

Attachment 1
Academic Affairs
Consent Agenda Supplemental Information

College of Arts & Sciences (2-20-14)

Pages 2-4 (curriculum change)

College of Architecture, Planning and Design (4-11-14)

Pages 5-6 (course additions)

College of Human Ecology (4-17-14)

Pages 7-9 (course changes and additions)

Pages 10-13 (curriculum change)

Graduate Courses (5-6-14)

Pages 14-16 (course changes)

College of Arts and Sciences (2-20-14)

Sociology, Anthropology, & Social Work

Certificate Program in Nonviolence Studies

FROM:

TO:

<p>General requirements</p> <hr/> <p>Course requirements (6 credit hours)</p> <hr/> <ul style="list-style-type: none"> • 2 Required courses: • DAS 355 - Introduction to Nonviolence Studies Credits: (3) • And One Capstone class: • DAS 455 - Violence, Nonviolence and Social Change Credits: (3) • or • DAS 590 - Applied Nonviolence Credits: (3) <p>Electives (9 credit hours)</p> <hr/> <p>Selected from a list of courses that have been approved by Arts and Sciences Dean in past:</p> <ul style="list-style-type: none"> • ANTH 200 - Introduction to Cultural Anthropology Credits: (3) • EDCEP 311 - Interaction and Guidance for the Paraprofessional Credits: (3) (Proactive Educators for the Elimination of Rape and Sexual Violence) • FSHS 531 - Core Conflict Resolution Credits: (3) • FSHS 533 - Prevention & Intervention of Violence Credits: (3) • FSHS 700 - Problems in Family Studies and Human Services Credits: (Variable) 	<p>General requirements</p> <hr/> <p>Course requirements (6 credit hours)</p> <hr/> <ul style="list-style-type: none"> • 2 Required courses: • DAS 355 - Introduction to Nonviolence Studies Credits: (3) • And One Capstone class: • DAS 455 - Violence, Nonviolence and Social Change Credits: (3) • or • DAS 590 - Applied Nonviolence Credits: (3) <p>Electives (9 credit hours)</p> <hr/> <p>Selected from a list of courses that have been approved by Arts and Sciences Dean in past:</p> <ul style="list-style-type: none"> • ANTH 200 - Introduction to Cultural Anthropology Credits: (3) • COMM 322 - Interpersonal Communication Credits: (3) • COMM 480 - Intercultural Communication Credits: (3) • <u>DANCE 325 – Ballet II Credits: (2)</u> (Anatomy for Dancers) • EDCEP 311 - Interaction and Guidance for the Paraprofessional Credits: (3) (Proactive Educators for the Elimination of Rape and Sexual Violence)
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<p>(Peace and Conflict)</p> <ul style="list-style-type: none"> • HORT 640 - Horticultural Problems Credits: (Variable) (The End of Industrial Society and Agriculture as We Know It) • LEAD 502 - Independent Study in Leadership Studies Credits: (0-3) (International Community Service Seminar) • SOCIO 363 - Global Problems Credits: (3) • SOCIO 500 - Sociological Perspectives on Contemporary Issues Credits: (Variable) (Human Trafficking) • SOCIO 507 - International Development and Social Change Credits: (3) • SOCIO 633 - Gender, Power, and International Development Credits: (3) • SOCWK 568 - Social Work Practice III Credits: (3) • WOMST 105 - Introduction to Women's Studies Credits: (3) • WOMST 480 - Seminar in Gender, Environment & Justice Credits: (3) (Women and Environmentalism) • WOMST 700 - Advanced Topics in Women's Studies Credits: (1-3) (Independent Study in Nonviolence Studies) 	<ul style="list-style-type: none"> • FSHS 531 - Core Conflict Resolution Credits: (3) • <u>FSHS 532 – Conflict Resolution across Cultures & Contexts Credits: (3)</u> • FSHS 533 - Prevention & Intervention of Violence Credits: (3) • FSHS 700 - Problems in Family Studies and Human Services Credits: (Variable) (Peace and Conflict) • <u>IAPD 391- Topics in Contemporary Design Seminar Credits: (3)</u> • HORT 640 - Horticultural Problems Credits: (Variable) (The End of Industrial Society and Agriculture as We Know It) • LEAD 502 - Independent Study in Leadership Studies Credits: (0-3) (International Community Service Seminar) • SOCIO 363 - Global Problems Credits: (3) • SOCIO 500 - Sociological Perspectives on Contemporary Issues Credits: (Variable) (Human Trafficking) • SOCIO 507 - International Development and Social Change Credits: (3) • SOCIO 520 - Methods of Social Research I Credits: (4) • SOCIO 545 - The Sociology of Women Credits: (3) • SOCIO 633 - Gender, Power, and International Development Credits: (3) • <u>SOCIO 635 – Sociology of Human Trafficking Credits: (3)</u> • SOCWK 568 - Social Work Practice III Credits: (3) • THTRE 664 - Creative Drama Credits: (3) • THTRE 665 - Drama Therapy with Special Populations Credits: (3) • WOMST 105 - Introduction to Women's Studies Credits: (3) • <u>WOMST 380 – Women and Global Social</u>
<p><u>New Electives</u></p> <hr/> <p>Electives that were approved by Nonviolence Studies Governing Board and Curriculum Committee November 5, 2012.</p> <ul style="list-style-type: none"> • COMM 322 - Interpersonal Communication Credits: (3) • COMM 480 - Intercultural Communication Credits: (3) • SOCIO 520 - Methods of Social Research 	

