TOPIC: University of Maryland University College: Master of Science in Learning Design and Technology

COMMITTEE: Education Policy and Student Life

DATE OF COMMITTEE MEETING: May 12, 2015

SUMMARY: The proposed Master of Science (M.S.) in Learning Design and Technology seeks to address an evolution of the instructional design process into a *learning design* process to encompass new ideas in teaching, learning, technology and digital pedagogy. The emphasis is now on the learning instead of the teaching.

UMUC is proposing an innovative program that will capitalize on this design evolution and emerging digital pedagogy. The program is unique in approach by including new pedagogical approaches and technologies for designing online and blended models of teaching and learning with critical elements of leadership and relationship management. Students will explore emerging learning theory as they create and assess effective, personalized, non-linear, and adaptive online experiences for learners in education (K-12 and higher education). Students will explore, develop, and integrate digital media, online resources, and the latest technologies and data analytics to impact and evaluate learning. Additionally, the program will require a seminar in an education setting where students will design real-world online learning programs. Importantly, students will gain valuable interpersonal skills and experiences while working with stakeholders or clients during the collaborative development process, a collaboration that is critical to the new learning design paradigm.

The target audience includes educators, online teachers, and professional development or training practitioners working in educational entities who wish to enhance their skills and earn a degree. Expected job titles for students graduating from the M.S. in Learning Design and Technology include, among others: learning designer, training specialist, online instructional design specialist, training and development specialist, instructional designer and technologist, instructional systems specialist, and online curriculum specialist.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funding is necessary. The program will be supported through tuition.

CHANCELLOR'S RECOMMENDATION: That the Committee on Education Policy and Student Life recommend that the Board of Regents approve the proposal from the University of Maryland University College to offer the Master of Science in Learning Design and Technology.

COMMITTEE RECOMMENDATION: DATE: May 12, 2015

BOARD ACTION: DATE:

SUBMITTED BY: Joann A. Boughman   301-445-1992   jboughman@usmd.edu

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

X   New Instructional Program
           Substantial Expansion/Major Modification
           Cooperative Degree Program

University of Maryland University College

Institution Submitting Proposal

Master of Science in Learning Design and Technology

Title of Proposed Program

Master of Science	**Fall 2016**
Degree to be Awarded	Projected Implementation Date

0825	**13.0607**
Proposed HEGIS Code	Proposed CIP Code

The Graduate School	**Aric Krause, PhD, Vice Provost and Dean**
Department in which program will be located	Department Contact

(240) 684-2400	**aric.krause@umuc.edu**
Contact Phone Number	Contact E-Mail Address

Marie A. Cini

Signature of President or Designee	4/30/15
	Date

University of Maryland University College
Master of Science in Learning Design and Technology

University of Maryland University College (UMUC) proposes to offer a new Master of Science (M.S.) in Learning Design and Technology (CIP 13.0607, HEGIS 0825). The new degree will require successful completion of 36 semester hours of graduate level course work consisting of six six-credit courses to be taken in a specified sequence. The program is aligned with identified workforce needs in the State of Maryland. The curriculum will prepare graduates to design curricula and courses that incorporate the latest technologies that support student learning.

Mission

The mission of University of Maryland University College is to offer top-quality educational opportunities to adult students in Maryland, the nation, and the world, setting the global standard of excellence in adult education. By offering academic programs that are respected, affordable and accessible technologically and through a variety of face-to-face formats, UMUC broadens the range of career opportunities available to students, improves their lives, and maximizes their economic and intellectual contributions to Maryland, the nation, and the world.

This mission is rooted in UMUC's institutional purpose as stipulated by State statute (MD Education Code Ann. § 13-101(2012)); specifically that the university shall:

(1) Operate as Maryland's open university, serving nontraditional students who reside in Maryland, the United States and around the world;
(2) Provide the citizens of Maryland with affordable, open access to higher education;
(3) Continue as a leader in distributed education.

As the public state and national leader in distance and distributed education, UMUC awards associate's, bachelor's, master's and doctoral degrees, as well as undergraduate and post-baccalaureate certificates. The university's academic inventory offers programs that are core to any public university, but UMUC's mission to the adult student results in an emphasis on workforce relevant programs. Consequently, the university awards degrees and certificates in the arts and humanities, behavioral and social sciences, business and management, health-related fields, computing, education and technology, including degrees in fields facing critical shortages, such as cybersecurity, information assurance and graduate level teacher training in STEM areas. As part of its emphasis on workforce needs, UMUC offers non-credit professional development programs such as those in executive leadership and, through its Inn and Conference Center and its Largo facility, hosts professional conferences and meetings that support the economic and societal needs of the State.

