

**Supplemental Information  
Course and Curriculum items  
FS Academic Affairs Committee Review  
September 15, 2015 Meeting**

**Graduate Course changes (5-5-15) (Old Business)**

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**Graduate Course and Curriculum changes (9-1-15)**

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## **Graduate course changes (5-5-15) Old Business – Tabled at 5-19-15 AAC meeting**

### **HUMAN ECOLOGY - School of Family Studies and Human Services**

#### Early Childhood Education

<b>Course Add:</b>
<b>ECED 700:</b> Problems in Early Childhood Education; Credits Variable: <u>(1-6)</u> Independent study of relevant aspects of early childhood development and education. <b>When Offered:</b> As needed and upon sufficient demand K-State 8: None Pre-Requisites: Consent of Instructor

**Rationale:** Given the rapidly changing field of early childhood development and education, the need for a special problems course in Early Childhood Education was identified by the faculty.

Note: The variable credits were changed from 1-18 credit to 1-6. This will reduce confusion by students and ensure they do not take more courses than allowed on the program of study.

**IMPACT:** NONE.

**Effective:** ~~Fall 2015~~ Spring 2016

<b>Course Add:</b>
<b>ECED 704:</b> Seminar in Early Childhood Education ; Credits Variable: <u>(1-6)</u> Interpretation and evaluation of information on varied topics relating to early childhood education and development. <b>When Offered:</b> As needed and upon sufficient demand K-State 8: None Pre-Requisites: Consent of Instructor

**Rationale:** Given the rapidly changing field of early childhood development and education, the need for a special seminar course in Early Childhood Education was identified by the faculty.

Note: The variable credits were changed from 1-18 credit to 1-6. This will reduce confusion by students and ensure they do not take more courses than allowed on the program of study.

**IMPACT:** NONE.

**Effective:** ~~Fall 2015~~ Spring 2016

<b>Course Add:</b>
<b>ECED 708:</b> Topics in Early Childhood Education ;Credits Variable: (1-3) Review of recent research and theory related to early childhood education and development. <b>When Offered:</b> As needed and upon sufficient demand K-State 8: None Pre-Requisites: Consent of Instructor

**Rationale:** Given the rapidly changing field of early childhood development and education, the need for a special seminar course in Early Childhood Education was identified by the faculty.

**IMPACT:** NONE.

**Effective:** ~~Fall 2015~~ Spring 2016

## **Graduate Course changes (9-1-15)**

### **College of Education**

**EDCI 702.** Curriculum, Instruction, and Assessment. (3) S. Develops core concepts and skills necessary for effective teaching in elementary and secondary schools. The course examines curriculum, pedagogy, and assessment techniques.

**IMPACT:** None.

**RATIONALE:** This course has been successfully delivered the last two summers as a topics (786) course, and it is a required course in the Graduate Certificate in Teaching and Learning offered by the Department of Curriculum and Instruction. As it is never a long-term solution to use topics numbers to cover essential, required material in a degree or certificate program, the department is ready to move this offering to a permanent course number.

**EFFECTIVE DATE:** Summer 2015

**EDCI 710.** Social Foundations of K-12 Education. (3) I, II. Examines the historical, political, philosophical, economic, legal, and sociological intersections of public education in the United States of America; emphasizes freedom, democracy, truth, power, and choice as core concepts of social change and social justice.

**IMPACT:** None.

**RATIONALE:** This is a required course in the Master of Arts in Teaching degree proposed by the Department of Curriculum and Instruction. As it is never a long-term solution to use topics numbers to cover essential, required material in a degree or certificate program, the department is ready to move this offering to a permanent course number.

**EFFECTIVE DATE:** Spring 2016

**EDCI 716.** Teaching Diverse Learners. (3) S. Examines teaching in a culturally diverse society. Emphasizes historically underrepresented students, culturally and linguistically diverse learners, abilities, exceptionalities, gender, religion, socioeconomic status, sexual orientation and preference. Additionally, this course explores environments that are healthy, respectful, supportive, and challenging for all students.

**IMPACT:** None.

**RATIONALE:** This is a required course in the Master of Arts in Teaching degree proposed by the Department of Curriculum and Instruction. As it is never a long-term solution to use topics numbers to cover essential, required material in a degree or certificate program, the department is ready to move this offering to a permanent course number.

**EFFECTIVE DATE:** Spring 2016

**EDCI 724.** Fundamentals of Teaching Music. (1) I, II. Techniques, materials, and experiences for a variety of music classes will be examined through discovery. Furthermore, lesson plan development, writing, and implementation will be examined in detail.

**IMPACT:** No foreseeable.

**RATIONALE:** This course provides a permanent graduate number for students in the graduate certificate in teaching and learning with a concentration in Music Education. Currently, students attend the undergraduate version of the content-specific course while enrolling in a special section of EDCI 786 for two credits and a special section of EDCI 991 for one credit. This one-credit course at the 700 level serves as part of the coursework for the TELRN methods requirement.