<p>I Credits: (4)</p> <ul style="list-style-type: none"> • SOCIO 545 - The Sociology of Women Credits: (3) • THTRE 664 - Creative Drama Credits: (3) • THTRE 665 - Drama Therapy with Special Populations Credits: (3) <p>Total credit hours: (15)</p>	<p><u>Change Credits: (3)</u></p> <ul style="list-style-type: none"> • WOMST 480 - Seminar in Gender, Environment & Justice Credits: (3) (Women and Environmentalism) • WOMST 700 - Advanced Topics in Women's Studies Credits: (1-3) (Independent Study in Nonviolence Studies) <p>Total credit hours: (15)</p>
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RATIONALE: The Nonviolence Studies Governing Board voted on May 17, 2013 to add new electives to the Nonviolence Studies Program. The head of SASW has approved these new electives. There are two required courses for this 15-credit certificate, DAS 355 **and** DAS 590 **or** DAS 450. Students choose three electives from approved courses that are offered in multiple colleges.

IMPACT: The 15-credit Nonviolence Studies Certificate appears in the catalog under AS. The required interdisciplinary courses are DAS courses and the departmental home for Nonviolence Studies is SASW. Undergraduates from all colleges can earn the Nonviolence Studies Certificate. The Nonviolence Studies Governing Board has approved electives from Arts and Sciences, Leadership Studies and Education, Human Ecology, Horticulture and Architecture. The certificate can be completed online through DCE.

EFFECTIVE DATE: Summer 2014

College of Architecture, Planning & Design (4-11-14)

Non-Expedited Proposals – Courses Numbered 000-599

**Department of Architecture
(Master of Architecture, Post-Baccalaureate Track)**

New Courses

Effective: Fall 2014

Impact on Other Units: None

Course: **ARCH 401 Accelerated Architectural Design Studio I**
Catalog Description: An introduction to the principles, processes and vocabularies of architectural design; basic architectural concerns (space/light/form and human factors); and techniques for visually representing design ideas (sketching/diagramming/instrument-aided drawings and model making).
Credits: (5)
Prerequisites: Admission to the post-baccalaureate track of the Master of Architecture Program.
When Offered: Fall
K-State 8: None
Rationale: The course is the first of a two-course sequence designed to allow students in the post-baccalaureate track to master the material contained in the first two years of the non-baccalaureate track. It delivers the material through more sophisticated and highly integrated project assignments appropriate to students with greater academic experience.

Course: **ARCH 434 Building Construction Systems in Architecture II**
Catalog Description: This course develops a more sophisticated level of understanding of how materials and systems assembly reinforce and extend the intentions of the designer. Students will develop their ability to both analyze and employ building construction techniques and assemblies as a design generator in preparation for Architectural Design Studio V.
Credits: (3)
Prerequisites: ARCH 433/BCSA I
When Offered: Spring
K-State 8: None
Rationale: This lecture course expands the student's basic knowledge of materials and construction systems to strengthen students' performance in ARCH 605. Building on content introduced in BCSA I and Structures II, this course seeks to cover more sophisticated building assembly systems, giving students a broader conceptual understanding of the crossover between material and assembly types in architecture. This course is a prerequisite for ARCH 605 ADS V.