This proposal aligns with UMUC's mission to offer high quality, workplace relevant academic programs to adult students that expand their range of career opportunities. The M.S. in Learning Design and Technology will fill an increasing need for individuals who can use emerging technologies, the latest in data analytics, and learning theory to design and assess effective online

learning experiences for educational institutions. This unique program will bring new pedagogical approaches and emerging technologies to the design of online teaching and learning while providing candidates with authentic clinical experiences.

Rationale and Need for the Proposed Program

Technology has brought dramatic changes to teaching and learning. The Internet provides far-reaching access to open source digital media, collaborative applications, and personalized tools that, when appropriately offered to students, have the capability to enhance learning. Furthermore, the proliferation of mobile devices allows multiple methods and modes for people to access learning opportunities. One consequence of these technological advances is the impact on the way students view the learning process. Today's learners gravitate toward mobile, personalized learning opportunities that are collaborative and accessible anytime, anywhere. Not only has access to learning opportunities changed, but there has also been a shift to what many university chief academic officers refer to as a "substantial use of student-directed, self-paced components."[1]

Online learners today are looking for a shift from traditional online course methodology, which in its most rudimentary format seeks to mimic on-site lecture-based courses that rely on printed textbooks. According to Kalantzis and Cope (2010), "this generation will be frustrated by a curriculum which expects them to be passive recipients of formal, generic textbook content."[2] This shift is fast-tracking an evolution of the instructional design process into a *learning design* process to encompass new ideas in teaching, learning, technology and digital pedagogy. The emphasis is now on the learning instead of the teaching.

UMUC is proposing an innovative M.S. in Learning Design and Technology that will capitalize on this design evolution and emerging digital pedagogy. The program is unique in approach by including new pedagogical approaches and technologies for designing online and blended models of teaching and learning with critical elements of leadership and relationship management. Students will explore emerging learning theory as they create and assess effective, personalized, non-linear, and adaptive online experiences for learners in education (K-12 and higher education). Students will explore, develop, and integrate digital media, online resources, and the latest technologies and data analytics to impact and evaluate learning. Additionally, the program will require a seminar in an education setting where students will design real-world online learning programs. Importantly, students will gain valuable interpersonal skills and experiences while working with stakeholders or clients during the collaborative development process, a collaboration which is critical to the new learning design paradigm.

The M.S. in Learning Design and Technology will consist of a six-credit prerequisite course, required for admission into the program, followed by a sequence of five six-credit courses. To be

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[1] Allen, I. & Seaman, J. (2014). Grade Change. Tracking On line Education in the United States. Online Learning Consortium Reports. Retrieved from: http://onlinelearningconsortium.org/survey_report/2013-survey-online-learning-report/

[2] Kalantzis, M. & Cope, M. (2010). The Teacher as Designer: pedagogy in the new media age. *E-Learning and Digital Media, 7(3).* Retrieved from: http://newlearningonline.com/_uploads/3_Kalantzis_ELEA_7_3_web.pdf

successful, students entering the program would have experience in teaching, professional development, training or other similar roles. Students should possess a positive view of technology and online learning as a way to increase their effectiveness in supporting learners. The program will serve individuals interested in obtaining a credential that will allow them to take advantage of the projected growth market in learning design for online formats.

Market Demand

Online education and online professional development offerings continue to grow. According to Allen and Seaman (2014) "ninety percent of academic leaders believe that it is "likely" or "very likely" that a majority of all higher education students will be taking at least one online course in five years' time."[3] As an example of the extent of the demand for online learning, at UMUC in Fiscal Year 2014, 87% of all students took at least one online class – 73,946 students – and yet enrollments at UMUC's many stateside and overseas physical sites remained robust.[4]

Increased demand for online courses will lead to increased opportunity for those individuals with advanced design skills. Traditional instructional designer positions are in demand in business, education, higher education, government, medical and other entities that wish to capitalize on enrollment trends and cost savings by delivering quality teaching and personnel training online. In support of improving the quality of learning, online and hybrid course methodologies are changing to embrace new ideas in teaching, learning, technology and digital pedagogy, leading to an evolution of the instructional design process into a *learning design* process. This shift reflects the change from content-centered to learner-centered design, at a time when learning experiences are vastly different and available anywhere, anytime.

