Graduate Council Minutes June 16, 2016 ELECTRONIC

Note: Course changes and additions will not take effect until they are listed in the graduate catalog. Items marked with an asterisk (*) must have approval by the Texas Higher Education Coordinating Board before listing in the graduate catalog. Items marked with a plus (+) must be approved by the Department of Education before being listed in the graduate catalog.

- I. ANNOUNCEMENTS
- II. MINUTES

APPROVED

Approval of May 19, 2016 Meeting

III. CHAIR / TGS DISCUSSION ITEMS

College of Information

APPROVED

III-1. Request a **change** to the Classification of Instructional Programs (CIP) code of the Doctor of Philosophy (PhD) in Learning Technologies program. (*)

IV. REQUEST FOR NEW COURSES

College of Engineering

APPROVED

Department of Computer Science and Engineering

IV-1. CSCE 5555 – Computer Forensics – 3 hours

Description: Fundamentals of computer forensics and cyber-crime scene analysis including laws, regulations, international standards and formal methodology for conducting computer forensic investigations. Topics include advanced computer forensic science capabilities such as target hardening and software, tools for data duplication, recovery and analysis, and development of pre-search or on-scene computer investigative techniques.

Justification: Computer forensics is an emerging discipline offering significant career opportunities. This course will help meet the increased interest and demand in computer security courses and is expected to make a contribution to the program curriculum as part of a certificate offering in cybersecurity.

Prerequisites: None.

IV-2. CSCE 5585 – Advanced Network Security – 3 hours

Description: Analyze the security of networks and protocols. Topics include Opportunistic Security, Increased TCP security, Using TLS in Applications, Security Automation and Continuous Monitoring (SCAM), Enabling browser-to-browser audio and video conference (WEBRTC), Software Defined Networks security, DTLS in constrained environments, wireless network security (4G/5G), and Security of Internet of Things.

Justification: The course is targeting the National Security Agency (NSA) and Department of Homeland Security (DHS) focus areas and is a requirement for a certificate on advanced network security. Based on a recent workshop

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on hot topics in the network security area, there is a latent demand from industry in the DFW area for a regular and structured advanced topics course in networks and security.

Prerequisites: CSCE 5520 or CSCE 5580

College of Information

APPROVED

Department of Library and Information Sciences

IV-3. INFO 5500 – Foundational Principles in Knowledge Management – 3 hours

Description: This course includes the data, information, knowledge, intelligence continuum, forms and sources of knowledge, challenges and best practices to preserve it in organizations. It covers the knowledge market, including players, dynamics, and pathologies, and theories and principles of knowledge management. Various perspectives of knowledge management are presented with emphasis in the knowledge management process: knowledge generation, knowledge codification, and knowledge transfer. It also includes the relationship between organizational enablers for sharing and managing knowledge: management, information and technology.

Justification: This is a core foundational course for the Master's of Science program in Analytics and Knowledge Management

Prerequisites: None.

IV-4. INFO 5501 – Fundamentals of Data Analytics – 3 hours

Description: This course covers the data lifecycle process and exposes students to the basic concepts required for analytical tasks, including smart processing and technologies such as computational methods from statistics linguistics, data visualization, and other techniques to facilitate analysis. Particular emphasis is on data management issues during the data lifecycle, from the observation of natural phenomena to the capture of raw data points to cleaning, organization and further treatments to make data useful for analysis.

Justification: This is a core foundational course for the Master's of Science program in Analytics and Knowledge Management.

Prerequisites: None.

IV-5. INFO 5502 – Methods and Tools of Data Analytics – 3 hours

Description: This course covers comprehensive and practical approaches to research, including specific methods of analysis for students to develop advanced research skills in the general areas of descriptive statistics, exploratory data analysis, and confirmatory data analysis. The course includes methods to better communicate results of the research. Successful students will have the skills to be useful participants in the data lifecycle from collection to management, analysis, and visualization of results.

Justification: This is a core foundational course for the Master's program in Analytics and Knowledge Management.

Prerequisites: None.