**Office of the Dean
(Environmental Design Studies Program)**

New Course

Effective: Fall 2014

Impact on Other Units: None

Course: **ENVD 400 Undergraduate Research**
Catalog Description: Mentored undergraduate research in architecture, interior architecture and product design, landscape architecture or planning.
Credits: (0-3)
Prerequisites: None
When Offered: Fall, Spring, Summer
K-State 8: None
Rationale: Response to request for each college/unit to have this course offering.

College of Human Ecology (4-17-14)

School of Family Studies and Human Services

CHANGE FROM:	CHANGE TO:
<p>FSHS 405 Advanced Personal and Family Finance</p> <p>Credits (3)</p> <p>In-depth applications of personal and family money management principles with emphasis on credit, savings, insurance, and budgeting.</p> <p>When Offered: Fall</p> <p>Pre-Requisites: FSHS 100, FSHS 105 with grade of “B” or better.</p> <p>K-State 8 TAG: Empirical and Quantitative Reasoning Social Sciences</p> <p>Components/Size: LEC/25</p>	<p>FSHS 405 Advanced Personal and Family Finance</p> <p>Credits (3)</p> <p>In-depth applications of personal and family money management principles with emphasis on credit, savings, insurance, and budgeting.</p> <p>When Offered: Fall</p> <p>Pre-Requisites: FSHS 105 with grade of “B” or better <u>and CIS 102</u> or CMST 108.</p> <p>K-State 8 TAG: Empirical and Quantitative Reasoning Social Sciences</p> <p>Components/Size: LEC/<u>40</u></p>

Rationale: Students must demonstrate a basic understanding of time value of money and spreadsheet concepts to be successful in this advanced course.

Impact: CIS Faculty/advisor, Dennis Lang, replied on 11/10/2013 that no problems are foreseen with the addition of CIS 102 as a requirement. CMST 108 was added as an alternative for CIS 102 at the request of Dr. Delker (TC) to accommodate students enrolled in BFPF on the Salina campus.

Effective Date: Fall 2014

CHANGE FROM:	CHANGE TO:
<p>FSHS 590 Capstone Experience in Family Studies and Human Services</p> <p>Credits (3)</p> <p>Capstone course for students NOT completing the internship. Consideration of professional roles and responsibilities of human service providers, ethics, career development, and characteristics of client populations. Focus on skills required in the delivery of human services with diverse groups.</p> <p>K-State 8 Tag:</p> <p>K-State 8 Rationale:</p>	<p>FSHS 590 Capstone Experience in Family Studies and Human Services</p> <p>Credits (3)</p> <p>Capstone course for students NOT completing the internship. Consideration of professional roles and responsibilities of human service providers, ethics, career development, and characteristics of client populations. Focus on skills required in the delivery of human services with diverse groups.</p> <p>K-State 8 Tag: <u>Ethical Reasoning and Responsibility</u></p>

<p>When Offered: Fall, Spring</p> <p>Pre-Requisite: Senior standing and FSHS majors only.</p>	<p>K-State 8 Rationale: This course is the capstone course for the students in the FSHS major who are completing an area of concentration rather than an internship. The main project in the course is completing a portfolio that represents their training and experience in the content areas of Family Life Education. One of those areas is ethics. The students review the ethical guidelines for the field and discuss (throughout the semester) how to apply those guidelines when they are working in the field. The students are expected to be able to show that they have had significant training in the ethics of the field and to represent that experience throughout their coursework and portfolio. Ethics constitute a significant portion of the course.</p> <p>When Offered: Fall, Spring</p> <p>Pre-Requisite: Senior standing and FSHS majors only.</p>
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Rationale: K-State 8 tags were not included with this course when it was created.