Learning design as an employment category is an emerging area; therefore, data on expected growth and potential demand for *instructional design* is provided as a current basis for assessing potential employment. Burning Glass market analysis (http://www.burning-glass.com/, data below) indicates very strong demand for instructional designers through 2022, with higher than average job growth, high initial job salaries, and low barriers in terms of experience requirements, all of which indicate a large market for graduates from the proposed program.

Although many employers require low *experience* levels to enter this growing job market, they are looking for employees with master's degree credentials and specialized skill sets. This demand for specialized skills is aligned with the movement away from traditional instructional design models in favor of online learning design models incorporating data analytical tools, non-linear adaptive learning techniques and a wide range of stakeholder collaboration interactions during course and program development. The M.S. in Learning Design and Technology program will provide the essential credentials and specialized skillset demonstrated through real world experiences built into the curriculum.

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[3] Allen, I. & Seaman, J. (2014). Grade Change. Tracking Online Education in the United States. Online Learning Consortium Reports. Retrieved from: http://onlinelearningconsortium.org/survey_report/2013-survey-online-learning-report/

[4] UMUC Office of Institutional Research Fact Book, Fall 2014. Retrieved from https://www.umuc.edu/visitors/about/ipra/upload/umuc-fact-book-fall-2014.pdf.

An examination of national[5] and local[6] projections for job growth yielded the following:
- Projected national growth rate, 2012-2022
  - Instructional Designer – 15% growth
  - Instructional Coordinator – 13% growth
  - Training Development Specialist – 15% growth
- Local growth rate through 2022
  - Instructional Coordinators – 14% growth
- Projected numbers of Instructional Design positions
  - National, open positions – 80,784 job openings
  - Washington D.C. metro area – 3,229 job openings
  - Baltimore-metro area – 789 job openings

Student Audience and Potential Careers

The target audience includes educators, online teachers, and professional development or training practitioners working in educational entities who wish to enhance their skills and earn a degree. Expected job titles for students graduating from the M.S. in Learning Design and Technology include, among others: learning designer, training specialist, online instructional design specialist, training and development specialist, instructional designer and technologist, instructional systems specialist, and online curriculum specialist.

A search of the Burning Glass Labor Insight online tool ((http://www.burning-glass.com/) indicates that:
- For positions requiring a background in educational design, 70% require a Master's degree.
- 83% of open positions require 0-5 years of experience, and 33% require 0-2 years of experience.
- The average pay on the national job market for Instructional Designers and Technologists is in the range of $60,000 - $90,000 per year.

The proposed program is aligned with actual positions in terms of required education and experience as described above. The data indicate that the market is robust in terms of number of openings, and the salaries are attractive.

Program Duplication

In Maryland, only the University of Maryland Baltimore County (UMBC) offers a similar program, namely the Master of Arts (M.A.) in Instructional Systems Development. While the curricula of both programs involve design, delivery, support, and measurement, UMUC's proposed M.S. in Learning

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[5] United States Department of Labor, Bureau of Labor Statistics, *Occupational Employment Projections to 2022*. Retrieved from http://www.bls.gov/opub/mlr/2013/article/occupational-employment-projections-to-2022.htm
[6] Maryland Department of Labor, Licensing and Regulation, *Occupational Projections, 2012- 2022*. Retrieved from http://www.dllr.state.md.us/lmi/iandoproj/maryland.shtml

Design and Technology differs from UMBC's M.A. in a number of significant ways - including program structure, delivery and content, and target audience - as described in the following table.

