

B. LIBRARY

1. Acquisitions Needed—describe additional library acquisitions needed during the next three years for the successful initiation of the program.

C. PHYSICAL FACILITIES AND EQUIPMENT

1. Existing Physical Facilities—assess the adequacy of the existing physical facilities and equipment available to the proposed program. Include special classrooms, laboratories, physical equipment, computer facilities, etc.

At this time, existing physical facilities are adequate to support this degree.

2. Additional Facilities Required or Anticipated—describe physical facilities and equipment that will be required or are anticipated during the next three years for the proposed program.

N/A

D. OTHER SUPPORT

1. Other Support Currently Available—include support staff, university and non-university assistance.

See budget below.

2. Other Support Needed, Next Three Years—list additional staff needed and other assistance needed for the next three years.

IX. FINANCING

A. LIST SUPPORTING FUNDS FROM OUTSIDE SOURCES.

BUDGET PROJECTIONS FORM—Complete the budget projection form describing the current departmental budget and estimating additional costs for the first three years of operation for
the proposed program. Please note that these costs for each year are incremental costs, not cumulative costs. Include in this budget the anticipated costs for support for instruction, administration of the program, graduate students, marketing, the support discussed in Section VI-D.2, and any other costs that will be needed.
### METRICS

<table>
<thead>
<tr>
<th>Metric</th>
<th>1st Year (2018-2019)</th>
<th>2nd Year (20___-20___)</th>
<th>3rd Year (20___-20___)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net increase in annual college enrollment UG</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net increase in college SCH UG</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net increase in annual college enrollment Grad (see note 1)</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Net increase in college SCH Grad (See note 1)</td>
<td>54</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Number of enrollments being charged a Program Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Sponsored Activity (MTDC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Faculty FTE (see note 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### FUNDING SOURCES

**Continuing Sources**
- UG RCM Revenue (net of cost allocation) (see note 2)
- Grad RCM Revenue (net of cost allocation) (see note 2)
- Program Fee RCM Revenue (net of cost allocation)
- F and A Revenues (net of cost allocations)
- UA Online Revenues
- Distance Learning Revenues
- Reallocation from existing College funds (attach description)
- Other Items (attach description)
- Recurring GIDP allocated operations and salary budget (see note 3)

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Continuing</td>
<td>$12,500</td>
<td>$12,500</td>
<td>$12,500</td>
</tr>
</tbody>
</table>

**One-time Sources**
- College fund balances
- Institutional Strategic Investment
- Gift Funding
- Graduate College GTS and GCF pool
- Other Items (attach description) (See note 6)

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total One-time</td>
<td>$20,000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**TOTAL SOURCES**

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sources</td>
<td>$32,500</td>
<td>$12,500</td>
<td>$12,500</td>
</tr>
</tbody>
</table>

### EXPENDITURE ITEMS

**Continuing Expenditures**
- Faculty (see note 2)
- Other Personnel (see note 4)
- Employee Related Expense
- Graduate Assistantships (see note 5)
- Other Graduate Aid (Grad Dean Commitment, through GIDP admin)
- Operations (materials, supplies, phones, etc.)
- Additional Space Cost
- GIDP Chair Stipend
- Other Items (attach description)

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Continuing</td>
<td>$22,500</td>
<td>$12,500</td>
<td>$12,500</td>
</tr>
</tbody>
</table>

**One-time Expenditures**
- Construction or Renovation
- Start-up Equipment
- Replace Equipment
- Library Resources
- Year 1 recruitment expense (see note 6)

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total One-time</td>
<td>$10,000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**TOTAL EXPENDITURES**

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Projected Fiscal Effect</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
</tbody>
</table>
OTHER RELEVANT INFORMATION

Note 1: GIDPs receive no credit or revenue from SCH. 100% of the tuition funds for GIDPs is returned to the participating instructional units.

Note 2: As in all GIDPs, most of the instructional and advising resources for the program come from already existing faculty in the units that are participating in the GIDP. Students in this program will enroll in existing classes.

In order to provide extra support for this program, the CFA and the Graduate College have agreed to fund a 1.0FTE tenure line position in ethnomusicology which will be housed in the School of Music. This position is not part of the GIDP and will be 100% in the school of music, but the person will be expected to help support the GIDP. They will also be expected to teach Gen Ed and other Undergraduate courses for the school of music to help support their salaries. So the revenue to support this hire will largely not come from the GIDP SCH. Space and staff support for this position will also come from CFA.

Because this is not a GIDP expense, we have not listed it in the budget, but here is the breakdown of the cost and funding sources. We are including an anticipated 1% merit annual increase.

*Ethnomusicology hire in the Fred Fox School of Music.*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuing funding sources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UG and Grad RCM revenue (CFA)</td>
<td>$38,280</td>
<td>$38,663</td>
<td>$78,099</td>
</tr>
<tr>
<td><strong>One Time funding sources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provost’s GIDP support fund (managed by Grad College)</td>
<td>$38,280</td>
<td>$38,663</td>
<td></td>
</tr>
<tr>
<td><strong>Continuing Expenditures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFA Faculty Salary + ERE</td>
<td>$53,000 salary +16,960 ERE = $69,960</td>
<td>$53,530 salary +17,130 ERE = $70,660</td>
<td>$54,065 salary +17,301 ERE = $71,366</td>
</tr>
</tbody>
</table>

Note 3: Graduate College (and GIDP) is not an RC Unit, it is a cost center, so its budget comes from central allocations, not directly from tuition or other forms of RCM revenue.

Note 4: College of Fine Arts has agreed to provide staff support for the GIDP. This staff member will also work as the CFA development officer. See Dean’s letter. This is not included in this budget because it is funded by and housed in a participating college.

Note 5: Graduate Student funding is likely to come mainly from Teaching assistantships. As with all GIDPs, these will typically be provided by the participating units as needed and negotiated on a case-by-case annual basis. In addition:

- College of Fine Arts has agreed to fund a dedicated .25GTA for the program.
- The GIDP will be eligible to apply for funding through the small GIDP Admin TA pool.
- The program will also be eligible for Graduate College Fellowships, Graduate Tuition scholarships and other fellowship programs. The Graduate College guarantees 10,000 in combined GTS and GCF to help with recruiting in the first year.

Note 6: The GIDP has received one time commitments of 2,000 from each of 5 colleges (see attached letters). These funds will be used to kick start recruitment and advertising.
VIII. REQUIRED SIGNATURES:

Managing Unit Administrator: Benedict J. Colombi, Faculty Director, Graduate Interdisciplinary Programs
(name and title)

Managing Administrator’s Signature: __________________________ Date: October 23, 2017

Managing Unit Administrator: ______________________________________________________
(name and title)

Managing Administrator’s Signature: __________________________ Date: __________________

Managing Unit Administrator: ______________________________________________________
(name and title)

Managing Administrator’s Signature: __________________________ Date: __________________

Dean’s Signature: __________________________ Date: October 17, 2017

Dean’s Signature: __________________________ Date: __________________

All programs that will be offered through distance learning must include the following signature. The signature of approval does not indicate a commitment to invest in this program. Any potential investment agreement is a separate process.

Joel Hauff, Associate Vice President of Student Affairs & Enrollment Management/Academic Initiatives and Student Success

Signature: __________________________ Date: __________________

All programs that will be offered fully online must include the following signature. The signature of approval does not indicate a commitment to invest in this program. Any potential investment agreement is a separate process.

Vincent Del Casino Jr., Vice Provost for Digital Learning and Associate Vice President of Student Affairs & Enrollment Management

Signature: __________________________ Date: __________________

Note: In some situations signatures of more than one unit head and/or college dean may be required.
September 13, 2017

Janet Sturman, Associate Dean
Graduate College
The University of Arizona
Administration 322

Dear Dean Sturman,

I am pleased to provide this letter of support from the College of Fine Arts (CFA) for the proposed Graduate Interdisciplinary Program in Applied Ethnomusicology.

We expect that there will be multiple opportunities for exciting research and creative collaboration among our faculty and arts disciplines.

The CFA will commit $2,000 annually to this effort and we look forward to participating in the guidance of this new interdisciplinary program.

Sincerely,

Tannis Gibson
Interim Dean, College of Fine Arts
Tuesday, September 19, 2017

Andrew Carnie, Dean
Graduate College
The University of Arizona

Dear Dean Carnie,

The College of Fine Arts is pleased to enter into a partnership with the Graduate Interdisciplinary Program in the Graduate College. We believe that the G.I.D.P. program in Applied Ethnomusicology and Intercultural Arts Research will offer exciting prospects for collaboration from within our college and across many disciplines campus wide.

While the CFA will fund the potential hire under the normal terms of the GIDP, the Fred Fox School of Music will be the tenure home unit. Importantly, the positioning of an ethnomusicologist into the School of Music will make for an expanded community of research-based music faculty. This step will contribute to opportunities for significant exchange of knowledge and a mutually supportive environment within the School.

The CFA strongly welcomes the opportunity to embrace a greater number of interdisciplinary research possibilities. We also wish to ensure that Music maintains a voice in the sharing of the degree programs, particularly the PhD in Ethnomusicology and the Minor in Ethnomusicology within the DMA. Changes to the Planning Proposal and Bylaws (see Article 2) have been made based upon discussions with Dr. Janet Sturman, Professor Martina Shenal, Sharon Young, and myself on Friday, September 8, 2017.

The College of Fine Arts (CFA) will support the hire of a new full-time tenure track professor in ethnomusicology and has already secured permission from the Provost to search once the GIDP proposal is approved. The terms of the budgetary agreement include a two-year 50% salary + ERE commitment from CFA for projected academic years 2018/19 and 2019/20. A full salary + ERE commitment from CFA will begin in Fall of the 3rd year.

The CFA will provide a .5 FTE Program Coordinator to support the GIDP program once it is fully approved and the faculty hire has been made.

The Fred Fox School of Music will provide a .25 Graduate Teaching Assistantship expected to begin Fall 2018. The FFSoM, in conjunction with the CFA, will provide office space for the potential hire.
The CFA is thrilled to be a part of this agreement and we look forward to the many opportunities that will emerge across campus as a result of this strategic hire.

