### **Attachment 1**

# Academic Affairs Consent Agenda Supplemental Information

### **College of Arts and Sciences (9-28-16)**

Pages 2-7

### **College of Business Administration (10-19-16)**

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### **College of Human Ecology (10-27-16)**

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### **Graduate Course and Curriculum changes (11-1-16)**

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### **College of Arts and Sciences (9-28-16)**

NON-EXPEDITED COURSE PROPOSALS Courses Numbered 000-599

### **Dean of Arts and Sciences**

ADD: DAS 475 – Nonviolence Studies: Women and Peace Movements. (3) I, II, S. Analyzes women and girls as leaders of diverse peace movements in the present and recent past. Pr.: DAS 355. K-State 8: Human Diversity within the US; Historical Perspectives.

K-STATE 8 RATIONALE: This course explores the diversity related to the role of women in peace movements and provides an important historic formation by examination of the historical context and biographies women in nonviolent movements.

RATIONALE: DAS 475 would allow students in the Nonviolence Studies Certificate Program (NVS) to have an additional core course that would apply toward the nine required credit hours of electives for the NVS certificate. The specific topic would also explore the important role women have played in the realm of Nonviolent activism.

IMPACT: None

EFFECTIVE DATE: Fall 2017

ADD: DAS 555 – Themes in Nonviolence Studies. (3) I, II, S. Explores nonviolence from a national and global perspective, with particular emphasis on emergent techniques and themes in nonviolence studies with particular emphasis on conflict resolution, peacekeeping and peacebuilding, and intersections of gender, race, class, ethnicity, and religion. Pr.: DAS 355 is recommended. K-State 8: Human Diversity within the US; Global Issues and Perspectives.

K-STATE 8 RATIONALE: The course topics are taught from global viewpoint and explore a range of international aspects of nonviolent perspectives and techniques and the "Global Issues and Perspectives" tag is appropriate. The "Human Diversity within the US" is appropriate as the course will also explore intersections of difference in relationship to nonviolence studies.

RATIONALE: DAS 555 would allow students in the Nonviolence Studies Certificate Program (NVS) to take additional course content that would apply toward the nine required credit hours of electives for the NVS certificate. This would also allow the NVS program to develop a new range of themes and course content that can vary with available faculty and capability. Currently most of the electives are cross-listed classes and the program does not have a stand-alone course of this nature.

IMPACT: None

EFFECTIVE DATE: Spring 2017

ADD: DAS 575 – Peacebuilding. (3) I, II, S. Explores how social problems, violence and war are generated and how people are working to build conditions that produce peace. Students will analyze peacebuilding efforts at home, in communities, in countries, in regions, and in the global social system. Pr.: None. K-State 8: Global Issues and Perspectives; Ethical Reasoning and Responsibility.

K-STATE 8 RATIONALE: This course utilizes a Global Perspective to explore peacebuilding programs and also explores ethics responsibility related to globalization, resource management and attempts to create a sustainable world.

RATIONALE: DAS 575 would allow students in the Nonviolence Studies Certificate Program (NVS) to have an additional course that would apply toward the nine required credit hours of electives for the NVS certificate. Peacebuilding at Home and in the World would also expose students to NVS content from a global social system perspective.

IMPACT: None

EFFECTIVE DATE: Fall 2017

### **Nonviolence Studies Certificate**

FROM: TO:

To earn the Certificate in Nonviolence Studies (NVS), students will examine violence and nonviolence within a holistic context. Students will look at social justice issues as they relate to individuals, the community, and the world. Students will take a comprehensive and far-reaching view of issues as they exist within the context of the culture and the world that surrounds them-as they exist through time and within a continuum that includes the precursors that lead to actual physical violence. They will imagine ways to apply nonviolence methodology to achieve better "cultural and social health" similarly to the way "public health" officials apply a preventative. contextual model.

To earn the Certificate in Nonviolence Studies (NVS), students will examine violence and nonviolence within a holistic context. Students will look at social justice issues as they relate to individuals, the community, and the world. Students will take a comprehensive and far-reaching view of issues as they exist within the context of the culture and the world that surrounds them-as they exist through time and within a continuum that includes the precursors that lead to actual physical violence. They will imagine ways to apply nonviolence methodology to achieve better "cultural and social health" similarly to the way "public health" officials apply a preventative. contextual model.