IV-6. INFO 5503 – Knowledge Management Processes and Practices – 3 hours

Description: Approaches to implementing knowledge management. Application examples with focus on people-process-technology issues: enterprise knowledge portals, communities of practice, after action reviews, knowledge café, benchmarking and best practices, organizational learning, and incentive programs. Success stories and lessons learned from industry. Roles, responsibilities and competencies of KM professionals.

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Justification: This is a core foundational course for the Master's of Science program in Analytics and Knowledge Management.

Prerequisites: None.

IV-7. INFO 5709 – Data Visualization and Communication – 3 hours

Description: This course introduces principles and techniques for data visualization for creating meaningful displays of quantitative and qualitative data to facilitate decision-making. Emphasis is placed on the identification of patterns, trends, and differences among data sets.

Justification: This course will count toward general electives for Master of Science in Information Science and Master of Science in Analytics and Knowledge Management.

Prerequisites: None.

College of Public Affairs and Community Service

APPROVED

Department of Disability and Addiction Rehabilitation

IV-8. AGER 5820 – Marketing Health Services – 3 hours

Description: This course reviews the legal, regulatory, and economic forces that shape the marketing of health services in today's environment. With the integration of real work organizational examples, students will explore the evolution of healthcare marketing from strategies based on advertising and promotion to current strategies that incorporate research, education, and the responsibility to understand the market in which healthcare organizations operate, the customers served by such organizations, and the customer's needs, wants, behaviors and motivations.

Justification: This course provides an elective that is specific to the new Health Services Administration master's degree program. It offers a broad appeal to working professionals across the spectrum of health care industries, offering them the unique skills and information necessary to assume leadership positions in the health care marketing community.

Prerequisites: None.

IV-9. RHAB 5734 – Psychopathology in Clinical Rehabilitation Counseling – 3 hours

Description: This course covers the etiological, emotional, and behavioral characteristics in syndromes of psychopathology. Included is an overview of diagnostic systems (e.g., DSM-VI, ICD, ICF), treatment interventions that include psychopharmacological interventions, and prognosis for independent functioning among individuals with disabilities.

Justification: Two events justify the need for this course: (1) as of July 2017, our accreditation organization will merge with an organization that accredits counseling and counseling related programs (CACREP) and we will need to apply for accreditation as a Clinical Rehabilitation Counseling (CRC) program. CRC accreditation standards include the requirement that students obtain the knowledge and skills involved in the diagnostic process, including the use of current diagnostic classification systems, and the classifications, indications, and contraindications of commonly prescribed psychopharmacological medications, and (2) as of August 2017, the State of Texas academic licensure requirements as a Professional Counselor will require applicants to have completed a psychopathology course that includes psychopharmacology. This proposed course is designed to address both the pending accreditation and licensure requirements.

Prerequisites: RHAB 5720 Counseling Theories in Rehabilitation, and RHAB 5730 Medical Aspects of Disability.

V. REQUEST FOR ADD/DELETE OF A DEGREE/MAJOR/PROFESSIONAL FIELD/CONCENTRATION/OPTION/MINOR/CERTIFICATE

College of Information

APPROVED

Department of Library and Information Sciences (2017-18)

V-1. Request to add a Master of Science in Analytics and Knowledge Management

Justification: This degree recognizes the need for specialization within the information Science profession of content expertise in the management, preservation, curation and use of data-information-knowledge spaces throughout their lifecycle.

V-2. Request to add a PhD in Information Science with a Concentration in Data Science

Description: This is a new concentration to the existing IIS PhD program that provides interdisciplinary education, research, and professional services in data science.

Justification: The ultimate goal of this concentration is to provide interdisciplinary education, research, and professional services in data science. The proposed concentration will prepare individuals to conduct research on the critical issues in big data, data analytics and related areas in data science, from the information science perspective. The concentration focuses on the intersection between information science, data science, data mining, statistics, and data analysis. There is a great need for industry, government, and academia in this area across the country and the globe. The graduates will be able to be employed in government, business management, research, and educational settings.