**EFFECTIVE DATE:** Spring 2016

**EDCI 725.** Music Methods for Elementary Schools. (1) II. The study of the musical characteristics of children and development of appropriate curriculum, instructional materials and techniques, and related technology for teaching musical understanding, literacy, multi-cultural connections, and creative improvisation in grades K-6 instrumental, vocal, and general music.

**IMPACT:** No foreseeable.

**RATIONALE:** This course provides a permanent graduate number for students in the graduate certificate in teaching and learning with a concentration in Music Education. Currently, students attend the undergraduate version of the content-specific course while enrolling in a special section of EDCI 786 for two credits and a special section of EDCI 991 for one credit. This one-credit course at the 700 level serves as part of the coursework for the TELRN methods requirement.

**EFFECTIVE DATE:** Spring 2016

**EDCI 726.** Music Program in Middle and Secondary Schools. (1) I. Organization and administration of the comprehensive music program in middle and secondary high schools; including the study of vocal and instrumental ensemble development, as well as techniques, materials and appropriate instructional technologies.

**IMPACT:** No foreseeable.

**RATIONALE:** This course provides a permanent graduate number for students in the graduate certificate in teaching and learning with a concentration in Music Education. Currently, students attend the undergraduate version of the content-specific course while enrolling in a special section of EDCI 786 for two credits and a special section of EDCI 991 for one credit. This one-credit course at the 700 level serves as part of the coursework for the TELRN methods requirement.

**EFFECTIVE DATE:** Spring 2016

**EDCI 727.** Advanced Methods in Music Education. (1) I, II. Advanced instructional methods and technologies related to the teaching of music in grades preK-12 implemented through field experiences

**IMPACT:** No foreseeable.

**RATIONALE:** This course provides a permanent graduate number for students in the graduate certificate in teaching and learning with a concentration in Music Education. Currently, students attend the undergraduate version of the content-specific course while enrolling in a special section of EDCI 786 for two credits and a special section of EDCI 991 for one credit. This one-credit course at the 700 level serves as part of the coursework for the TELRN methods requirement.

**EFFECTIVE DATE:** Spring 2016

**EDCI 791.** Teaching Science and Mathematics in the Elementary School. (4) I. Develops knowledge, skills, and dispositions to effectively teach elementary science and mathematics. Introduces content, methods, and materials. Explores curriculum integration. Pre-Requisite: Admission to MAT Program and Co-Requisite: EDCI 800.

**IMPACT:** None.

**RATIONALE:** This is a required course in the Master of Arts in Teaching degree proposed by the Department of Curriculum and Instruction. As it is never a long-term solution to use topics numbers to cover essential, required material in a degree or certificate program, the department is ready to move this offering to a permanent course number.

**EFFECTIVE DATE:** Fall 2016

**EDCI 792.** Teaching Social Studies, Reading, and Literacy in the Elementary School. (4) I. Develops knowledge, skills, and dispositions to effectively teach elementary social studies, reading, and language arts. Introduces content,

methods, and materials. Explores curriculum integration. Pre-Requisite: Admission to MAT Program and Co-Requisite: EDCI 800.

**IMPACT:** None.

**RATIONALE:** This is a required course in the Master of Arts in Teaching proposed by the Department of Curriculum and Instruction. As it is never a long-term solution to use topics numbers to cover essential, required material in a degree or certificate program, the department is ready to move this offering to a permanent course number.

**EFFECTIVE DATE:** Spring 2016

**EDCI 793.** Teaching Health, Movement, and Fine Arts in Elementary Schools. (4) II. Develops knowledge, skills, and dispositions to effectively teach health, movement, and fine arts. Introduces content, methods, and materials. Explores curriculum integration. Pre-Requisite: Admission to MAT Program.

**IMPACT:** None.

**RATIONALE:** This is a required course in the Master of Arts in Teaching by the Department of Curriculum and Instruction. As it is never a long-term solution to use topics numbers to cover essential, required material in a degree or certificate program, the department is ready to move this offering to a permanent course number.

**EFFECTIVE DATE:** Spring 2016

**EDCI 796.** Brain-Based Literacy Instruction. (3) On Sufficient Demand. This course provides advanced study of theory and research regarding literacy acquisition related to brain development and function. The intended audience includes K-12 regular classroom teachers, reading teachers, resource room teachers, teacher aides, and other professionals concerned with meeting the literacy needs of children and young adults. The following topics are covered in the course: Cognitive functions, memory systems, sensitive/ critical periods for brain development related to literacy, implications for classroom environment and stress upon student performance, executive functions and research-based instructional strategies found to increase student performance.

**IMPACT:** No foreseen impact.

**RATIONALE:** This course has been offered as a Topics course for several semesters. This proposal is to assign it a permanent number.

**EFFECTIVE DATE:** Spring 2016

**EDCI 800.** Teaching Practicum. (1-6) I. Participate in supervised field experience in K-12 schools. Apply principles of curriculum, instruction, and assessment to plan, teach, and reflect. Pre-Requisite: Admission to MAT Program and Co-Requisites: EDCI 791, EDCI 792.

**IMPACT:** None.

**RATIONALE:** This is a required course in the Master of Arts in Teaching degree proposed by the Department of Curriculum and Instruction. As it is never a long-term solution to use topics numbers to cover essential, required material in a degree or certificate program, the department is ready to move this offering to a permanent course number.