	UMUC Learning Design and Technology	UMBC Instructional Systems Development
Degree Requirements and Structure	Master of Science, 36 SH A single sequence of six 6-credit courses, no electives.	Master of Arts, 36 SH A core of four 3-credit courses, three 3-credit advanced courses, and five 3-credit electives chosen from a list of fifteen courses.
Delivery	Entirely online	Core courses online, some electives also offered on-site.
Program Content and Focus	The UMUC M.S.in Learning Design and Technology is designed to prepare professionals for careers in new and emerging learning environments, and will capitalize on the current online course design evolution and emerging digital pedagogy. The program focuses on new pedagogical approaches, technologies, and analytical tools for designing online models of teaching and learning combined with critical elements of leadership and relationship management. Students will explore emerging learning theory as they create and assess effective, personalized, online tools for learners in the growing competency based education space (K-12 and higher education). The program will focus on skill development in such emerging areas as data analytics, adaptive learning, digital pedagogy, mobile technologies, and client relationship management. Its approach is the design of non-linear online and hybrid environments using learning methodologies, rather than traditional instructional design methodologies.	According to UMBC marketing materials, the M.A. in Instructional Systems Development enables graduates to work in a variety of positions in workplace learning. It provides a solid grounding in the theory of ISD while providing students with opportunities to apply what they have learned in real projects with actual clients. Throughout the program, students also have an opportunity to develop their own professional portfolio.
	Primary Points of Differentiation: UMUC's proposed MS in Learning Design and Technology is focused on online learning design for competency-based educational entities. The Instructional Systems Development program at UMBC appears to be focused on training, especially corporate training, with marketing materials identifying alumni employers as "IBM, National Security Agency, T. Rowe Price, Booze Allen and Hamilton, and many more."	
Target Audience	The UMUC M.S. in Learning Design and Technology program fills an increasing need for individuals who can use emerging technologies, the latest in data analytics and learning theory to design and assess effective online learning experiences for competency-based educational entities.	According to UMBC marketing materials, the M.A. in Instructional System Development is "for people who design, deliver, support and measure training, learning and performance within organizations."[7]
	Primary Points of Differentiation: UMBC appears to market to potential students who wish to enter corporate training, both in the Instructional Systems Development program. UMUC is targeting potential students who want to build competency-based online programs and courses for educational institutions.	

[7] UMBC Program Guide. Retrieved from http://www.umbc.edu/isd/images/ISD-Program%20Guide-9.2014.pdf

	UMUC Learning Design and Technology	UMBC Instructional Systems Development
CIP Code	13.0607 Learning Sciences Definition: A program that focuses on the multiple aspects of learning in different environments, including specific aspects of the content to be mastered, cognitive aspects of the student, the instructional environment and materials, the preparation and activities of the instructor, socio-cultural and linguistic components, and assessment outcomes. Includes instruction in the social, organizational, and cultural dynamics of learning; learning and cognition; learning strategies; educational psychology; educational testing and measurement; instructional design and technology; and statistical design of educational research.	13.0301 Curriculum and Instruction Definition: A program that focuses on the curriculum and related instructional processes and tools, and that may prepare individuals to serve as professional curriculum specialists. Includes instruction in curriculum theory, curriculum design and planning, instructional material design and evaluation, curriculum evaluation, and applications to specific subject matter, programs or educational levels.
	Primary Points of Differentiation: CIP codes indicate overall program classification and focus. The difference in CIP codes for UMUC's Learning Design and Technology program vs. UMBC's Instructional Systems Development program indicates a fundamental difference in approach. UMUC's content focus is on learning, learning and cognition, and use of technology (data analytics) to support online learning environments.	
Course Content	UMUC course descriptions focus on use of digital pedagogy and data analytics to design online learning environments for today's learners. All courses incorporate hands-on learning.	UMBC's core courses focus on the ADDIE method of instructional systems development along with one course on learning theory and one on training and development. Advanced courses incorporate hands-on learning. Electives span several areas with a preponderance of training and employee performance courses.
	Primary Points of Differentiation: The course content illustrates different approaches to the instructional design process. UMBC focuses on the Analysis, Design, Development, Implementation, Evaluation (ADDIE) model. ADDIE is specifically referenced throughout UMBC courses and literature. In the UMUC program, the ADDIE seminal design model is only one of several instructional design models covered. UMUC chooses to review and discuss new pedagogy and design models and learning theories specific for online learners (Game Theory, ASSURE Model, Agile design, Learning and Motivation, Interface Design). Both UMUC and UMBC have internships built into their program sequence. Key assessment outcomes in both programs measure candidates' application of knowledge, skills and dispositions in real world settings and hence both programs have internships. The difference lies in the setting for the internship. UMUC candidates' internship experiences would be in competency-based educational settings, while UMBC places students in a variety of organizations. Both UMUC and UMBC have courses addressing adult learning theory. UMUC's proposed program is based on the premise that there are many cognitive theories and factors to consider when designing online learning experiences. The UMUC program will investigate how social learning theories, theories of motivation, game theory, heutogogy (self-directed learning), and Informal Learning theory influence the design of online interactions.	