IMPACT: NONE

Effective: Fall 2014

Department of Human Nutrition

<p>Course Add</p> <p>HN 558 ADVANCED ATHLETIC TRAINING TECHNIQUES</p> <p>Credits: (3)</p> <p>This course will provide a deeper application of athletic training techniques in specific orthopedic related areas. Students will have a hands-on and lab component as it relates to casting, bracing, Kinesiotaping, and manual therapy techniques. Upon completion of this course, students will be eligible to complete the certification examinations to obtain credentialing as an ASOP Orthopedic Physician Extender.</p> <p>The course will be conducted as a hands on lab and lecture. The primary focus is skill acquisition and application.</p> <p>When Offered: Spring</p> <p>Pre-Requisite: HN 551 Co-Requisite: HN 552</p>

Rationale: The Athletic Training program is one of 13 schools selected to be a Physician Extender Certification program. Many athletic training students are employed in orthopedic clinics throughout the country. As part of a clinical position, the athletic trainers often gain additional certifications in casting, bracing, kinesiotaping, joint mobilization and manual therapy. During the accreditation review, we have identified that our students would benefit from additional certification to enhance their employment with a variety of settings. The advanced athletic training techniques will allow us to prepare students for this additional certification while also gaining additional knowledge on specialty bracing and casting techniques.

IMPACT: NONE

Effective: Spring 2015

Course Add
HN 589 PROFESSIONAL PREPARATION FOR ATHLETIC TRAINING
Credits: (0-1)
This course will provide a comprehensive review of athletic training knowledge in specific domain areas. Students will have a seminar component to review and apply knowledge across the 5 domain areas of athletic training. The domain areas include: injury/illness prevention and wellness protection; clinical evaluation and diagnosis; immediate and emergency care; treatment and rehabilitation; organizational and professional health and well-being. Upon completion of this course, students will be eligible to complete the Board of Certification examination to obtain the license of Certified Athletic Trainer.
When Offered: Fall, Spring
Other Requirements: Senior Standing
K-State 8 TAG: None
K-State 8 TAG Rationale:

Rationale: In 2013-2014, the accrediting agency for athletic training; CAATE, implemented additional standards for program outcomes. One of the standards is that all programs meet at first time certification pass rate of 70% over a three year period. In the past, the program has conducted weekly review sessions for senior athletic training students preparing to complete the certification examination. On the recommendation of an external site reviewer, it was recommended that the program develop a non-credit course that would allow ease of scheduling but also allow for assessment of student readiness for the certification examination.

IMPACT: No other units are impacted

Effective: Spring 2015

Non-expedited Undergraduate Curriculum Change Proposal

School of Family Studies and Human Services

Change From:	Change To:
Personal Financial Planning (B.S.)	Personal Financial Planning (B.S.)
<p>The personal financial planning program combines course work in personal finance, family relationships and decision making, consumer rights, insurance, investments, retirement and estate planning, economics, and accounting. Emphasis is placed on understanding financial products and how they work, as well as the role of family in financial decisions. The program offers financial planning courses that satisfy CFP® Board’s education requirement for the CFP®/CERTIFIED FINANCIAL PLANNER® certification.</p> <p>Kansas State University does not certify individuals to use the CFP®, CERTIFIED FINANCIAL PLANNER®, and CFP® (with flame logo)® certification marks. CFP® certification is solely granted by the Certified Financial Planner Board of Standards to individuals who, in addition to completing an education requirement such as this CFP Board-Registered program, have met ethics, experience, and examination requirements.</p> <p>Admission to the personal financial planning program requires completion of FSHS 105 with a grade of B or better.</p>	<p>The personal financial planning program combines course work in personal finance, family relationships and decision making, consumer rights, insurance, investments, retirement and estate planning, economics, and accounting. Emphasis is placed on understanding financial products and how they work, as well as the role of family in financial decisions. The program offers financial planning courses that satisfy CFP® Board’s education requirement for the CFP®/CERTIFIED FINANCIAL PLANNER® certification.</p> <p>Kansas State University does not certify individuals to use the CFP®, CERTIFIED FINANCIAL PLANNER®, and CFP® (with flame logo)® certification marks. CFP® certification is solely granted by the Certified Financial Planner Board of Standards to individuals who, in addition to completing an education requirement such as this CFP Board-Registered program, have met ethics, experience, and examination requirements.</p> <p>Admission to the personal financial planning program requires completion of FSHS 105 with a grade of B or better.</p>
<p>Bachelor’s Degree Requirements General Requirements (36-37 credit hours)</p>	<p>Bachelor’s Degree Requirements General Requirements (41-44 credit hours)</p>
<p>Communications (8-9 credit hours)</p>	<p>Communications (8-9 credit hours)</p>
<ul style="list-style-type: none"> • COMM 105 - Public Speaking IA Credits: (2) • or • COMM 106 - Public Speaking I Credits: (3) • ENGL 100 - Expository Writing I Credits: (3) • ENGL 200 - Expository Writing II Credits: (3) 	<ul style="list-style-type: none"> • COMM 105 - Public Speaking IA Credits: (2) • or • COMM 106 - Public Speaking I Credits: (3) • ENGL 100 - Expository Writing I Credits: (3) • ENGL 200 - Expository Writing II Credits: (3)
<p>Social Sciences (9 credit hours)</p>	<p>Social Sciences (9 credit hours)</p>