Sincerely,

[Signature]

Tannis Gibson
Interim Dean, College of Fine Arts
Memorandum

TO: Andrew Carnie, Dean, Graduate College
    Janet Sturman, Associate Dean, Graduate College

FROM: Alain-Philippe Durand, Dean, College of Humanities

DATE: March 30, 2017

RE: GIDP MA & PhD in Ethnomusicology

The College of Humanities would like to formally confirm our intent to participate and contribute financial support for underwriting the proposed GIDP MA & PhD in Ethnomusicology. This interdisciplinary program will benefit master and doctoral candidates and faculty through shared course access and delivery across colleges, linking diverse areas of research and expanding the network of theoretical research at the university.

The College of Humanities financial commitments ($2,000 annually) are pending approval of the GIDP, and are intended for the first three years of the program, with optional renewal after, contingent on availability of funding.

cc: Kim Jones | Toni Alexander
April 13, 2017

Janet Sturman
Associate Dean, Graduate College
Administration 322
The University of Arizona

Dear Janet,

It is my pleasure to submit this letter of support from the College of Social and Behavioral Sciences for the newly proposed Graduate Interdisciplinary Program (GIDP) in Applied Ethnomusicology.

The draft proposal I have seen suggests exciting collaborative possibilities between faculty in SBS and elsewhere on campus — the Fred Fox School of Music, certainly, but also the College of Science, the College of Humanities, and the College of Education, among others. I am confident that within SBS units such as Anthropology, History, American Indian Studies, Mexican American Studies, and Gender and Women’s Studies there are a number of faculty who will find participation in the development and actualization of the GIDP exciting and meaningful.

The College of SBS looks forward to contributing to the curriculum, research partnerships, and community collaborations that will surely emerge as the GIDP’s potential is realized. With this letter of support we also confirm our contribution of no less than $2,000 annually toward the GIDP’s operations.

We wish all involved in the Applied Ethnomusicology GIDP the best of success moving forward.

Sincerely,

J.P. Jones, III
Dean, College of Social and Behavioral Sciences
May 31, 2017

Janet Sturman
Associate Dean, Graduate College
Administration 322
The University of Arizona

Dear Janet,

I am pleased to provide this letter of support from the College of Science for the proposed Graduate Interdisciplinary Program (GIDP) in Applied Ethnomusicology.

There are many opportunities for collaboration with faculty from COS departments such as Speech, Language and Hearing Sciences, Neuroscience, Cognitive Science, Psychology, and likely others as well.

The College of Science is enthusiastic about contributing to this exciting new interdisciplinary program. With this letter of support, we also confirm our contribution of $2000 annually toward the GIDP’s operations budget. We look forward to assisting this program achieve success.

Sincerely,

Brad H. Story
Interim Associate Dean, College of Science
May 31, 2017

Dr. Janet Sturman, Associate Dean
Graduate College
Administration 322
The University of Arizona

Dear Janet:

I am pleased to provide the support of the College of Education to the proposal to create a new Graduate Interdisciplinary Program in Applied Ethnomusicology.

The proposal for the new GIDP is fully consistent with the interdisciplinary culture of The University of Arizona. I anticipate the new GIDP will help foster excellent collaborations among faculty in the Colleges of Social and Behavioral Sciences, Humanities, Fine Arts and Education. In our college, faculty members in a number of departments are likely to wish to affiliate with the Applied Ethnomusicology GIDP. In particular, faculty members in education with backgrounds in language and culture and in applied linguistics will find this new GIDP to be a welcome addition to research at the University of Arizona. Moreover, I can anticipate that a number of courses in the College of Education will help contribute to the curriculum of the GIDP.

I am committing $2,000 annually to this effort as a way to secure participation by the College of Education and I welcome the opportunity to place a College of Education faculty member on the committee guiding the new program.

Sincerely,

Ronald W. Marx, Dean
Professor of Educational Psychology
Paul L. Lindsey and Kathy J. Alexander Chair
Hi Janet,

I looked this over. I think it is a very interesting program. I think there may be other faculty members who could participate such as Nicole Yuan as she is a clinical psychologist. I do have to discuss this with Iman since there is a financial contribution to the program. I will talk to her about it. FYI, Chris Cutshaw and Ken Schachter are both part-time NTE faculty and I am not sure if that makes a difference.

Doug

Douglas Taren, PhD
Associate Dean for Academic Affair
Professor of Public Health
Director, Western Region Public Health Training Center
Mel and Enid Zuckerman College of Public Health
University of Arizona
1205 N. Martin Ave, PO Box 245163
Tucson, AZ 85724
Phone: 520-626-8375

From: "Sturman, Janet L - (sturman)" <sturman@email.arizona.edu>
Date: Sunday, March 26, 2017 at 3:25 PM
To: Doug Taren <taren@email.arizona.edu>
Subject: invitation to participate in a new GIDP in Ethnomusicology

Dear Doug,

We are hoping to create a new GIDP in Applied Ethnomusicology that would include partnerships with the College of Public Health.

Attached is a letter with more details and a rough draft of the GIDP proposal. Please do not hesitate to give me a call to talk more about the plans.

Although I have been thinking about this for a long time, the proposal is still in a gestational stage, but step one for a GIDP is establishing an executive committee and securing support from participating Colleges.

Looking forward to hearing your thoughts on this.

all best,

Janet

Janet L. Sturman, Ph.D.
To: Andrew Carnie, Dean, Graduate College  
From: Colin Blakely, Director, School of Art  
Date: December 4, 2017  
Re: Support for Proposed Ph.D. in Applied Ethnomusicology and Intercultural Arts Research

Dean Carnie,
On behalf of the School of Art, I am happy to offer my support of the proposed PhD program in Applied Ethnomusicology and Intercultural Arts Research. Faculty in the school have worked with Associate Dean Sturman to ensure that all School of Art courses listed in the program are appropriate, and we are happy to open up those courses to students in the program.

We look forward to continuing to work with Associate Dean Sturman and the Graduate College on the success of this new program!

Sincerely,

Colin Blakely  
Director  
cblakely@arizona.edu
October 26, 2017

Dean Andrew Carnie  
Graduate College  
University of Arizona

Dear Dean Carnie (Dear Andrew):

I am writing to express the Department of Linguistics' support for the proposal for a new GIDP for Ethnomusicology. Relevant groups of our graduate students are enthusiastic about the prospect of this program. I have discussed course choices for the program with Dean Sturman, and she has incorporated several relevant courses from our department into the plans for the program.

Beyond those points, I believe that ethnomusicology is an important area for those of us who work with language and cultural revitalization. I personally would welcome the presence of a coordinated group focusing on this topic on campus who I could consult with regard to my own work.

Sincerely,

Natasha Warner, Head  
Department of Linguistics
Dear Andrew,

The School of Dance has no objections to students who will be enrolled in the Ethnomusicology and Intercultural Arts GIDP from taking the classes regularly offered and taught by the School of Dance as listed in the program proposal. We would expect the students to meet all the normal prerequisites for those classes.

Wishing you the best regarding this initiative!

Jory

Jory Hancock
Associate Dean of Fine Arts/UA Presents
Director of Dance and Stevie Eller Endowed Chair
Cell Phone: 520.730.7353
Dear Andrew,

Congratulations on the approval of the new GIDP in Applied Ethnomusicology and Intercultural Arts Research. The School of Anthropology is happy to allow students in this program to register for the classes listed in the curriculum. The only caveat is that ANTH 608A is only open to graduate students with a major or minor in anthropology. We noted that anthropology is not one of the identified minors for the program, so there may not be any students eligible for this course. If that's the case, then it should be dropped from the list.

Best,
Diane

From: Sturman, Janet L - (sturman)
Sent: Wednesday, October 18, 2017 10:57 AM
To: Austin, Diane E - (daustin)
Subject: Instructional Support Request

Dear Diane,

Thank you for your support of the new GIDP Ph.D. in Applied Ethnomusicology and Intercultural Arts Research.

We are happy to report that the Graduate Interdisciplinary Programs Advisory Council approved the implementation of the new GIDP and the process of implementing the program is proceeding.
Andrew Carnie, Dean  
Graduate College  
University of Arizona  

December 10, 2017  

Dear Dean Carnie,  

Janet Sturman has asked for me to confirm that the Fred Fox School of Music is willing to allow students in the proposed GIDP Ph.D. in Applied Ethnomusicology and Intercultural Arts Research program to register for graduate classes in Music listed in the GIDP curriculum. In her request to me, Dr. Sturman pointed out that there is a sizeable number of Music courses required for this degree.  

As you know, four of us from the Fred Fox School of Music administration addressed this question in a letter to you dated October 31, 2017, and again on December 8, 2017. Our letters spelled out our initial concerns, and most of those have been addressed. Thank you for your help.  

I wish to confirm that we are willing to support this proposal. Students from the GIDP are welcome to take Music classes provided they meet the prerequisites and possess the skill sets needed to succeed in those classes.  

Thank you.  

Sincerely,  

Edward Reid, Director  
Alan C. and Daveen Fox Endowed Chair  
Fred Fox School of Music  
University of Arizona  
Tucson, AZ 85721  
ereid@email.arizona.edu
Dear Andrew,

This email serves as my enthusiastic confirmation as Acting Head of the American Indian Studies Department to allow students in the proposed Ethnomusicology GIDP and to register for AIS classes as listed in the curriculum, below and attached.

Many Thanks!

Sincerely,

Ben

On Wed, Oct 18, 2017 at 3:38 PM, Berry, Christina L - (christinaberry) <christinaberry@email.arizona.edu> wrote:

On behalf of Dean Sturman

Dear Ben,

Thank you for your support of the new GIDP Ph.D. in Applied Ethnomusicology and Intercultural Arts Research.

We are happy to report that the Graduate Interdisciplinary Programs Advisory Council approved the implementation of the new GIDP and the process of implementing the program is proceeding.

The next step is the approval of the new degrees. Attached is the proposal for the Ph.D. in Applied Ethnomusicology and Intercultural Arts Research.

So that the proposal may continue its routing through university committees, we need your confirmation that the Department of American Indian Studies is willing to allow students in this program to register for the American Indian Studies classes listed in the curriculum.