Relevance to Historically Black Institutions (HBIs)

A search of the MHEC inventory of approved academic programs in Maryland found no graduate program in "learning design," "instructional design," or "instructional systems design" at any of the four Historically Black Institutions (HBI) in Maryland (Bowie State University, Coppin State University, University of Maryland Eastern shore, or Morgan State University). Thus UMUC's proposed program will have no impact on the uniqueness and institutional identities and missions of the HBI's, and will not harm these schools.

Characteristics of the Proposed Program

Description of Proposed Program

In this program, students will explore, develop, and integrate digital media, online and open resources, and the latest technologies and analytics to impact and evaluate learning in online environments. Additionally, in their final course, a seminar, students will design real world online or hybrid learning programs in an education setting. During the seminar, students will gain valuable interpersonal skills and experiences while working with stakeholders during the collaborative development process, a collaboration which is critical to the new learning design paradigm.

Student Learning Outcomes

The M.S. in Learning Design and Technology will ensure that graduates excel in the design, development and evaluation of innovative online learning experiences for educational settings. The student who completes the M.S. in Learning Design and Technology will be able to:

- Design and implement transformative, personalized online and blended/hybrid learning experiences;
- Create authentic real-world assessment strategies to evaluate online and hybrid learning;
- Evaluate the impact of technology on learning;
- Apply current research and theory to the practice of learning design;
- Utilize emerging technologies and analytics to create a personalized approach to online learning experiences;
- Select, evaluate or design media and technologies to support online learning environments;
- Communicate effectively online using visual, oral, data-based, and written formats;
- Initiate and lead learning design projects and collaborate with all stakeholders;
- Evaluate legal and ethical issues and develop appropriate strategies for online learning projects;
- Design, develop and implement a summative online learning project that demonstrates effective implementation of the program's theories and concepts.

Evaluation and assessment for the program will take place in the required courses, including regular course evaluations, review of grade distributions, and faculty review of student performance on embedded course assessments. Additional assessment of program effectiveness will include tracking of student completion rates.

General Requirements for the Program

The following courses are required to be taken in the sequence shown:

M.S. in Learning Design and Technology	
DCL 600 Decisive Communication and Leadership (to be required of all entering graduate students regardless of degree program)	6
LDT 610 Learning Design and Digital Pedagogy	6
LDT 620 Learning Design and Data Analytics	6
LDT 630 Learning Design, Media and Emerging Technologies	6
LDT 640 Advanced Practicum in Learning Design	6
LDT 670 Learning Design Seminar	6
Total Credits	**36 sh**

Course descriptions are provided in the Appendix.

Enrollment Projections

The following enrollment projections are based upon expected completion of the program in two years, with completion of 18 semester hours per year.

Projected Enrollment	Year One	Year Two	Year Three	Year Four	Year Five
First Year Students	15	20	25	30	35
Second Year Students	0	14	18	23	28
Total Students	**15**	**34**	**43**	**53**	**63**

It is anticipated that approximately 30-35 degrees will be awarded each year after the program is established and reaches steady state.

Program Delivery and Principles of Good Practice.

The proposed program will be offered fully online. UMUC's approach to online learning is to provide a highly interactive environment that supports the development of competencies in written and oral communication, critical thinking, quantitative reasoning, leadership and discipline knowledge – the five graduate learning areas identified as institutional-level learning outcomes by the university's *Institutional Plan for the Assessment of Student Learning Outcomes* (http://www.umuc.edu/outcomes/upload/Inst_Plan_2010.pdf).

Curriculum and Instruction

UMUC is committed to providing the best online teaching and learning possible and to excellence in all of its programs. There is no difference in coherence, cohesiveness, or academic rigor between programs offered in traditional instructional formats and those offered from a distance. Each program is designed to result in learning outcomes appropriate to the rigor and breadth of the program and all programs assess student achievement of defined learning outcomes through regular and formal assessment planning. Online and onsite courses and programs are fully aligned and integrated -- designed around the same learning outcomes and principles, overseen and taught by the same faculty, held to the same standards, and assessed in the same way.