VI. REQUEST FOR GRADUATE ACADEMIC CERTIFICATES

VII. REQUEST FOR CHANGE IN PROGRAM/ MAJOR/ DEGREE/ OPTION REQUIREMENTS

College of Information

APPROVED

Department of Learning Technologies

VII-1. Request a **change** to the Classification of Instructional Programs (**CIP**) **code** of the Doctor of Philosophy (PhD) degree in Learning Technologies.

Current Degree Plan CIP Code: 13.1321 (Computer Teacher Education)
Proposed Degree Program CIP Code: 13.0501 (Educational/Instructional Technology)

Justification: According to our research, the current "computer teacher education" CIP code is only used on bachelor's degrees in the state of Texas (and elsewhere) where teacher certification is sought.

The proposed CIP code for the degree is 13.0501 (Educational/Instructional Technology). This code is defined as "a program that focuses on integrating technology into education curricula. Includes instruction in foundations of educational technology, computer applications, utilizing technology for assessment, multimedia instruction, webbased instruction, distance education, and designing and producing educational software and materials" (nces.ed.gov/ipeds/cipcode/cipdetail.aspx?y=55&cipid=88063).

The proposed CIP code matches that of our current Master of Science degree in Learning Technologies. The alignment of CIP codes reflects the direct relationship between the two degrees. Furthermore, the proposed CIP code accurately reflects the science nature of the courses included in the doctoral degree.

College of Public Affairs and Community Service

APPROVED

Department of Disability and Addiction Rehabilitation

VII-2. Request a change in requirements for the Master of Science, Rehabilitation and Counseling program.

Justification: The rehabilitation faculty have decided to no longer require the GRE as an application requirement and to provide more detailed information regarding the application process in the Graduate Catalog. This decision was made after consistently finding a positive correlation between GRE scores and GPA scores. We historically have waived the GRE for those applicants who have been working in the rehabilitation field for at least two years and, consistent with many of the programs in the college, have decided to waive the GRE for all applicants.

VII-3. Request a **change** in **requirements** for the Master of Science, Rehabilitation and Counseling Grad Track Pathways program.

Justification: Upon further discussion among faculty regarding the courses included in our approved Grad Track Pathways program, it was determined the graduate RHAB 5730 class (students receive credit for RHAB 3200) was not the most appropriate class to include as students who typically enroll in RHAB 4200 are often in their first semester of the Rehabilitation Studies undergraduate program. The decision was made to replace the class with the RHAB 5770 Research and Program Evaluation course (for RHAB 4500 credit) as students typically enroll in RHAB 4500 after having completed at least 15 hours of the Rehabilitation Studies major. The Research class is also seen as an excellent class for eligible Grad Track students to take who are interested in graduate study.

Department of Public Administration

VII-4. Request a change in requirements for the Master of Public Administration and Management program.

Justification: Over the past 14 years, no student has ever selected the thesis option, but instead has chosen to take the written comprehensive examination. Therefore we are changing the program to reflect this fact. Below is the paragraph in the existing catalog program requirements, rewritten omitting the thesis option.

"In addition to the course requirements, students must pass a written comprehensive examination. The written comprehensive examination will cover topics from the core courses and areas included in the MPA degree program, including all core courses with the exception of PADM 5035."

VII-5. Request a **change** in **requirements** and **hours** for the Doctoral Public Administration and Management program.

Justification: Non-Dissertation Research: Department faculty elected to increase this portion of the PhD program from 9 to 12 credit hours to accommodate the addition of a research course in the final semester of coursework prior to commencing dissertation work. The goal of the course is to provide a structured environment in which students can develop their dissertation proposals. Dissertation Research: Department faculty elected to decrease this portion of the PhD program from 12 to 9 credit hours to be consistent with the Graduate School suggested requirement.

- VIII. REQUEST FOR DUAL OR JOINT DEGREE PROGRAMS
 - IX. REQUEST ADD/ CHANGE TO TEACHER CERTIFICATION PROGRAMS
 - X. CONSENT CALENDAR
 - A. Course Changes

College of Engineering

APPROVED

Department of Computer Science and Engineering

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X-1. CSCE 5100 – Theory of Computation (Prerequisites)

Prerequisites: Consent of the department. None.

B. Course Deletions