You can see from the curricular outline that a sizeable number of American Indian Studies courses are recommended as options for this degree.

We ask that you send a brief email or memo of confirmation to Andrew Carnie, Dean, Graduate College:
Faculty Consent Agenda Item

Request for Authorization to Implement a New Degree Program

<table>
<thead>
<tr>
<th>Program Name &amp; Degree</th>
<th>Master of Science in Business Analytics,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requested by (College/Department)</td>
<td>Department of Management, Eller College of Management</td>
</tr>
<tr>
<td>CIP Code</td>
<td>52.1399 Management Sciences and Quantitative Methods</td>
</tr>
</tbody>
</table>

Purpose of Program:

The MS in Business Analytics combines a technical and managerial curriculum to provide students with the expertise required to apply analytics to business problems and make decisions in data-centric environments. The degree offers a program in which students can immediately apply the knowledge and skills they learn in the classroom to a broad range of jobs in high-paying commercial and non-profit sectors.

The UA is well-equipped to offer this degree, drawing on the interdisciplinary breadth within the Eller College’s with its highly ranked programs in Management and Information Systems, MBA, finance, economics, accounting, and marketing. This degree will prepare graduates to meet the growing market need for jobs in Data Science and Data Analysis.

The demand for qualified business professionals with analytical skills so exceeds the supply that organizations report trouble finding qualified individuals to hire. Indeed.com reports that there are 5,728 unfilled jobs in Data Business, 9,421 in Data Science, and 6,196 in Data Analysis. Graduates with the MS in Business Analytics would be prepared to step into these jobs. The consulting firm McKinsey & Co. projects that 2018 will see a “50-60% gap between supply and demand of deep analytic talent.” The shortage is felt across a broad spectrum of industries, including aerospace, insurance, pharmaceuticals, and finance.

<table>
<thead>
<tr>
<th>5-year projected annual enrollment</th>
<th>1st year</th>
<th>2nd year</th>
<th>3rd year</th>
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<td>70</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

Source(s) of Funding

RCM Revenue, Program Fees and after year 2 Consulting Program Revenue

Approvals:

ABOR
Graduate Council
CAAC
Provost’s Council
Faculty Senate Executive Cmte
Faculty Senate
I. PROGRAM NAME, DESCRIPTION AND CIP CODE

A. PROPOSED PROGRAM NAME AND DEGREE(S) TO BE OFFERED – Master of Science in Business Analytics

B. CIP CODE – 52.1399 Management Sciences and Quantitative Methods - Other (NOTE: CIP 52 is Business, Management, Marketing and Support Services)

C. DEPARTMENT/UNIT AND COLLEGE – Eller College of Management.

Campus and Location Offering – indicate by highlighting in yellow the campus(es) and location(s) where this program will be offered.

- UA South Campus
  Sierra Vista
  Douglas
  Mesa
  Pima CC East
  Pinal County
  Santa Cruz
  UA Science and Tech Park

- UA Main
  Tucson
  UA Downtown

- UA Online
  Online

- Distance Campus
  Chandler
  Paradise Valley
  Yuma

NOTE: While the program will initially roll out on campus, it is our intention that an online version will be developed soon.

II. PURPOSE AND NATURE OF PROGRAM—The Master’s of Science in Business Analytics program will operate at the intersection of business, quantitative methods and information technology with a clear focus on business applications. The program will focus on the application of current analytical methods to business problems utilizing business world data wherever possible. Many competing programs are simply rebadged statistics programs. We see this program as different from many others in that it is clearly a “business” analytics program with real world applications with business partner provided data in most if not all courses. We will address the foundational skills and tools needed to do business analytics and apply those to real situations.
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

While it would lack integrity to suggest that we would have a completely novel and unique program, we are confident that there is both unmet demand for such a program and exceptional delivery capability on this topic in a business world ready fashion that most programs cannot match due to our highly credentialed MIS and other Eller faculty. Additionally, Eller trails most of the top 10 MIS/technology related master’s programs (see Attachment A) by not offering a master’s degree specifically titled business analytics. We only offer a departmental certificate in Business Intelligence and Analytics for on ground students and an online certificate. While we are starting a bit behind, we are confident that with our reputation in the related field of MIS and our accomplished faculty we can quickly achieve a highly ranked position in the market.

See Attachment A top 10 programs

In terms of demand, business professionals in today’s highly competitive world are expected to make decisions in a more data centric manner every day. The days of making decisions based on “gut feel” or pure intuition are now past. Roles in accounting, finance, marketing and information technology, among others, all expect a level of skill in business analytics as a going in position. While we have incorporated analytics in many of our existing Eller graduate programs, there is demand for a program which will develop deeper skills in the application of analytics to business problems than can be provided in 2 or 3 courses.

The purpose of the MS program Business Analytics is to offer students a high-quality, flexible program that is in high demand in the both commercial and not-for-profit sectors.

A search of Indeed.com on 4/13/2017 indicates that using the search criteria of full time, entry level jobs with a salary of $65K+ there are 9,421 unfilled jobs with the title Data Science, 5,728 jobs with the title Business Analytics and 6,196 jobs with the title Data Analysis. Our graduates would be candidates for most of these opportunities and more.

A study by McKinsey & Co. (https://www.mckinsey.com/ -- one of the “Big 3” business strategy consulting firms) projects that “by 2018, the U.S. alone may face a 50 percent to 60 percent gap between supply and requisite demand of deep analytic talent.” The shortage is already being felt across a broad spectrum of industries, including aerospace, insurance, pharmaceuticals, and finance. When the consulting firm Accenture surveyed its clients on their big-data strategies in April 2014, more than 90 percent said they planned to hire more employees with expertise in data science—most within a year. However, 41 percent of the more than 1,000 respondents cited a lack of talent as a chief obstacle. “It will get worse before it gets better,” says Narendra Mulani, senior managing director at Accenture (a global consulting firm) Analytics.
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

In short, the demand for qualified business professionals with analytic skills is exceeding the supply so much so that organizations report that they have trouble finding qualified individuals to hire.

Our new MS in Business Analytics program will help meet this demand by offering a program in which students can immediately apply the knowledge and skills they learn in the classroom to their job.

How does our program differ from others? In short, our program encompasses both a technical and a managerial perspective on business analytics. Most of the programs we reviewed were either very technical to the exclusion of business application or rebadged statistics or other existing programs. Our proposed program will offer a focus area of application resulting in a deeper understanding of the business questions to be addressed. Additionally, the proposed program will both allow for and encourage dual degrees with our existing portfolio of master’s programs in finance, marketing, MIS, economics, accounting and MBA providing for an even deeper understanding of the underlying questions. We will provide students with a clear and predetermined pathway to those dual degrees relieving the student of the responsibility to “figure it out” themselves by providing pre-approved plans of study for each dual degree.

Below is the vision for the Eller College developed by Dean Paulo Goes as communicated in his annual college report dated 5/2/2017. Those items highlighted in yellow are well served by the addition of a MS in Business Analytics program.

**Vision**

- We will become a top 10 public business school. Influential and a widely recognized leader in business education, frontier knowledge discovery and impact on business practice.
- We will **create the future of business education** and will shape the future of business.
- We will build on our outstanding foundation of business and economics and will **embrace forward-leaning big interdisciplinary themes that leverage our core competencies in entrepreneurship, innovation, analytics and digital transformation.**
- We will foster and create advanced interdisciplinary immersive environments of experiential learning, **where business innovation meets the creative thinking of the Eller students and faculty,** and business education intertwine with professional development.
- In the world of the networked economy, we will develop and grow stronger than ever business and community connections, in a close-knit triad of knowledge creation and discovery, education and external partnerships.
- The Eller College will be positioned to address the challenges of the external business world, the demands of the consumers in the various markets for business education.

Additionally, Dean Goes sees the future of the business world in the following way:

**Business world facing exponential changes.** The forces of the “fourth industrial revolution” are shaping the business world in unprecedented ways. Exponential advances in a wide range of digital technologies are causing
disruption in entire industries forcing rapid changes everywhere, from retail to logistics to financial services. In a world of big data analytics, artificial intelligence and where software reigns, digital transformation affects society at large, the economy and organizations in ways never seen before. This is the innovation economy, and more than ever there is an accelerated need for forward-looking, impactful business education. An education that is firmly planted on the solid foundation of business disciplines, but at the same time focuses on entrepreneurship, innovation, creativity, interdisciplinary, new business models, and an understanding of the digital forces and their consequences in an increasing inter-disciplinary context.

III.  PROGRAM REQUIREMENTS – Our required courses are as follows:

BNAD 555 -- Introduction to Business Analytics (3)
RDB/SQL primer (summer online module – 1 credit)
MKT 552 -- Introduction to Statistics (2)
MKT 555A -- Regression Modeling for Analytics (2)
MKT 555B -- Experimentation for Data Analytics (2)
MIS 561 -- Data Visualization (3)
MIS 587 -- Business Intelligence (3)
MIS 509 -- Business Communications (3)
MIS 586 -- BI for Data Analytics (3)
MIS 545 -- Data Mining for Business Intelligence (3)

BNAD 597A -- Business Analytics Consulting (3)
Two Electives (6 credits total)

Two elective courses must be selected. The student may choose an optional functional focus area (Econometrics, Marketing, Finance, Forensic Accounting, Econometrics, Health Care or Information Technology). The program will be 33 credits. There will be a prerequisite of a college-level programming course or a passing grade on a proficiency exam as well as exposure to calculus level math and basic statistics.

Note that MIS 531 is currently indicated as a prerequisite for MIS 587. The MIS department has approved the 1 credit RDB/SQL primer as fulfilling this requirement. They will be amending the appropriate documents to support this.