All of UMUC's online courses have been designed by faculty members in appropriate disciplines in collaboration with instructional designers and other experts in the field. Course learning outcomes and course descriptions are the same for every section of the course. The learning outcomes for each course are the foundation of the course; the learning activities, assessments and content of the course are in alignment with the outcomes and provide a clear pathway for mastery of the outcomes.

UMUC's learning management system provides appropriate real-time and asynchronous interaction between faculty and students in online classes, as well as access to course materials and a wide array of online library resources. All online classes have conferences in which students interact with faculty and with each other.

Role and Mission

All programs at UMUC are designed to be consistent with the mission of the institution. Each program has a mission and program outcomes aligned to the university mission as described in the catalog.

Evaluation and Assessment

Students have the opportunity to evaluate courses and faculty through a standard evaluation process. In addition, faculty are evaluated by their supervisors on a pre-determined schedule using a standard evaluation instrument employing direct observation.

Formal evaluation of student learning occurs within courses and programs via annual review of student performance in authentic learning demonstrations. Learning goals and competencies are aligned to learning demonstrations that comprise the curriculum. Annually, student performance across learning demonstrations is evaluated to determine where improvements may be required. Changes are made to curriculum and/or student support models. The process supports a continuous cycle of improvement.

Additional evaluation includes tracking of student retention, grade distributions and cost-effectiveness. Regular academic program reviews consider all factors related to academic quality, curriculum currency and relevance, student support and adequacy of facilities.

All UMUC programs are subject to periodic academic program reviews, including the review of the appropriateness of the technology being used to meet a program's objectives. The schedule and results of periodic program reviews are reported to the University System of Maryland (USM).

Demonstrable Quality of Program Faculty

UMUC has a substantial roster of faculty with expertise in areas related to Learning Design and Technology. A terminal degree is generally required to teach at the graduate level, although an occasional exception can be made in the case of an individual with a master's degree and exceptional professional credentials. Teaching effectiveness is monitored through direct class observation and student course evaluations. Because this revised degree is related to existing UMUC degrees in the field of distance education, the program already has an active unit of faculty prepared to teach courses in the revised curriculum.

The following is a partial list of program faculty with their degree, academic title/rank, and the courses they will teach.

- Randall Hansen, Ed.D., Program Chair and Associate Professor, Master of Instructional Technology Program; EDLD 610; EDLD 620; EDLC 670
- Linda J. Smith, Ph.D., Interim Program Chair and Adjunct Associate Professor, Master of Distance Education Program; EDLD 620; EDLD 650; EDLD 670
- Lisa Blaschke, Ph.D., Program Director, Master of Distance Education (joint program with the University of Oldenburg, Germany); EDLD 620; EDLD 650
- Rand Ford, Ph.D., Program Chair, Master of Data Analytics Program; EDLD 620

Faculty Support

All UMUC faculty are trained to teach online, including training in the use of the learning management system as well as in the pedagogy of distance education. All faculty have 24/7 access to support services for both on-site and on-line courses, including the learning management system. Additional support to faculty is provided through the University's Faculty Development Office, offering ongoing workshops, online coaching and mentoring programs for faculty (https://www.umuc.edu/facultydevelopment).

As part of their formal training, new graduate faculty become familiar with the expectations that The Graduate School has set for them as well as for their students. Program Chairs, the administrators responsible for supervising the faculty and managing all aspects of an academic program, reinforce these expectations in their regular reviews of and communications with their faculty. A formal document specifying the teaching expectations of The Graduate School can be found online and is available to all faculty, students, and interested parties at https://www.umuc.edu/faculty/facsupport/facultyexams/upload/the-graudate-school-faculty-expectations.pdf.

Student Support

UMUC provides all students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies. Students have access to the complete range of student services available at UMUC in support of their distance education activities. All students are provided with opportunities to engage with the academic support they need to be successful in the online environment.

The proposed program builds on a 6-credit foundational course that provides entering students in all graduate programs with a springboard for academic and professional success. Students begin to practice prerequisite skills related their professions, create beneficial social networks and presence, and develop and exercise moral and ethical decision-making. Through these activities, new graduate students refresh and refine their skills in communication, critical thinking, quantitative reasoning and team leadership.

All advertising, recruiting, and admissions materials are the same for all students, and accurately represent programs and services available. Full information is available at www.UMUC.edu.