Upon completion of an undergraduate certificate in nonviolence studies, student will be able to demonstrate their understanding of:

- systems theory
- the differences between a mechanistic and organic worldview
- basic anthropological perspectives and concepts of holism
- history and theories of past and current nonviolence movements, including major writers
- their positionality in the social order and in what ways their life choices make a difference

their ability to apply:

- the concepts and methodologies of nonviolent resistance and direct action
- holistic thinking to human issues ranging from local to global
- the basic skills of conflict resolution, mediation, and arbitration
- critical thinking to real-world issues

### General requirements

# Course requirements (6 credit hours)

- 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

Upon completion of an undergraduate certificate in nonviolence studies, student will be able to demonstrate their understanding of:

- systems theory
- the differences between a mechanistic and organic worldview
- basic anthropological perspectives and concepts of holism
- history and theories of past and current nonviolence movements, including major writers
- their positionality in the social order and in what ways their life choices make a difference

their ability to apply:

- the concepts and methodologies of nonviolent resistance and direct action
- holistic thinking to human issues ranging from local to global
- the basic skills of conflict resolution, mediation, and arbitration
- critical thinking to real-world issues

### General requirements

# Course requirements (6 credit hours)

- 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

### Electives (9 credit hours)

Selected from a list of courses that have been approved by Arts and Sciences Dean in past:

- ANTH 200 Introduction to Cultural Anthropology Credits: 3
- CNRES 531 Core Conflict Resolution Credits: 3
- CNRES 532 Conflict Resolution across Cultures & Contexts Credits: 3
- CNRES 533 Prevention & Intervention of Violence Credits: 3
- COMM 322 Interpersonal Communication Credits: 3
- COMM 480 Intercultural Communication Credits: 3
- DANCE 325 Ballet II Credits: 2 (Anatomy for Dancers)
- EDCEP 311 Interaction and Guidance for the Paraprofessional Credits: 3 (Proactive Educators for the Elimination of Rape and Sexual Violence)
- FSHS 700 Problems in Family Studies and Human Services Credits: 1-18 (Peace and Conflict)
- GWSS 105 Introduction to Gender, Women, and Sexuality
   Studies Credits: 3
- GWSS 380 Women and Global Social Change Credits: 3
- GWSS 480 Seminar in Gender, Environment & Justice Credits: 3 (Women and Environmentalism)
- GWSS 700 Advanced Topics in Gender, Women, and Sexuality Studies Credits: 1-3 (Independent Study in Nonviolence Studies)

### Electives (9 credit hours)

Selected from a list of courses that have been approved by Arts and Sciences Dean in past:

- ANTH 200 Introduction to Cultural Anthropology Credits: 3
- CNRES 531 Core Conflict Resolution Credits: 3
- CNRES 532 Conflict Resolution across Cultures & Contexts Credits: 3
- CNRES 533 Prevention & Intervention of Violence Credits: 3
- COMM 322 Interpersonal Communication Credits: 3
- COMM 480 Intercultural Communication Credits: 3
- DANCE 325 Ballet II Credits: 2 (Anatomy for Dancers)
- DAS 475 Nonviolence Studies: Women and Peace Movements
   Credits: (3)
- DAS 555 Themes in Nonviolence Studies Credits: (3)
- DAS 575 Peacebuilding at Home and in the World Credits: (3)
- EDCEP 311 Interaction and Guidance for the Paraprofessional Credits: 3 (Proactive Educators for the Elimination of Rape and Sexual Violence)
- FSHS 700 Problems in Family Studies and Human Services Credits: 1-18 (Peace and Conflict)
- GWSS 105 Introduction to Gender, Women, and Sexuality
   Studies Credits: 3
- GWSS 380 Women and Global Social Change Credits: 3

- IAPD 391 Topics in Contemporary Design Seminar **Credits:** 3
- 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: 1–18 (Human Trafficking)
- SOCIO 507 International Development and Social Change Credits: 3
- SOCIO 423 Methods of Social Research I Credits: 4
- SOCIO 545 The Sociology of Women Credits: 3
- SOCIO 633 Gender, Power, and International Development Credits: 3
- SOCIO 635 Sociology of Human Trafficking Credits: 3
- SOCWK 100 Social Work: The Helping Profession Credits: 3
- SOCWK 568 Social Work Practice
   III Credits: 3
- THTRE 664 Creative Drama Credits: 3
- THTRE 665 Drama Therapy with Special Populations Credits: 3