See Attachment B for course descriptions
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

A. CURRENT COURSES AND EXISTING PROGRAMS -- Several current courses from the MIS, Economics and Marketing Departments provide relevant material for this new program. The required courses include the following:

- MKT 552 Introduction to Statistics
- MIS 561 Data Visualization
- MIS 587 Business Intelligence
- MIS 545 Data Mining for Business Intelligence
- MIS 586 Big Data Analytics
- MIS 509 Business Communications
- BNAD 597A Business Consulting

Electives include the following:

- MKT 542 Marketing Analytics
- MKT 572 Marketing Research for Managers
- FIN 525 Empirical Methods in Finance
- ACCT 530 Forensic Accounting
- ACCT 540 Introduction to Accounting
- MIS 531 Enterprise Data Management
- MIS 510 Web Computing and Mining
- MIS 506 Health Care IT
- ECON 520 Quantitative Methods for Economics
- ECON 522A Econometrics I

See Attachment B for course descriptions

SPECIAL CONDITIONS FOR ADMISSION TO/DECLARATION OF THIS MAJOR -
Prerequisites to the program would be college-level course in computer programming or the passing of a proficiency exam. Applicants would be expected to demonstrate inclination toward analytical work via their UG major (Math, Engineering, MIS, ...) or work experience. An UG GPA of 3.0 or better would be needed except in rare occasions. In addition, a college level course in Calculus or equivalent course work or experience will be required as well as exposure to statistics.

NEW COURSES NEEDED -- list any new courses which must be added to initiate the program; include a course prefix, number, title, catalog description and number of units for each of these courses.

Required new Courses needed include:
- BNAD 555 Introduction to Business Analytics – 2 credits
- MKT 555B Experimentation for Data Analytics – 2 credits
- MKT 555A Regression Modeling for Analytics – 2 credits
- RDB/SQL primer – 1 credit
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

See Attachment A for course descriptions

REQUIREMENTS FOR ACCREDITATION -- Once approved, the program will fall under the umbrella of accredited offerings in the Eller College.

IV. STUDENT LEARNING OUTCOMES AND ASSESSMENT

STUDENT OUTCOMES –
Student outcomes for the program are:
1. Apply a broad set of analytical tools to address business decisions; these tools to include statistics, regression analysis, data visualization, data mining, experiment design, data curation and storage of multiple data types.
2. Determine the appropriate tool(s) (see #1) needed to address a business decision; business decisions to include, customer segmentation/targeting, scarce resource allocation, financial results analysis and sentiment determination.
3. Interpret the results of analysis to support business decision making in the context of a specific business domain; domains to include at least one of finance, marketing, accounting and economics.
4. Communicate skills and techniques developed to employers to attract relevant job offers

STUDENT ASSESSMENT –
A variety of assessment activities will be utilized to measure student learning outcomes, including the following.

A. While students are still in the program,
   a. Learning outcomes 1-3 identified above will be connected to a set of assignments, projects, case studies, and exam questions with rubrics customized to measure specific outcomes.
   b. Learning outcome 4 will be assessed based on student-specific placement data and recruiter assessments.

B. After students have completed the degree and have been working for 3 years, we will survey them to be sure that the skills and experiences were sufficient for them to achieve success in their positions.

C. In both cases, the Business Analytics Master’s committee will meet regularly to review the results of assessment and modify assessment activities and pedagogy to ensure they are meeting the needs of the students and recruiters.
### NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

<table>
<thead>
<tr>
<th>Student Outcomes</th>
<th>Exams</th>
<th>Projects</th>
<th>Placement Data</th>
<th>Recruiter Survey</th>
<th>Post-Graduation Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Apply a broad set of analytical tools to address business decisions; these tools to include statistics, regression analysis, data visualization, data mining, experiment design, data curation and storage of multiple data types.</td>
<td>Use of targeted exam questions with customized rubrics</td>
<td>Student consulting projects with real companies to be evaluated with customized rubrics</td>
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<td></td>
<td>X</td>
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<tr>
<td>2. Determine the appropriate tool(s) (see #1) needed to address a business decision; business decisions to include, customer segmentation/targeting, scarce resource allocation, financial results analysis and sentiment determination.</td>
<td>Use of targeted exam questions with customized rubrics</td>
<td>Student consulting projects with real companies to be evaluated with customized rubrics</td>
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<td>X</td>
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<tr>
<td>3. Interpret the results of analysis to support business decision making in the context of a specific business domain; domains to include at least one of finance,</td>
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<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

marketing, accounting and economics.

4. Communicate skills and techniques developed to employers to attract relevant job offers

| X | X | X |

V. STATE'S NEED FOR THE PROGRAM

A. HOW DOES THIS PROGRAM FULFILL THE NEEDS OF THE STATE OF ARIZONA AND THE REGION? -- INCLUDE AN EXPLANATION OF THE PROCESS OR SOURCE FOR ARRIVING AT ALL NUMBERS USED IN THIS SECTION

1. IS THERE SUFFICIENT STUDENT DEMAND FOR THE PROGRAM? -- As stated above, the demand for graduates with analytics skills far outweighs current supply. On a very local level, many of our existing MIS students and applicants (we have about 1000 applicants for about 100 spots in the class) seek careers in data science/analytics. The job market for this skill is extremely strong. See data in the answer to #3 below. We fully expect the demand for this program to equal the demand for the existing MIS program. That said, it would not be surprising if this new program would reduce the demand for our existing MIS program, we do not expect it to have any material impact on our other graduate programs.

2. What is the anticipated student enrollment for this program? (Please utilize the following tabular format). While these are estimates they are based on our experience with the demand for our existing MIS graduate programs.
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

5-YEAR PROJECTED ANNUAL ENROLLMENT

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
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<td>of students</td>
<td>25</td>
<td>50</td>
<td>75</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

3. A search of Indeed.com on 4/13/2017 indicates that using the search criteria of full-time, entry level jobs with a salary of $65K+ there are 9,421 jobs with the title Data Science, 5,728 jobs with the title Business Analytics and 6,196 jobs with the title Data Analysis. Our graduates would be candidates for most of these opportunities and more. Individual discussions have taken place with senior people from KPMG, Accenture, Deloitte, Microsoft, Amazon and others with all indicating the lack of ability to meet the demand for adequate talent in this domain.

4. Beginning with the first year in which degrees will be awarded, what is the anticipated number of degrees that will be awarded each year for the first five years? (Please utilize the following tabular format).

PROJECTED DEGREES AWARDED ANNUALLY

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
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<td>23</td>
<td>45</td>
<td>70</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

IV. APPROPRIATENESS FOR THE UNIVERSITY -- The MS in Business Analytics program will help enable for profit and not-for-profit entities in the state of Arizona, and more by providing high quality, cutting-edge research based education in a field of utmost importance - business analytics. Students will experience an innovative, engaged hands-on approach to learning about the critical components of business analytics that will enable to them to translate their newly acquired skills and theory learned to advance their careers over time by both applying the tools and techniques they have learned and having the background to learn new tools and techniques as they arise.
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

Inclusive Excellence Statement

Inclusive Excellence (IE) is a fundamental part of the University of Arizona’s strategic plan and culture. As articulated and endorsed by the Association of American Colleges and Universities, an IE institution, in pursuit of a multiplicity of educational and social outcomes, engages the values and voices of all faculty, staff, and students and the varied rich backgrounds, experiences, perspectives, talents, gifts, and cultures that individuals and groups bring to an institution of higher learning. Stated differently, an IE institution perceives diversity and inclusiveness as a resource that offers tremendous benefits and, subsequently, works towards cultivating, utilizing, and embedding the concept in all areas of the institution. By achieving and maintaining inclusive student, staff, and faculty bodies, along with creating an inclusive climate, an IE institution successfully connects with the reality of our evolving society and contributes to a better world. Ultimately, by cultivating a broadly diverse and inclusive intellectual environment, an IE institution gains an edge in educational and research opportunities and in thereby preparing all students for living and working in a diverse democracy and an increasingly complex global society.

The Master of Business Analytics Program adheres to the UA principles of IE by being attentive to diversity and inclusiveness in all aspect of the program including curriculum, teaching, research, and service. In particular, we seek to recruit and retain talented students from underrepresented communities (e.g., women, students of color, LGBTQ+, people with disabilities, etc.) We strive to create the best possible climate for all students to learn, grow, and develop, allowing them to contribute to the goals and objectives of the field of business analytics. Thus, one of the goals of the program is to increase the diversity of students in the program with special emphasis on women and students of color, who are largely underrepresented in this field.

V. EXISTING PROGRAMS WITHIN THE ARIZONA UNIVERSITY SYSTEM

A. Arizona University System -- List all similar programs at the same academic level (Bachelor’s, Master’s, Doctoral) currently offered in the Arizona University System. (Please utilize the following tabular format).
### NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Degree Type</th>
<th>Number of Students Enrolled</th>
<th>LOCATION University &amp; Site</th>
<th>PROGRAM ACCREDITATION? YES/NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ASU – Business Analytics</td>
<td>MS-BA</td>
<td>158</td>
<td>Tempe</td>
<td>Y</td>
</tr>
<tr>
<td>2 UA Agricultural Economics – Applied Econometrics and Data Analytics</td>
<td>MS</td>
<td>12 1st year; 9 2nd year</td>
<td>Tucson</td>
<td>Y</td>
</tr>
<tr>
<td>3 UA MS in Management Information Systems</td>
<td>MS</td>
<td>160</td>
<td>Tucson</td>
<td>Y</td>
</tr>
<tr>
<td>4 UA MS in Econometrics and Quantitative Economics</td>
<td>MS</td>
<td>New fall 2018</td>
<td>Tucson</td>
<td>Y</td>
</tr>
<tr>
<td>5 UA MS in Finance</td>
<td>MS</td>
<td>27</td>
<td>Tucson</td>
<td>Y</td>
</tr>
<tr>
<td>6 UA MS in Marketing</td>
<td>MS</td>
<td>17</td>
<td>Tucson</td>
<td>Y</td>
</tr>
</tbody>
</table>

The primary difference between the proposed program and the others is that it has an extensive focus on applying analytical methods (statistics/regression, optimization, machine learning, network analysis, ...) to business-based applications/data (Finance, Marketing/Customer, Accounting, external/social media, etc.) throughout the curriculum with an optional functional focus area of application. The other programs primarily focus as follows:

1. MS in Ag Econ – Per the Agricultural & Resource Economics web site, “The Master's program provides training in the theory and methods of applied agricultural and resource economics”.

2. MS in MIS – Development in deep skills in the areas of business information technology application development, the storage of structured transaction data and technologies in support of all types of data.