<ul style="list-style-type: none"> • ECON 110 - Principles of Macroeconomics Credits: (3) • PSYCH 110 - General Psychology Credits: (3) • SOCIO 211 - Introduction to Sociology Credits: (3) <p>Humanities (6 credit hours)</p>	<ul style="list-style-type: none"> • ECON 110 - Principles of Macroeconomics Credits: (3) • PSYCH 110 - General Psychology Credits: (3) • SOCIO 211 - Introduction to Sociology Credits: (3) <p>Humanities (6 credit hours) <u>Only a course of 3 credits or more will apply.</u></p>
<p>Natural and physical sciences (7 credit hours)</p> <hr/> <p>Life science elective and Physical Science elective. One course must be taken from each area; one course must include a laboratory.</p> <p>Quantitative Studies (6 credit hours)</p>	<p>Natural and physical sciences (7 credit hours)</p> <hr/> <p>Life science elective and Physical Science elective. One course must be taken from each area; one course must include a laboratory.</p> <p>Quantitative Studies (7-9 credit hours)</p>
<ul style="list-style-type: none"> • STAT 350 - Business and Economic Statistics I Credits: (3) • Choose one from the following: • MATH 100 - College Algebra Credits: (3) • or • A college-level calculus course Credits: (3) <p>Integrative Studies (4 credit hours)</p>	<ul style="list-style-type: none"> • <u>CIS 102-Introduction to Spreadsheets Applications Credits: (1)</u> • <u>Or</u> • <u>CMST 108-PC Desktop Software Credits: (3)</u> • STAT 350 - Business and Economic Statistics I Credits: (3) • Choose one from the following: • MATH 100 - College Algebra Credits: (3) • or • A college-level calculus course Credits: (3) <p>Integrative Human Ecology Courses (4 credit hours)</p>
<ul style="list-style-type: none"> • FSHS 350 - Family Relationships and Gender Roles Credits: (3) • or • GNHE 310 - Human Needs Credits: (3) • GNHE 210 - Foundations of Human Ecology Credits: (1) <p>Professional Studies (62 credit hours)</p>	<ul style="list-style-type: none"> • FSHS 350 - Family Relationships and Gender Roles Credits: (3) • or • GNHE 310 - Human Needs Credits: (3) • GNHE 210 - Foundations of Human Ecology Credits: (1) <p>Professional Studies (62 credit hours)</p>
<p>Grades of C or higher required.</p> <p>Professional FSHS courses (32 credit hours)</p>	<p>Grades of C or higher required.</p> <p>Professional FSHS courses (38 credit hours)</p>

- FSHS 100 - Family Financial Planning as a Career Credits: (1)
- FSHS 105 - Introduction to Personal and Family Finance Credits: (3)
- FSHS 110 - Introduction to Human Development Credits: (3)
- FSHS 301 - The Helping Relationship Credits: (3)
- FSHS 405 - Advanced Personal and Family Finance Credits: (3)
- FSHS 595 - Professional Seminar in Family Financial Planning Credits: (3)
- FSHS 756 - Financial Counseling Credits: (3)
- FSHS 760 - Families, Employment Benefits, and Retirement Planning Credits: (3)
- FSHS 762 - Investing for the Family's Future Credits: (3)
- FSHS 764 - Estate Planning for Families Credits: (3)
- FSHS 772 - Personal Income Taxation Credits: (3)

Other supporting courses (26 credit hours)

- ACCTG 231 - Accounting for Business Operations Credits: (3)
- ACCTG 241 - Accounting for Investing and Financing Credits: (3)
- ECON 120 - Principles of Microeconomics Credits: (3)
- ECON 530 - Money and Banking Credits: (3)
- ~~FINAN 460 - Insurance Credits: (3)~~
- ~~or~~
- ~~FSHS 766 - Insurance Planning for Families Credits: (3)~~
- MANGT 390 - Business Law I Credits: (3)
- MKTG 400 - Introduction to Marketing Credits: (3)