### Total credit hours: (15)

- GWSS 480 Seminar in Gender, Environment & Justice Credits: 3 (Women and Environmentalism)
- GWSS 700 Advanced Topics in Gender, Women, and Sexuality Studies Credits: 1-3 (Independent Study in Nonviolence Studies)
- IAPD 391 Topics in Contemporary Design Seminar Credits: 3
- 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: 1–18 (Human Trafficking)
- SOCIO 507 International Development and Social Change Credits: 3
- SOCIO 423 Methods of Social Research I Credits: 4
- SOCIO 545 The Sociology of Women Credits: 3
- SOCIO 633 Gender, Power, and International Development Credits: 3
- SOCIO 635 Sociology of Human Trafficking Credits: 3
- SOCWK 100 Social Work: The Helping Profession Credits: 3
- SOCWK 568 Social Work Practice
   III Credits: 3
- THTRE 664 Creative Drama **Credits**: 3
- THTRE 665 Drama Therapy with Special Populations Credits: 3

### Total credit hours: (15)

RATIONALE: The course additions are offered as additional courses to the nine hours of elective content students may apply toward a Certificate in Nonviolence Studies.

IMPACT: None

### **College of Business Administration (10-19-16)**

#### NON-EXPEDITED COURSE CHANGES – COURSES NUMBERED 000-599

### **Department of Management**

### **NEW COURSE:**

### **ENTRP 497 Topics in Entrepreneurship**

Credits: Variable 1 to 3

Discussion and analysis of current issues in entrepreneurship, including topics related to new theory and the practice of entrepreneurship.

### Requisites

None

#### Note

Repeatable

### **Typically Offered**

On sufficient demand

#### K-State 8

None

#### Rationale

The Topics in Entrepreneurship course will be used to offer experimental courses in entrepreneurship.

#### **Impact On Other Units**

None

#### **Effective Date**

Spring 2017

### **Department of Marketing**

#### **NEW COURSE:**

### **MKTG 581 Marketing Analytics**

Credits: 3

Marketing analytics focuses on applications of quantitative analysis to understand dynamic marketing phenomena. This course is a mixture of lectures on essential marketing concepts/econometrics/text mining, instructions on software programs (Stata and R), and discussions of marketing cases to facilitate students' critical thinking and decision making leveraged by analytical ability. To facilitate learning statistical software programs, students will practice hands-on projects in the computer lab. Learning

outcomes are that students will be able to do the following: • Identify business issues and obtain relevant secondary data to address those business issues. • Choose correct quantitative analysis methodologies. • Learn data analysis software programs (Stata and R). • Make strategic decisions based on data analysis and communicate marketing strategies.

### Requisites

Prerequisite: STAT 350 or equivalent

### **Typically Offered**

Fall or Spring

#### K-State 8

Empirical and Quantitative Reasoning Social Sciences

Social Sciences: This course deals with business issues related to marketing in various industry contexts, an area of Social Sciences.

Empirical and Quantitative Reasoning: For analysis skills, data mining techniques such as decision tree, text mining, and social network analysis as well as traditional statistics such as *t*-test, regression, and logistic regression will be covered. These topics are closely related to Empirical and Quantitative Reasoning

#### Rationale

The demand for marketing analysts who can understand a dynamic business environment, analyze data in various formats (e.g., numeric and text) with solid analytical skills, and make strategic business decisions has rapidly increased. As a new course on the marketing analytics track, this course will provide students with learning opportunities of analyzing real marketing data with advanced quantitative approaches that are not covered in current marketing courses. In addition, this course places emphasis on business case studies so that students learn how to communicate, in the format of verbal and written presentations, the value of findings from analysis. Along with the two existing courses in the marketing analytics track (MKTG 580 and 642), this course will assist students in developing their career opportunities in multiple companies in the fields of marketing research and consulting.

**Impact on Other Units** 

None

**Effective Date** 

Fall 2017

#### NON-EXPEDITED UNDERGRADUATE CURRICULUM CHANGES

### **Curriculum Change**

### **Integrated Investment Management Certificate**

http://catalog.k-state.edu/preview\_program.php?catoid=13&poid=3381

### **Change From:**

### **Integrated Investment Management Certificate**

All students enrolled in the Certificate will take 9 credit hours of the core, and choose six credit hours from eligible electives.