3. MS in Econometrics and Quantitative Economics – Application of economic theory and quantitative methods to microeconomic problems. Per the New Academic Program Request Form – “The Program has an analytical and empirical focus and draws on the current strengths of the Economics department in microeconomics, empirical methods and experimental/behavioral economics.”
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

4. MS in Finance — Focus is primarily on the theory of Finance including investments, valuation and corporate finance strategy.
5. MS in Marketing — Focus is primarily on the theory of Marketing and customer/product and promotion strategies.

See also Attachments C&D for a comparison of the proposed program to other public offerings including ASU.
VI. EXPECTED FACULTY AND RESOURCE REQUIREMENTS

A. FACULTY

1. Current Faculty -- List the name, rank, highest degree, primary department and estimate of the level of involvement of all current faculty members who will participate in the program. If proposed program is at the graduate level, also list the number of master’s theses and doctoral dissertations each of these faculty members have directed to completion. At the end of this document is a brief vita for each faculty member listed.

2. Additional Faculty -- Describe the additional faculty needed during the next three years for the initiation of the program and list the anticipated schedule for addition of these faculty members. No new faculty needed at this point.

Current Student and Faculty FTEs -- Give the present numbers of Student FTE (identify number by graduate and undergraduate students) and Faculty FTE in the department or unit in which the program will be offered. According to the Fall 2016 census data, the Eller College had 1620 undergraduate professionally admitted to the upper division program. For graduate FTEs, there were 491 students enrolled in the various MBA platforms and 339 students in the other Master’s programs and 123 PhD students for a total of 953 graduate students. In the Eller College there are 96 tenure track eligible FTEs, 49 non-tenure track FTEs. This results in a total of 145 FTEs for faculty.

3. Projected Student and Faculty FTEs -- Give the proposed numbers of Student FTE and Faculty FTE for the next three years in the department or unit in which the program will be offered. There are no needs specified at this time.

B. LIBRARY

1. Acquisitions Needed -- Describe additional library acquisitions needed during the next three years for the successful initiation of the program. No new library material needed.
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

C. PHYSICAL FACILITIES AND EQUIPMENT

1. Existing Physical Facilities -- Assess the adequacy of the existing physical facilities and equipment available to the proposed program. Include special classrooms, laboratories, physical equipment, computer facilities, etc. The program will need to utilize a portion of existing McClelland Hall space for a small lab to use and demonstrate key tools and methods.

2. Additional Facilities Required or Anticipated -- Describe physical facilities and equipment that will be required or are anticipated during the next three years for the proposed program. New software tools will need to be made available as well as storage space in a secure environment for partner supplied data for student use.

D. OTHER SUPPORT

1. Other Support Currently Available -- Include support staff, university and non-university assistance. A part time program director will be required for the first year.

2. Other Support Needed, Next Three Years -- List additional staff needed and other assistance needed for the next three years. After the first year the director may need to be full time and an assistant director added going forward. This assumes an enrollment of approximately 50 in the second year.

VII. FINANCING

A. SUPPORTING FUNDS FROM OUTSIDE SOURCES -- None at this time

B. BUDGET PROJECTIONS FORM -- See attached spreadsheet – Attachment E

VIII. OTHER RELEVANT INFORMATION -- Attachments F, G & H outline the Plan of Study in tabular and graphic format for reader convenience. Note that the student would have the option of completing the program in 10 or 16 months depending on the desire to complete in 2 or 3 semesters with the 3 semester option allowing for a summer internship which may be attractive to some less experienced students. Also attached are letters of support from potentially impacted programs.
IX. REQUIRED SIGNATURES:

Managing Unit Administrator: _Lisa D. Ordóñez, PhD, Eller College Vice Dean______________
(name and title)
Managing Administrator’s Signature: __________________________ Date: 12/8/17

Managing Unit Administrator: __________________________
(name and title)
Managing Administrator’s Signature: __________________________ Date:______________

Managing Unit Administrator: __________________________
(name and title)
Managing Administrator’s Signature: __________________________ Date:______________

Dean’s Signature: _Paulo Goes, PhD, Eller College Dean______________ Date:______________

Dean’s Signature: __________________________ Date: 12/8/17

All programs that will be offered through distance learning must include the following signature. The signature of approval does not indicate a commitment to invest in this program. Any potential investment agreement is a separate process.

Joel Hauff, Associate Vice President of Student Affairs & Enrollment Management/Academic Initiatives and Student Success

Signature: __________________________ Date:______________

All programs that will be offered fully online must include the following signature: The signature of approval does not indicate a commitment to invest in this program. Any potential investment agreement is a separate process.

Vincent Del Casino Jr., Vice Provost for Digital Learning and Associate Vice President of Student Affairs & Enrollment Management

Signature: __________________________ Date:______________
Name: Sudha Ram, Ph.D.
Course: MIS 586: Big Data Analytics
Rank: Anheuser-Busch Chair in MIS, Entrepreneurship, and Innovation

Professor of Management Information Systems, Director, INSITE: Center for Business Intelligence and Analytics
Highest Degree: Ph.D.
Primary Department: Eller College -- MIS
Level of Involvement: 20%
No. of Master's Theses: 0
No. of Doctoral Dissertations: 25

Brief Vita: Sudha Ram has joint faculty appointments as Professor of MIS and Computer Science, she is a member of the BIOS Institute, and Institute for Environment. She is co-director of INSITE: Center for Business Intelligence and Analytics at the UofA. Her research is in the areas of enterprise data management, Business Intelligence, large scale networks and data analytics. Her work uses different methods such as machine learning, statistical approaches, ontologies and conceptual modeling. Dr. Ram has published more than 200 research articles in refereed journals, conferences and book chapters.

She has received research funding for more than $60 million from organizations such as, IBM, Intel Corporation, SAP, Ford, Raytheon Missile Systems, US ARMY, NIST, NSF, NASA, and Office of Research and Development of the CIA. Dr. Ram served as the senior editor for Information Systems Research, and is on the editorial board for many leading Information Systems journal and currently a co-editor in chief of the Journal on Data Semantics. She is a cofounder of the Workshop on Information Technology and Systems (WITS) and serves on the steering committee of many workshops and conferences including the Entity Relationship Conference (ER). Dr. Ram has published articles in such journals as Communications of the ACM, IEEE Expert, IEEE Transactions on Knowledge and Data Engineering, Information Systems, Information Systems Research, Management Science, and MIS Quarterly.

Dr. Ram serves as a consultant to several global companies on Business Intelligence, enterprise data management and social media analytics. She received the IBM faculty Development Award and UA Leading Edge Innovator in Research Award in 2007 and 2012. Her research has been highlighted in several media outlets including Arizona Alumni Magazine, International Journalism Festival, and NPR news. She was a speaker for a TED talk in December 2013 on “Creating a Smarter World with Big Data”.

Note: In some situations signatures of more than one unit head and/or college dean may be required.
Name: Bikram Ghosh
Course: BNAD 570 Introduction to Business Analytics
Rank: Associate Professor
Highest Degree: Ph.D.
Primary Department: Eller College -- Marketing
Level of Involvement: 20%
No. of Master's Theses: 0
No. of Doctoral Dissertations: 5

Brief Vita: Bikram Ghosh is an Associate Professor in the Marketing Department. His teaching and research has a focus on Analytical models of marketing with a focus on firm pricing strategy and competition; models of endogenous search and models of limited consumer attentiveness. In addition, he studies the effect of user generated review of products on firm competition and strategy as well as social movements.

Name: Minfeng Lin
Course: MIS 561 Data Visualization
Rank: Associate Professor of MIS
Highest Degree: Ph.D.
Primary Department: Eller College -- MIS
Level of Involvement: 20%
No. of Master's Theses: 0
No. of Doctoral Dissertations: 5

Brief Vita: Mingfeng Lin is an Associate Professor (with tenure) of Management Information Systems (MIS) at the University of Arizona. He studies Internet-enabled communities, marketplaces, and business models as drivers of innovation and entrepreneurship, including but not limited to:

- Crowdfunding, particularly debt-crowdfunding (peer-to-peer lending) and equity crowdfunding;
- Online labor markets; and
- Online communities, including user-generated contents (UGCs).

Name: Bin Zhang
Course: MIS 545: Data Mining for Business Intelligence
Rank: Assistant Professor of MIS
Highest Degree: Ph.D.
NEW ACADEMIC PROGRAM – IMPLEMENTATION REQUEST

**Primary Department:** Eller College -- MIS  
**Level of Involvement:** 20%  
**No. of Master’s Theses:** 0  
**No. of Doctoral Dissertations:** 0  

**Brief Vita:** Bin is an assistant professor at Department of Management Information Systems, Eller College of Management, University of Arizona. His research interests include:

- Social Network Analysis  
- Analytical Methods for Large Social Networks  
- Statistical Modeling for Social Network Problems  
- Business Intelligence  
- Machine Learning  
- Bayesian Statistics  

In addition he is also:

- Affiliated member of Artificial Intelligence Lab, University of Arizona  
- Visiting research fellow at iLab, Carnegie Mellon University  
- Ph.D advisor at Zhejiang University, China

**Name:** Yong Ge

**Course:** MIS 587: Business Intelligence  
**Rank:** Assistant Professor of MIS  
**Highest Degree:** Ph.D.  
**Primary Department:** Eller College -- MIS  
**Level of Involvement:** 20%  
**No. of Master’s Theses:** 0  
**No. of Doctoral Dissertations:** 0  

- **Brief Vita:** Dr. Ge’s research and teaching interests include Data mining, Machine learning, Recommender systems and Business analytics.