Choose one from the following:

- AGECE 513 - Agricultural Finance Credits:

- FSHS 100 - Family Financial Planning as a Career Credits: (1) **Must be taken twice.**
- FSHS 105 - Introduction to Personal and Family Finance Credits: (3)
- FSHS 110 - Introduction to Human Development Credits: (3)
- FSHS 301 - The Helping Relationship Credits: (3)
- **FSHS 400 – Family and Consumer Economics (3)**
- FSHS 405 - Advanced Personal and Family Finance Credits: (3)
- FSHS 595 - Professional Seminar in Family Financial Planning Credits: (3)
- FSHS 756 - Financial Counseling Credits: (3)
- FSHS 760 - Families, Employment Benefits, and Retirement Planning Credits: (3)
- FSHS 762 - Investing for the Family's Future Credits: (3)
- FSHS 764 - Estate Planning for Families Credits: (3)
- **FSHS 766 - Insurance Planning for Families Credits: (3)**
- FSHS 772 - Personal Income Taxation Credits: (3)

Other supporting courses (24 credit hours)

- ACCTG 231 - Accounting for Business Operations Credits: (3)
- ACCTG 241 - Accounting for Investing and Financing Credits: (3)
- ECON 120 - Principles of Microeconomics Credits: (3)
- ECON 530 - Money and Banking Credits: (3)
- MANGT 390 - Business Law I Credits: (3)
- MKTG 400 - Introduction to Marketing Credits: (3)
- **MKTG 542 – Professional Selling Credits: (3)**

Choose one from the following:

- AGECE 513 - Agricultural Finance Credits: (3)

<p>(3)</p> <ul style="list-style-type: none"> • FINAN 450 - Principles of Finance Credits: (3) <p>Electives (21-22 credit hours)</p> <hr/> <p>Total hours required for graduation (120)</p>	<ul style="list-style-type: none"> • FINAN 450 - Principles of Finance Credits: (3) <p>Electives (14-17 credit hours)</p> <hr/> <p>Total hours required for graduation (120)</p>
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Rationale: Professionals and potential employers for students in personal financial planning feel that Family and Consumer Economics is a core class for students. With increased faculty support, we have the capacity to offer FSHS 400 Family and Consumer Economics (3) on a regular basis and therefore are proposing that it be added back to the curriculum. We have also been offering FSHS 766 Insurance Planning for Families on a regular basis and would like to list it as a required professional course versus a supporting course. The Certified Financial Planner Board of Standards requires that we offer this course in our curriculum.

It has also become apparent that students are not entering FSHS 405 Advanced Personal and Family Finance with adequate spreadsheet skills, which has led us to adding CIS 102 Introduction to Spreadsheets Applications (1) to our curriculum with approval from the CIS unit. Students also lack marketing skills leading to the inclusion of MKTG 542 Professional Selling (3) to the curriculum with permission from the respective unit.

Adjustment in General Requirements credit hours reflects addition of CIS 102 and the inclusion of integrative Human Ecology courses.

Impact: The Computing and Information Services and Marketing units can expect approximately 20 new students per year in the classes we are adding to our curriculum (CIS 102 and MKTG 542). Each department has approved these courses with the understanding that our students must enroll with other students and receive no special enrollment treatment. The Finance Department has been contacted as of 3/20/2014 to inform of the intention to drop FINAN 460 from the curriculum.

David Delker, Technology & Aviation Dean Salina Campus, has recommended CMST 108 as an alternate course for CIS 102 of for the Salina Campus. CIS 102 is not offered at the Salina campus and CMST 108 is not offered at the Manhattan campus. By adding the course to the curriculum, the need for exceptions to the course will not be necessary.

Effective: Fall 2014

Graduate Council (5-6-14)

Non-Expedited New Courses

Architecture, Planning & Design

Office of the Dean (Environmental Design Studies Program)

ADD: ENVD 654 Study Abroad Orientation (1). Fall. Preparation for participation in study abroad with a focus on specific information pertaining to the design professions and the analysis of the built and natural environment.