Consistency with the State's Minority Student Achievement Goals

UMUC has seven core values that reflect the University's central beliefs and serve as core principles that guide all program development and availability. Diversity, the idea that each individual brings value to the University's efforts and results, is central to the University's core values. This core value is reflected in the University's ethnically and racially diverse student body and its proven record of providing higher education access to minority students.

- As of Fall 2014, 47% of all undergraduate students and 54% of all graduate students are minority students.*
- Additionally, UMUC enrolls more African American students (14,195) than any other institution in Maryland, including any single one of the four Maryland HBIs. Morgan State University is second with 6,677 African American students.
- In Fiscal Year 2014, 41% of bachelor's degrees, 51% of master's degrees, and 37% of doctoral degrees were awarded to minority students.*
- Annually, UMUC awards more degrees to African American students than any other Maryland institution, including the four Maryland HBIs in Maryland.

Minority students are defined here as students who identify themselves as Black/African American, Latino/Hispanic, Asian, Pacific Islander, or Native American, plus those of two or more races.

Technology Fluency

Technology fluency is a core learning area for UMUC students and is assessed at the institutional level as well as being incorporated into all degree programs. All courses in the proposed program will be taught online, so that all students will be required to use enhanced technology to complete assignments. Students will also use the UMUC Library's online databases and other extensive online holdings to fulfill course requirements. The program will thus require students to acquire and maintain a high level of technological proficiency.

Library Requirements

No new library resources are needed to serve the proposed program. The UMUC Library provides access to a vast array of library resources and services to UMUC students, faculty, and staff worldwide to meet their academic needs and include a wide and varied collection of journal articles, reports, case studies, and, in some instances, complete books available electronically via a comprehensive selection of online library databases. Library services include instruction, reference, electronic reserves, and document delivery for materials not otherwise available in the library databases. The UMUC Library relies on technology as its primary mechanism to provide online access to resources and services to UMUC's widely dispersed, nontraditional student population.

The curated collection of online academic research databases available to UMUC faculty and students provides access to hundreds of thousands of full text articles as well as reports, statistics, case studies, book chapters and complete books in a wide range of subject areas. In addition, students have access to the full text of dissertations and theses via the *ProQuest Dissertations and Theses* database. The Library assists faculty in providing links to Library materials directly in online classes.

The UMUC Library also offers other resources and services. UMUC students, faculty, and staff within the continental United States have access to more than ten million volumes in print from the 16-member University System of Maryland and Affiliated Institutions (USMAI) library consortium. The UMUC Library offers document delivery services to all UMUC students, faculty, and staff worldwide for a variety of materials, including journal articles and book chapters. UMUC's expanding collection of 75,000 electronic books (e-books) has significantly increased the ability to meet the needs of UMUC's global population.

The UMUC Library provides faculty and students with research assistance in creating search strategies, selecting relevant databases, and evaluating and citing resources in a variety of formats via its *Ask a Librarian* service at https://www.umuc.edu/library/libask/index.cfm, which includes 24/7 chat and e-mail. A guide to locating scholarly articles and using UMUC's library databases is available at http://www.umuc.edu/library/libhow/articles.cfm. The UMUC Library *OneSearch* tool allows users to simultaneously search for scholarly articles, books, and/or other research resources via a single search engine in most of the databases to which the UMUC Library subscribes, either directly or as additional resources (http://www.umuc.edu/library/index.cfm).

In addition, UMUC faculty can request customized library instruction sessions for both on-site and online classes, and can also add UMUC Library tutorials and materials to their learning management system classrooms and refer students to them through the Web gateway.

A librarian liaison assigned to each academic department assists faculty with resource identification and other program needs. The Subject Guides area of the library's Web site at http://www.umuc.edu/library/libresources/subjects.cfm provides a listing of resource guides for each subject area, with each guide containing relevant databases, Web sites, books, and other resources along with technical and citation assistance.

Facilities and Equipment

Existing resources related to facilities and equipment are adequate to meet the program needs.

Finances

No new general funds will be required for implementation of the proposed revision to this program. As shown in the following tables, the program is expected to be self-supporting.