**Name:** Madhu Visanathan

**Course:** MKT 552: Introduction to Statistics  
**Rank:** Assistant Professor of Marketing  
**Highest Degree:** Ph.D.  
**Primary Department:** Eller College -- MIS  
**Level of Involvement:** 20%
Brief Vita: Dr. Visanathan is interested in the nature of inter-firm relationships, organization forms and their effect on various marketing mix elements such as prices and assortments. He has studied questions related to this theme in a variety of industries, such as digital TVs, crop insurance and grocery retail. As an empiricist, he uses various econometric techniques with a particular emphasis on structural econometric models to examine these issues.
<table>
<thead>
<tr>
<th>School</th>
<th>Degree offered</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIT</td>
<td>MSBA</td>
<td>Designed for &quot;straight throughs&quot;; 8 month experiential learning experience</td>
</tr>
<tr>
<td>Carnegie Mellon -- Tepper</td>
<td>MISM (Information Systems Management)</td>
<td>Business Intelligence and Data Analytics concentration (not in Business School)</td>
</tr>
<tr>
<td>UT Austin -- McCombs</td>
<td>MSBA</td>
<td></td>
</tr>
<tr>
<td>U of A -- Eller</td>
<td>Master's in MIS</td>
<td>Business Intelligence and Analytics certificate available online</td>
</tr>
<tr>
<td>U of Minnesota -- Carlson</td>
<td>MSBA</td>
<td></td>
</tr>
<tr>
<td>U Penn -- Wharton</td>
<td></td>
<td>On line certificate</td>
</tr>
<tr>
<td>NYU -- Stern</td>
<td>MSBA</td>
<td>Executive program</td>
</tr>
<tr>
<td>Stanford</td>
<td></td>
<td>Certificate in Data Mining and Applications and MS in Statistics/Data Science</td>
</tr>
<tr>
<td>U of Maryland -- Smith</td>
<td>MSBA</td>
<td></td>
</tr>
<tr>
<td>Georgia Tech -- Scheller</td>
<td>MS in Analytics with Business Analytics track</td>
<td>Multi college offering (Colleges of Business, Computing and Engineering)</td>
</tr>
</tbody>
</table>
## ATTACHMENT B -- Courses required for the MS in Business Analytics program

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Department</th>
<th>Course #</th>
<th>Current/New/Modified</th>
<th>Semester</th>
<th>Credits</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Business Analytics</td>
<td>BNAAD</td>
<td>555</td>
<td>New</td>
<td>Summer 1st Orientation Week</td>
<td>2</td>
<td>Introduction to the language and methods of business analytics. Topics to include: overview of business data structures; analytic methods in marketing, finance, human resources, supply chain/economics and accounting; external versus internal data availability and value; simulation methods; optimization methods</td>
<td>Format will be 30 hours of in person class time during orientation week.</td>
</tr>
<tr>
<td>Regression Modeling for Analytics</td>
<td>MKT</td>
<td>55A</td>
<td>New</td>
<td>Fall 1st 8 weeks</td>
<td>2</td>
<td>Introduction to the basic concepts of probability, common distributions, statistical methods, and data analysis. The goal of course is to ensure that students understand basic principles of statistics and can select appropriate statistical tools and apply them correctly. Topics include descriptive statistics, sampling distributions, estimation, hypothesis testing, inferences on two populations, simple and multiple regression, and logistic regression.</td>
<td></td>
</tr>
<tr>
<td>Experimentation for Data Analysis</td>
<td>MKT</td>
<td>55B</td>
<td>New</td>
<td>Fall 2nd 8 weeks</td>
<td>2</td>
<td>Linear regressions; multiple regressions; Heteroskedastic/Serially-correlated error terms; Autoregressive models; Binary dependent variables; Panel Data; ...</td>
<td></td>
</tr>
<tr>
<td>Data Visualization</td>
<td>MIS</td>
<td>561</td>
<td>New but already approved</td>
<td>FALL</td>
<td>3</td>
<td>Many issues in Marketing, Human resources &amp; management, Accounting, Business Economics, etc. can really be answered only by designing such studies. Likewise, there is an increasing use of field and natural experiments even in the most state-of-the-art big data organizations – Google, Facebook, Amazon, etc. and knowing how to design such studies will complement the skills they learn in their other classes. So in addition to data acquisition and data mining, we teach them data creation.</td>
<td>Data Visualization (note: this course is being develop for the Online MIS/MIS degree) - The goal of this class is to introduce students to principles and tools of data visualizations, and create visualizations using appropriate tools for two different but related purposes: (1) exploration; and (2) presentation. The first part is about trying to understand the data and test hypotheses that drive the data visualization effort, and formulate a story; the second part is to convey that finding to others in a convincing manner.</td>
</tr>
<tr>
<td>Business Intelligence</td>
<td>MIS</td>
<td>587</td>
<td>Existing</td>
<td>FALL</td>
<td>3</td>
<td>Structured and unstructured data storage and design; Data acquisition and cleaning techniques; Data Warehousing; ETL; NoSQL databases such as MongoDB.</td>
<td></td>
</tr>
<tr>
<td>Business Communications</td>
<td>MIS (taught by MGMT)</td>
<td>509</td>
<td>Existing</td>
<td>FALL</td>
<td>3</td>
<td>Techniques in written and oral presentation of business concepts with a focus on client interaction and significant use of data visualization techniques</td>
<td></td>
</tr>
<tr>
<td>Data Mining for Business Intelligence</td>
<td>MIS</td>
<td>545</td>
<td>Existing</td>
<td>SPRING</td>
<td>3</td>
<td>Introduction to machine learning and predictive modeling, classification, clustering and association rule mining</td>
<td></td>
</tr>
<tr>
<td>Big Data Analytics</td>
<td>MIS</td>
<td>586</td>
<td>Existing</td>
<td>SPRING</td>
<td>3</td>
<td>Techniques in acquiring data from internal and external sources including social media and text data; Hadoop/Apache distributed processing scalable for business applications; Introduction to network analysis and large scale data analytics</td>
<td></td>
</tr>
<tr>
<td>Business Analytics Consulting</td>
<td>BNAAD</td>
<td>597A</td>
<td>Existing</td>
<td>SPRING</td>
<td>3</td>
<td>Deliver a business analytics-centric project to an actively engaged client applying the techniques and using the tools learned in the program. Seek to provide insight and analysis beyond the obvious.</td>
<td></td>
</tr>
<tr>
<td>Course/Field</td>
<td>Code</td>
<td>Year</td>
<td>Quarter</td>
<td>Units</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>------</td>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Analytics</td>
<td>MKT</td>
<td>542</td>
<td>Existing</td>
<td>FALL</td>
<td>3</td>
<td>New called CRM &amp; Data Mining</td>
<td></td>
</tr>
<tr>
<td>Marketing Research for Managers</td>
<td>MKT</td>
<td>572</td>
<td>Existing</td>
<td>SPRING</td>
<td>3</td>
<td>This course will provide you with an overview of the issues involved in acquiring, analyzing, and interpreting marketing research data.</td>
<td></td>
</tr>
<tr>
<td>Empirical Methods in Finance</td>
<td>FIN</td>
<td>525</td>
<td>Existing</td>
<td>SPRING</td>
<td>3</td>
<td>This course is to familiarize the students with the database and various statistical methods needed to undertake practitioner-type research in finance. Heavy exposure to SAS.</td>
<td></td>
</tr>
<tr>
<td>Financial Analytics</td>
<td>FIN</td>
<td>525</td>
<td>New</td>
<td>FALL</td>
<td>3</td>
<td>Methods, techniques and applications of analytical methods and tools as applied to finance and financial institutions.</td>
<td></td>
</tr>
<tr>
<td>Forensic Accounting</td>
<td>ACCT</td>
<td>530</td>
<td>New but approved</td>
<td>Spring</td>
<td>3</td>
<td>This course provides an overview of forensic and investigative accounting topics. It concentrates on concepts involved in understanding and differentiating the various types of forensic and investigative accounting methods. Instruction and application of basic forensic and investigative accounting techniques will be a focus of this course.</td>
<td></td>
</tr>
<tr>
<td>Another accounting elective</td>
<td>ACCT</td>
<td>540</td>
<td>Existing</td>
<td>Fall</td>
<td>3</td>
<td>Course with a combined introduction to Financial and Managerial Accounting</td>
<td></td>
</tr>
<tr>
<td>Enterprise Data Management</td>
<td>MIS</td>
<td>531</td>
<td>Existing</td>
<td>Fall</td>
<td>3</td>
<td>Introduction to the fundamentals of database analysis, design and implementation.</td>
<td></td>
</tr>
<tr>
<td>Web Computing and Mining</td>
<td>MIS</td>
<td>510</td>
<td>Existing</td>
<td>???</td>
<td>3</td>
<td>Introduction to algorithms suited for developing Internet-based information systems such as search engines and text mining.</td>
<td></td>
</tr>
<tr>
<td>Health Care IT</td>
<td>MIS</td>
<td>505</td>
<td>Existing</td>
<td>???</td>
<td>3</td>
<td>Introduction to the concepts and practices of health care information systems. (1) Introduction to the health IT discipline; (2) major applications and commercial vendors; (3) decision support methods and technologies; (4) information systems design and engineering; and (5) new opportunities and emerging trends.</td>
<td></td>
</tr>
<tr>
<td>Health Care Analytics</td>
<td>MIS</td>
<td>777</td>
<td>New</td>
<td>???</td>
<td>3</td>
<td>Analytic methods and tools applied to health care and public health data</td>
<td></td>
</tr>
<tr>
<td>Quantitative Methods for Economics</td>
<td>ECON</td>
<td>520</td>
<td>Existing</td>
<td>Fall</td>
<td>3</td>
<td>This course introduces basic concepts in probability theory and univariate statistics, which are necessary for courses in microeconomics and econometrics. Probability topics include: probability models, random variables and joint distributions, expectations, and large-sample results. Statistical topics include: descriptive statistics, point estimators, confidence intervals, hypothesis tests, maximum likelihood methods, method of moments, and Bayesian methods. Calculus will be used extensively in this course.</td>
<td></td>
</tr>
<tr>
<td>Econometrics I</td>
<td>ECON</td>
<td>522A</td>
<td>Existing</td>
<td>Spring</td>
<td>3</td>
<td>This course gives tools that are helpful for empirical analysis. It is focused on applications and it covers the potential outcome model, the average treatment effect, the linear model, the linear model with endogeneity, machine learning, prediction, and the bootstrap. Computer programming experience is helpful but not required. Applications include finance models, IO models and labor economic models and real datasets are used to estimate these models. The usefulness of random experiments and instrumental variables for causal inference is emphasized and so is the need for a parsimonious model for prediction.</td>
<td></td>
</tr>
</tbody>
</table>
## ATTACHMENT C - Program Comparison to Public Peer Institutions