**EFFECTIVE DATE:** Spring 2016

**EDCI 801.** Internship in K-12 Schools. (4) I, II. Supervised experience teaching in discipline-specific K-12 school classrooms.

**IMPACT:** No foreseeable.

**RATIONALE:** This course provides a fixed graduate number for the internship (student teaching) experience for students in the graduate certificate in teaching and learning. Previously students were enrolled in EDCI 991, an

internship course that in actuality is intended for doctoral students in the Ed.D. program. This proposal establishes a master's level number for the internship.

**EFFECTIVE DATE:** Spring 2016

### College of Technology and Aviation

**ADD:** **COT 680. Unmanned Aircraft Systems and Risk Analysis.** (3) Fall. An introductory course in Unmanned Aircraft Systems (UAS) history, elements, US Aviation regulations, operations, use of geospatial data; automation, safety issues; detect and avoid systems; sensors and payloads, human factors, and future. Special attention to UAS Cyber Security Risks, Threats, Impact, Vulnerabilities, and Countermeasures will be identified. The Ryan-Nichols Risk Assessment equations will be used for qualitative risk analysis of Threats so identified.

**RATIONALE:** This course is designed to provide understating of unmanned aircraft systems, regulatory issues and Cyber Security environment. Additionally, this class will focus on students using Risk Assessment techniques to address UAS Cyber Threats and deployment of Countermeasures.

**IMPACT:** No impact on other departments.

**EFFECTIVE DATE:** Spring 2016

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**ADD:** **COT 684. Advanced Topics in Cyber Data Fusion.** (3) Spring. This course is scenario-based applying cyber surveillance techniques and analysis of collected data, to realistic, terrain-oriented problems. Topics include the digital soldier and sailor, 360-degree battlefield awareness and the use of unmanned, semiautonomous technologies. Risk Assessment and Cyber Security countermeasures are the "glue" to successful implementation of data fusion techniques. The Ryan-Nichols Risk Assessment equations and other methods will be used for qualitative risk analysis of identified Cyber Threats.

**RATIONALE:** This course defines the fusion of Robotics, Cybersecurity and limits of Cyberwar. Students will develop critical thinking, knowledge, and skills to apply to UAS Surveillance techniques to realistic, terrain-oriented problems.

**IMPACT:** No impact on other departments

**EFFECTIVE DATE:** Spring 2016

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### College of Architecture, Planning and Design

**LAR 734 – Rivers: Processes & Forms**

This course addresses key aspects of hydrology such as precipitation and movement of water from uplands to channels. This movement, generally referred to as “runoff processes,” is responsible for shaping the watershed. It then focuses upon fluvial geomorphology, the science of riverscapes, to examine processes and resultant landforms. This course teaches field observation skills and field survey procedures that allow the classification of natural rivers and streams. Finally, it previews methods of prediction and monitoring of river channel stability parameters.

Credit: (Variable, 2-3)

When Offered: Fall

Effective: Spring 2016

Impact on Other Units: None

Rationale: The course has been offered previously as a problems course (LAR 741, topic: Fluvial Systems) and will continue to be offered regularly

## **Non-Expedited Course Change**

### **College of Architecture, planning and Design**

From: **CDPLN-699 - Special Studies in Community Development**

Independent study on special topics of interest in community development.

Credit: (1-3)

To: **CDPLN 701 - Special Studies in Community Development**

Independent study on special topics of interest in community development.

Credit: (1-3)

Effective: Spring 2016

Impact on Other Units: None

Rationale: Several Community Development electives are offered as problems courses. Changing the course number from 699 to 701 will allow students to meet the Graduate School's 700-level credit hour requirement more easily.



# Non-Expedited Curriculum Changes

## Electrical and Computer Engineering

### **Electrical and Computer Engineering (M.S. and Ph.D) Program**

**Effective:** Spring 2016

#### **Rationale:**

The current graduate degrees within the ECE department are listed as MS and PhD in Electrical Engineering. This fails to capture the scope of a student's coursework and research, which may be focused on a combination of electrical and computer engineering areas, or could be focused mainly on the computer engineering area. The make up of the ECE department is about 50/50 for the students and close to that for the faculty between the electrical and the computer areas. One additional problem is that the online graduate application system (College Net) only shows the Electrical Engineering area, so prospective graduate students seeking Computer Engineering areas may have been misled by not seeing computer engineering in the program title.

Therefore we are changing the name of the graduate degrees from "Master of science in Electrical Engineering" to "Master of science in Electrical and Computer Engineering", and from "Doctor of philosophy in Electrical Engineering" to "Doctor of philosophy in Electrical and Computer Engineering".

#### **Summary of changes:**

Change the name of the graduate degrees in the ECE department from "Master of science in Electrical Engineering" to "Master of science in Electrical and Computer Engineering", and from "Doctor of philosophy in Electrical Engineering" to "Doctor of philosophy in Electrical and Computer Engineering".

**Impact (i.e. if this impacts another unit):** No significant impacts outside the department are anticipated for any of these changes.