Resources and Expenditures

Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	0	0	0	0	0
2. Tuition/Fee Revenue	$187,380	$424,728	$537,156	$662,076	$786,996
a. # Students	15	34	43	53	63
b. Credit Hour Rate	$694	$694	$694	$694	$694
c. Credit Hours per student per year	18	18	18	18	18
d. Total Tuition Revenue (a x b x c)	$187,380	$424,728	$537,156	$662,076	$786,996
3. Grants, Contracts, & Other External Sources	$0	$0	$0	$0	$0
4. Other Sources	$0	$0	$0	$0	$0
TOTAL (Add 1 - 4)	**$187,380**	**$424,728**	**$537,156**	**$662,076**	**$786,996**

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Total Faculty Expenses (b + c below)	$22,878	$45,756	$68,634	$91,512	$91,512
a. Total sections taught	3	6	9	12	12
b. Total Salary (Adjunct faculty salary at average of $ per 6-credit course)	$22,878	$45,756	$68,634	$91,512	$91,512
c. Total Benefits	N/A	N/A	N/A	N/A	N/A
2. Total Administrative Staff Expenses (b + c below)	$25,300	$25,300	$25,300	$25,300	$25,300
a. # FTE	0.2	0.2	0.2	0.2	0.2
b. Total Salary	$20,000	$20,000	$20,000	$20,000	$20,000
c. Total Benefits (26.5%)	$5,300	$5,300	$5,300	$5,300	$5,300
3. Total Support Staff Expenses (b + c below)	$12,650	$12,650	$12,650	$12,650	$12,650
a. # FTE					
b. Total Salary	0.2	0.2	0.2	0.2	0.2
c. Total Benefits (26.5%)	$10,000	$10,000	$10,000	$10,000	$10,000
4. Equipment	$2,650	$2,650	$2,650	$2,650	$2,650
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses (Course development, marketing, overhead)	$35,000	$35,000	$25,000	$25,000	$25,000
TOTAL (Add 1 - 7)	**$95,828**	**$118,706**	**$131,584**	**$154,462**	**$154,462**

Appendix

DCL 600 Decisive Communication and Leadership (6 credits)
> Prepare for academic and professional success by honing skills that employers want in their employees, exploring your area of study and how it fits with your career, creating a professional social network presence, and exercising moral and ethical decision-making. Refresh and refine your skills in communication, critical thinking, quantitative reasoning and team leadership. Gain experience in producing both written and oral communications, enhancing presentation skills, and using spreadsheets, collaboration tools, and other business software.

LDT 610 Learning Design and Digital Pedagogy (6 credits)
> Prerequisite: DCL 600. Gain the foundational knowledge, skills, and dispositions you need in the field of learning design. Explore the history of online learning and design, current learning design models, technology tools and foundational theories for online education, principles of distance learning, adult learning theory, collaborative and social learning, computer mediated learning, and technology tools and applications to support online interactions.

LDT 620 Learning Design and Data Analytics (6 credits)
> Prerequisite: LDT 610. Investigate advanced learning design concepts and apply data analytics to assess the impact of design and technology on learning. Implement a systems thinking approach and digital tools to evaluate and support online learners and learning programs. Explore assessing online learning and interactions, data analytic tools and techniques, supporting user experiences, Human Computer Interface design, and data visualization.

LDT 630 Learning Design, Media and Emerging Technologies (6 credits)
> Prerequisite: LDT 620. Develop skills in the design, development and integration of digital media to enhance the learning experience.   Investigate how media, emerging and mobile tools, and online applications impact technology-mediated learning environments. Explore media and visual literacy, graphic design for online and mobile environments, use and design of open educational resources, emerging technologies, and trends in technology such as mobile learning environments, gaming and augmented reality.

LDT 640 Advanced Practicum in Learning Design (6 credits)
> Prerequisite: LDT 630. Examine and evaluate leadership and change models to advance learning design projects. Identify and research legal issues associated with online teaching and learning. Examine leadership and project management techniques associated with learning design projects, evaluate Learning Management Systems; and identify and develop a Learning Design Seminar proposal.

LDT 670 Learning Design Seminar (6 credits)
> Prerequisite: LDT 640. Assume the role of an instructional designer and apply all learning design knowledge, skills, and dispositions developed during the program to create and assess an authentic online learning program. Using the project proposal you developed during LDT 640 Advanced Practicum in Learning Design, complete the design, implementation and analysis. Develop your professional portfolio and present your project and reflective analysis online through the UMUC Department of Education web site and online professional communities.