<table>
<thead>
<tr>
<th>Course</th>
<th>UA Eller College</th>
<th>University of Texas at Austin</th>
<th>University of Minnesota</th>
<th>Arizona State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Business Data Analytics</td>
<td>Statistics I: Intro to predictive modeling</td>
<td>Analytics for Competitive Advantage - 1.5 credits</td>
<td>Introduction to Enterprise Analytics</td>
<td></td>
</tr>
<tr>
<td>Experimentation and Data Analytics</td>
<td>Data Analytics programming</td>
<td>Fundamentals of Decision Analysis - 1.5 credits</td>
<td>Introduction to Applied Analytics</td>
<td></td>
</tr>
<tr>
<td>Introduction to Statistics</td>
<td>Advanced predictive modeling</td>
<td>Intro to Statistics for Data Scientists</td>
<td>Data Mining I</td>
<td></td>
</tr>
<tr>
<td>Data Visualization</td>
<td>Text Mining - 1 credit</td>
<td>Programming and Application Development</td>
<td>Data-driven Quality Management</td>
<td></td>
</tr>
<tr>
<td>Business Intelligence</td>
<td>Decision Analytics - 2 credits</td>
<td>Financial Accounting</td>
<td>Analytical Decision Making Tools I</td>
<td></td>
</tr>
<tr>
<td>Business Communications</td>
<td>Learning structures and time series</td>
<td>Marketing Management</td>
<td>Data Mining II</td>
<td></td>
</tr>
<tr>
<td>Regression Modeling for Analytics</td>
<td>Stochastic Control and Optimization</td>
<td>Database Management, Databases and Data Warehousing</td>
<td>Analytical Decision Making Tools II</td>
<td></td>
</tr>
<tr>
<td>Big Data Analytics Consulting</td>
<td>Elective</td>
<td>Project Management of Analytics Projects - 1.5 credits</td>
<td>Marketing Analytics</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>Building and Managing Teams - 1.5 credits</td>
<td>Applied Project</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>Exploratory Data Analytics and Visualization</td>
<td>Predictive Analytics</td>
<td></td>
</tr>
<tr>
<td>All 3 credit courses unless specified otherwise</td>
<td>Elective</td>
<td>Advanced Issues in Business Analytics</td>
<td>Unclear from website but appears to be all 3 credit courses</td>
<td></td>
</tr>
<tr>
<td>33 credits total</td>
<td>Data Driven Experimentation and Measurement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Month Program</td>
<td>All 3 credit courses unless specified otherwise</td>
<td>Modeling and Heuristics for Decision Making and Support</td>
<td>If so, it is a 30 credit program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36 credits total</td>
<td>Experiential Learning - 6 credits</td>
<td>9 month program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 Month Program</td>
<td>All 3 credit courses unless specified otherwise</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>45 credits total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12 Month Program</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### ATTACHMENT D - Comparison Chart MS in Business Analytics

<table>
<thead>
<tr>
<th>Criteria</th>
<th>U of A – Eller College</th>
<th>UT Austin McCombs</th>
<th>U of Minnesota - Carlson</th>
<th>ASU WP Carey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current number of students</td>
<td>NA</td>
<td>53 students; 42% straight through; 41% international</td>
<td>83 students; 88% international</td>
<td>XX students; 74% international</td>
</tr>
<tr>
<td>Degree title</td>
<td>MS in Business Analytics (Proposed CIP 52.1399)</td>
<td>MS in Business Analytics</td>
<td>MS in Business Analytics</td>
<td>MS in Business Analytics (CIP Code 52.1301)</td>
</tr>
<tr>
<td>Units required for MS</td>
<td>34</td>
<td>36</td>
<td>45</td>
<td>30</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>College level statistics, calculus and programming</td>
<td>Computer programming, calculus and statistics (linear algebra recommended)</td>
<td>One semester of college calculus and demonstrated proficiency in programming</td>
<td>Students with demonstrated expertise in quantitative skills and proficiency in statistics, calculus, programming, and Excel (per web site)</td>
</tr>
<tr>
<td>Required courses</td>
<td>Introduction to Business Analytics, Introduction to Statistics, Regression Modeling for Analytics, Experimentation and Data Analysis, Data Visualization, Business Communications, Data Mining for Business Intelligence, Big Data Analytics, Business Analytics Consulting</td>
<td>Stat Analytics Programming, Predictive Modeling, Decision Analysis, Text Analysis, Financial Management, Database Management, Advanced Predictive Modeling, Stochastic Control &amp; Optimization, Learning structures &amp; Time Series, Business Analytics capstone</td>
<td>Analytics for Competitive Advantage; Decision Analysis; Statistics; Programming; Accounting; Marketing; DB Management; Big Data; Project Management; Building and Managing Teams; Analytics and Data Visualization; Data Driven Experimentation; Modeling and Heuristics for Decision Making; Experiential Learning</td>
<td>Enterprise Analytics; Applied Analytics; Data Mining I; Data Mining II; Quality Management; Decision Making Tools; Analytics Strategy; Marketing Analytics; Applied Project</td>
</tr>
<tr>
<td>Optional concentrations</td>
<td>Econometrics, Marketing, Finance, Forensic Accounting, IT, Health Care</td>
<td>Courses in Marketing, Supply Chain, Social Networks and Trading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program origination (Year)</td>
<td>2018 Expected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program duration</td>
<td>10 months; 16 month option</td>
<td>10 months</td>
<td>12 months FT; 2 year PT</td>
<td>9 months</td>
</tr>
<tr>
<td>Program format options</td>
<td>Initially on the ground with future online expected</td>
<td>On the ground</td>
<td>On the ground</td>
<td>On the ground</td>
</tr>
<tr>
<td>STEM Designated?</td>
<td>Expected</td>
<td>Yes (the only McCombs program that is STEM)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
## Attachment E -- Financial Summary

### Master of Science in Business Analytics

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Fiscal Year</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2018</td>
<td>2019</td>
<td>2020</td>
<td>2021</td>
<td>2022</td>
<td>2023</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>75</td>
<td>100</td>
</tr>
</tbody>
</table>

### Sources of Funds to UA (Reflects net revenue in year it is EARNED)

<table>
<thead>
<tr>
<th>Source</th>
<th>Fiscal Year</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Revenue</td>
<td></td>
<td>930,056</td>
<td>2,184,464</td>
<td>3,384,051</td>
<td>4,619,074</td>
<td>4,930,607</td>
<td></td>
</tr>
<tr>
<td>Less Regents Set Aside (RSA)</td>
<td></td>
<td>(149,485)</td>
<td>(316,334)</td>
<td>(485,503)</td>
<td>(657,328)</td>
<td>(677,828)</td>
<td></td>
</tr>
<tr>
<td>Less Support Center Expense Recovery</td>
<td></td>
<td>(94,615)</td>
<td>(273,990)</td>
<td>(513,695)</td>
<td>(483,064)</td>
<td>(515,715)</td>
<td></td>
</tr>
<tr>
<td>Less Strategic Investment Allocation</td>
<td></td>
<td>(27,320)</td>
<td>(78,590)</td>
<td>(118,694)</td>
<td>(159,948)</td>
<td>(160,445)</td>
<td></td>
</tr>
<tr>
<td>Less Sponsored Projects Assessment</td>
<td></td>
<td>(75,000)</td>
<td>(35,000)</td>
<td>(15,000)</td>
<td>(15,000)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sources of Funds to Eller (Reflects net revenue in year it is RECEIVED)

<table>
<thead>
<tr>
<th>Source</th>
<th>Fiscal Year</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Academic Year RCM Revenue - SCH</td>
<td></td>
<td>-</td>
<td>-</td>
<td>112,157</td>
<td>222,518</td>
<td>327,115</td>
<td>413,082</td>
<td></td>
</tr>
<tr>
<td>Net Academic Year RCM Revenue - Major</td>
<td></td>
<td>-</td>
<td>-</td>
<td>336,472</td>
<td>167,555</td>
<td>1,011,345</td>
<td>1,361,945</td>
<td></td>
</tr>
<tr>
<td>Net Academic Year RCM Revenue - Program Fees</td>
<td></td>
<td>-</td>
<td>207,987</td>
<td>408,556</td>
<td>112,894</td>
<td>817,112</td>
<td>817,112</td>
<td></td>
</tr>
<tr>
<td>Net Summer Tuition Revenue</td>
<td></td>
<td>-</td>
<td>-</td>
<td>35,790</td>
<td>152,575</td>
<td>273,059</td>
<td>393,200</td>
<td>477,500</td>
</tr>
<tr>
<td>Net Summer Program Fee Revenue</td>
<td></td>
<td>-</td>
<td>-</td>
<td>56,000</td>
<td>237,975</td>
<td>419,950</td>
<td>601,925</td>
<td>727,900</td>
</tr>
<tr>
<td>Net Summer Consulting Project Revenue</td>
<td></td>
<td>-</td>
<td>-</td>
<td>45,000</td>
<td>45,000</td>
<td>45,000</td>
<td>45,000</td>
<td></td>
</tr>
<tr>
<td>Less Unrealized Net Revenue</td>
<td></td>
<td>-</td>
<td>(10,239)</td>
<td>(42,859)</td>
<td>(75,145)</td>
<td>(108,729)</td>
<td>(331,652)</td>
<td></td>
</tr>
<tr>
<td>Institutional Strategic Investment</td>
<td></td>
<td>-</td>
<td>289,287</td>
<td>1,249,877</td>
<td>2,183,761</td>
<td>3,095,439</td>
<td>3,751,587</td>
<td></td>
</tr>
</tbody>
</table>