Rationale: This course is offered to students in all departments within the college. It is the standard practice that courses of this nature are offered under the ENVD prefix.

Arts & Sciences

Add: MATH 725 – The Mathematics of Data and Networks I. (3) I. Develops the mathematical tools necessary for studying and handling large datasets and networks. Includes matrix, graph, and probability theory, dimensionality reduction, clustering, maximum likelihood, Bayesian networks, sparsification, modularity, information theory, hidden Markov chains, branching processes, electrical networks, internet mathematics, random walks, random graphs, random matrices, and search algorithms. Pr.: (recommended) Math 551, MATH 222.

RATIONALE: This class was offered in the past in the Mathematics Department as a Topics course and has a record of attracting students from other departments. Our intention is to formalize it so that it can be chosen as an elective in the context of a Master's level Certificate of Data Analytics, currently under development at the University. Raw data might be collected in the real world or might result from computer simulations. Hence, it may sometimes come already interconnected into a network structure. Alternatively, a natural graph structure can be gainfully superimposed to it. Many mathematical tools have been developed to study and understand such structures. Our goal is to aid basic understanding of how these tools work. These topics will appeal to students in Mathematics as well as students in applied sciences such as Engineering, Biology, Ecology, and Political Science.

IMPACT: Statistics. The department has been contacted and has no objection to the proposal.

EFFECTIVE DATE: Fall 2014

ADD: MATH 726 – The Mathematics of Data and Networks II. (3) II. Continuation of Math 725. Develops the mathematical tools necessary for studying and handling large data-sets and networks. Includes matrix, graph, and probability theory, dimensionality reduction, clustering, maximum likelihood, Bayesian networks, sparsification, modularity, information theory, hidden Markov chains, branching

processes, electrical networks, internet mathematics, random walks, random graphs, random matrices, and search algorithms. Pr.: (recommended) MATH 551, MATH 222.

RATIONALE: This class was offered in the past in the Mathematics Department as a Topics course and has a record of attracting students from other departments. Our intention is to formalize it so that it can be chosen as an elective in the context of a Master's level Certificate of Data Analytics, currently under development at the University. Raw data might be collected in the real world or might result from computer simulations. Hence, it may sometimes come already interconnected into a network structure. Alternatively, a natural graph structure can be gainfully superimposed to it. Many mathematical tools have been developed to study and understand such structures. Our goal is to aid basic understanding of how these tools work. These topics will appeal to students in Mathematics as well as students in applied sciences such as Engineering, Biology, Ecology, and Political Science.

IMPACT: Statistics. The department has been contacted and has no objection to the proposal.

EFFECTIVE DATE: Fall 2014

ADD: PHILO 610 – Special Topics in Logic. (3) On demand. Examination of one or more advanced topics in mathematical or philosophical logic, such as: modal, temporal, and epistemic logics; counterfactuals; intuitionistic and other sub-classical logics; higher-order and other super-classical logics; formal semantics of natural language; or theories of truth. Pr.: PHILO 110 or PHILO 320, or consent of instructor.

RATIONALE: PHILO 610 is a new course, covering various topics in logic not normally covered in our extant logic sequence, but useful for students going on to graduate school, as for example, Modal Logic and Deontic Logic. As topics covered will depend on the particular students enrolled in any given semester, we need a new vehicle in which to provide this variable content.

EFFECTIVE DATE: Fall 2014

Engineering

ADD: IMSE 785. Big Data Analytics. (3) Topics include big data management, data architecture of hosting big data, big data retrieval languages, parallel computing methods, big data analytical methods, and data visualization. Required pre-requisites: CIS 209; STAT 510 (or STAT 350).

When Offered: Spring, on campus every other year; online every year

Effective term for requested action: Term Spring Year 2015

Rationale: This course aims to enhance data analytics education at K-State. This proposed course will extend traditional data analytics to situations where the data is big in terms of volume, velocity, and variety.

Impact (i.e. if this impacts another unit) – Possible on-campus students other than those from IMSE, who will take this course, are from Statistics and CIS. This proposed course was brought to the attention of the department heads of Statistics and CIS, Drs. Gadbury, and Singh during the data science meeting on February 18, 2014. Dr. Singh suggested we need Dr. Dan Andresen's approval to use the K-State Beocat computer facility for instructional purposes. We did make the request and gained the permission on March 11, 2014.