### Uses of Funds

<table>
<thead>
<tr>
<th>Category</th>
<th>Fiscal Year</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Instruction</td>
<td>-</td>
<td>378,831</td>
<td>425,012</td>
<td>753,431</td>
<td>808,545</td>
<td>815,936</td>
</tr>
<tr>
<td>TA Salary</td>
<td>-</td>
<td>52,210</td>
<td>52,440</td>
<td>79,005</td>
<td>105,800</td>
<td>105,800</td>
</tr>
<tr>
<td>TA Tuition Remission</td>
<td>-</td>
<td>29,201</td>
<td>29,432</td>
<td>39,591</td>
<td>47,808</td>
<td>48,286</td>
</tr>
<tr>
<td>Program Director (8 G. S. P.E)</td>
<td>-</td>
<td>66,900</td>
<td>69,010</td>
<td>73,550</td>
<td>73,575</td>
<td>76,160</td>
</tr>
<tr>
<td>Program Coordinator (1.0 FTE)</td>
<td>-</td>
<td>66,900</td>
<td>69,010</td>
<td>73,550</td>
<td>73,575</td>
<td>76,160</td>
</tr>
<tr>
<td>Advertising</td>
<td>25,000</td>
<td>25,000</td>
<td>25,000</td>
<td>25,000</td>
<td>25,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Analytics Lab</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Travel Expenses</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>ASC on Expenses</td>
<td>750</td>
<td>6,422</td>
<td>6,948</td>
<td>10,660</td>
<td>11,643</td>
<td>11,973</td>
</tr>
</tbody>
</table>

### Total Uses of Funds

<table>
<thead>
<tr>
<th>Category</th>
<th>Fiscal Year</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Uses of Funds</td>
<td>75,760</td>
<td>648,664</td>
<td>701,763</td>
<td>1,176,678</td>
<td>1,176,946</td>
<td>1,209,135</td>
</tr>
</tbody>
</table>

### Net proceeds (deficit)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
</tr>
</thead>
<tbody>
<tr>
<td>(75,750)</td>
<td>(359,377)</td>
<td>548,134</td>
<td>1,087,084</td>
<td>1,191,472</td>
<td>2,542,271</td>
</tr>
</tbody>
</table>

### Net per student

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
</tr>
</thead>
<tbody>
<tr>
<td>(14,375)</td>
<td>10,963</td>
<td>14,494</td>
<td>19,195</td>
<td></td>
</tr>
</tbody>
</table>

### Rate of Return

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
<th>Proforma</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>-12.44%</td>
<td>44%</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Notes:**

- Assumes enrollments are made up of 70% non-residents and 30% residents.
- Sources reflect that the tuition (SCH and major) revenue is not received by Eller until the following year, while program fees are received in the same year.
- Unrealized net revenue calculates a 5% buffer for unpaid balances, tuition discounting, etc. on academic year revenue.
- Includes an annual 3% increase on faculty and staff salaries.
Attachment F

MS in Business Analytics

**CORE**
- Programming
- SQL/RDL
- Intro to Statistics
- Intro to Business Analytics
- Experimentation for Data Analysis

**REQUIRED**
- Regression Modeling
- Data Visualization
- Business Intelligence
- Data Mining
- Big Data
- Business Communications
- Consulting Project

**ELECTIVES**
- Elective 1
  - Accounting, Marketing, Finance, MIS
- Elective 2
  - Accounting, Marketing, Finance, MIS

**DATA MANAGEMENT** **STATISTICS** **ANALYTIC METHODS** **PROFESSIONAL DEVELOPMENT**
<table>
<thead>
<tr>
<th>Attachment G</th>
<th>MSBA POS -- 10 Month w/May completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer - Pre</td>
<td>Semester 1</td>
</tr>
<tr>
<td>Summer online boot camp:</td>
<td>Semester 2</td>
</tr>
<tr>
<td>1. Programming -- CBT or pass proficiency test (no credit)</td>
<td>1a. MKT 552 Introduction to Statistics (8 weeks - 2 credits) and use a commercial stats tool; 1b. MKT 555A Regression Modeling for Analytics (8 weeks - 2 credits)</td>
</tr>
<tr>
<td>2. Data Visualization -- MIS 561</td>
<td>1a. MKT 555B Experimentation and Data Analysis (8 weeks - 2 credits)</td>
</tr>
<tr>
<td>-2. SQL/RDB overview (fulfills prerequisite for MIS 587) 1 credit</td>
<td>2. Data Mining for Business Intelligence -- MIS 545</td>
</tr>
<tr>
<td>- Summer II offering (July 1 start)</td>
<td>3. Business Intelligence -- MIS 587</td>
</tr>
<tr>
<td>4. Elective</td>
<td>5. Elective</td>
</tr>
</tbody>
</table>

For both some form of a placement test can be used to opt out

<table>
<thead>
<tr>
<th>3. Introduction to Business Analytics Strategy BNAD 555 new course (30 hours/2 credits) to be completed during Orientation Week</th>
</tr>
</thead>
</table>

Elective options (examples only): (If seeking an optional focus area choose 2 from same focus area)

- Econometrics focus
- Marketing focus
- Finance focus
- Forensic accounting focus
- Information Technology focus
- Health Care focus

ECON 520 Quantitative Methods for Economics and S22A Econometrics I
Customer analytics MKT 542; Marketing Research for Managers (MKT 572)
Empirical Methods in Finance FIN 525; Financial Analytics (NEW)
Forensic Accounting ACCT 530; Intro to Financial and Managerial Accounting ACCT 540; MIS 514 IT Auditing
Enterprise Data Management (MIS 531); Web Computing and Mining (MIS 5/0)
Health Care IT (MIS 506); Health Care Analytics (NEW)

- 3 Credits prior to fall semester
- 36 Credits in fall semester
- 14 credits in spring semester

Total of 33 credits
<table>
<thead>
<tr>
<th>Attachment H</th>
<th><strong>MSBA POS -- 16 Month w/December completion</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer - Pre</strong></td>
<td>Semester 1</td>
</tr>
<tr>
<td>Summer online boot camp:</td>
<td>1a. Introduction to Statistics – MKT 552 (8 weeks - 2 credits and use a commercial stats tool); 1b. MKT 555A Regression Modeling for Analytics (8 weeks 2 credits)</td>
</tr>
<tr>
<td>1. Programming – CBT or pass proficiency test (no credit)</td>
<td>2. Data Visualization – MIS 561</td>
</tr>
<tr>
<td>- Summer II offering (July 1 start)</td>
<td>4. Eller Business Consulting -- BNAD 597A</td>
</tr>
<tr>
<td>For both some form of a placement test can be used to opt out</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Introduction to Business Analytics Strategy BNAD 555 new course (30 hours/2 credits) to be completed during Orientation Week</td>
</tr>
<tr>
<td>Elective options (examples only): (If seeking an optional focus area choose 2 from same focus area)</td>
<td></td>
</tr>
<tr>
<td>- Econometrics focus</td>
<td>ECON 520 Quantitative Methods for Economics and 522A Econometrics I</td>
</tr>
<tr>
<td>- Marketing focus</td>
<td>Customer analytics MKT 542 ; Marketing Research for Managers (MKT 572)</td>
</tr>
<tr>
<td>- Finance focus</td>
<td>Empirical Methods in Finance FIN 525; Financial Analytics (NEW)</td>
</tr>
<tr>
<td>- Forensic accounting focus</td>
<td>Forensic Accounting ACCT 530; Intro to Financial and Managerial Accounting ACCT 540; MIS 514 IT Auditing</td>
</tr>
<tr>
<td>- Information Technology focus</td>
<td>Enterprise Data Management (MIS 531); Web Computing and Mining (MIS 510)</td>
</tr>
<tr>
<td>- Health Care focus</td>
<td>Health Care IT (MIS 500); Health Care Analytics (NEW)</td>
</tr>
<tr>
<td>- 3 Credits prior to fall semester</td>
<td>- 10 Credits in fall semester</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MEMORANDUM

DATE: November 28, 2017

TO: Paulo Goes, Dean, Eller College of Management
    Lisa Ordonez, Vice Dean, Eller College of Management

FROM: Gary Thompson, Professor and Head
      Dept. of Agricultural and Resource Economics (AREC)

SUBJECT: Support for Proposed M.S. Degree in Business Analytics.

After consulting with Mike Staten, Associate Dean in CALS, I would like to lend our—AREC’s and CALS’—support to the proposed M.S. program in Business Analytics. There is likely very little overlap or redundancy between the classes required in AREC’s M.S. in Applied Econometrics and Data Analytics and those of the proposed degree. Though both M.S. degrees may compete for the same prospective students, we suspect many applicants to a Business Analytics M.S. in Eller would not apply to our M.S. program in CALS.
November 17, 2017

Lisa Ordóñez, Vice Dean
Eller College of Management
430L McClelland Hall
University of Arizona

Dear Dr. Brown,

This is a letter of support for the proposed Eller College of Management proposal for a Master’s in Business Analytics. I have reviewed the New Academic Program – Implementation Request for the new program and I believe that the program is both timely and would provide an excellent education for the students. Business Analytics is a critical issue for the education of University of Arizona Students.

There is no conflict with School of Information programs.

We look forward to future cooperation with the Eller College of Management

Sincerely,

[Signature]

P. Bryan Heidorn
Director, School of Information
November 25, 2017

Letter of Support for Business Analytics Masters’ Degree

Lisa Ordóñez, Vice Dean
Professor of Management & Organizations and Marketing
McClelland Professor
Eller College of Management

Dear Lisa,

The Executive Committee for the Statistics Program has reviewed the proposal put forth by the Eller College of Management to implement the new Master of Science in Business Analytics. We are writing to offer our backing for the degree program.

Business Analytics is a discipline that bases its work on statistics and data science with an application orientation towards modern business and management applications. The Graduate Interdisciplinary Program in Statistics recruits its students from those having a more advanced mathematical backgrounds with a goal to advance both the foundations and applications across many disciplines. Thus, we do not see the two programs competing for an overlapping pool of students.

Best wishes as you complete the approval process.

Respectfully yours,

Joseph C. Watkins
Joseph C. Watkins
Chair, Graduate Program in Statistics
November 14, 2017

MEMORANDUM TO: Pamela Coonan, Executive Director, Academic & Curricular Affairs
FROM: Todd Proebsting
REGARDING: Support for proposed Master of Science in Business Analytics

This is to formally express Department of Computer Science support of the proposed Master of Science in Business Analytics.

We do not anticipate any negative impact on course enrollment or demand from the proposed degree.