### **Core Courses (9 credit hours)**

- FINAN 450 Principles of Finance **Credits**:
- FINAN 451 Introduction to Integrated Investment Management **Credits:** 3
- FINAN 500 Investment Management Concepts Credits: 3

### **Elective Courses (6 credit hours)**

Select 2 of the following four courses

- ACCTG 445 Financial Statement Analysis Credits: 3
- FINAN 653 Security and Portfolio Analysis Credits: 3
- MANGT 566 Computer Systems for Finance and Investment Management Credits: 3
- MKTG 497 Topics in Financial Services Marketing Credits: 3

### **Course and Certificate Completion Notes**

- Students must earn a minimum of 2.5 GPA on courses taken to fulfill the requirements of the Certificate in Integrated Investment Management.
- No more than 25% of total credit hours required for the certificate may be

### **Change To:**

### **Integrated Investment Management Certificate**

All students enrolled in the Certificate will take 9 credit hours of the core, and choose six credit hours from eligible electives.

### **Core Courses (9 credit hours)**

- FINAN 450 Principles of Finance Credits:
   3
- FINAN 451 Introduction to Integrated Investment Management Credits: 3
- FINAN 500 Investment Management Concepts **Credits:** 3

### **Elective Courses (6 credit hours)**

Select 2 of the following four courses

- ACCTG 445 Financial Statement Analysis
   Credits: 3
- FINAN 653 Security and Portfolio Analysis **Credits:** 3
- MANGT 566 Computer Systems for Finance and Investment Management Credits: 3
- MKTG 497 Topics in Financial Services Marketing Credits: 3

### **Course and Certificate Completion Notes**

- Students must earn a minimum of 2.5 GPA on courses taken to fulfill the requirements of the Certificate in Integrated Investment Management.
- No more than 25% of total credit hours required for the certificate may be

transfer credits. Students must earn at least 75% of credits that apply to the certificate from Kansas State University or an approved university affiliate of Kansas State University in a foreign country.

 Students will be able to substitute FINAN 510 and FINAN 520 (both must be completed) for FINAN 500.
 FINAN 510 - Financial Institutions and Markets Credits: 3

and

FINAN 520 - Investments Credits: 3

transfer credits. Students must earn at least 75% of credits that apply to the certificate from Kansas State University or an approved university affiliate of Kansas State University in a foreign country.

 Students will be able to substitute FINAN 510 and FINAN 520 (both must be completed) for FINAN 500.
 FINAN 510 - Financial Institutions and Markets Credits: 3 and

FINAN 520 - Investments Credits: 3

Certificate can be completed by degree seeking students at Kansas State University or obtained as a credential on its own (free-standing). Students who do not intend to become a candidate for a bachelor's degree at Kansas State University must apply for admission as a non-degree, certificate-seeking student. Such students must submit the admission application, application fee, and transcripts. Applicants must provide documentation of high school or GED completion and, if college courses have been attempted, official transcripts demonstrating a cumulative GPA of 2.0 or higher for all post-secondary coursework. Students who later choose to pursue a bachelor's degree must apply for admission as a degree-seeking student.

**Total Credit Hours: (15)** 

**Total Credit Hours: (15)** 

#### Rationale:

Change is being made so certificate can be completed as a free-standing certificate by a non-degree seeking student.

**Impact on Other Units** 

None

**Effective Date** 

Spring 2017

### **Professional Strategic Selling Certificate (PSS)**

http://catalog.k-state.edu/preview program.php?catoid=13&poid=6695

### **Change From:**

### **Professional Strategic Selling Certificate:**

- The Professional Strategic Selling
   Certificate is designed to prepare
   students for a career in sales. The
   program exposes students to the
   fundamentals of sales and through
   innovative curriculum and sales labs,
   allows them to develop the skills needed
   to be successful. The certificate is open to
   all majors within the university.
- The certificate consists of 15 credit hours, one current core course in Business Administration and four courses related to sales. Entry into the PSS Certificate program is competitive. Students must apply and be accepted to the program via a behaviorally-based interview process conducted by faculty and corporate partners.
- Students must earn a minimum 2.50
  grade point average on courses taken to
  fulfill the requirements of the certificate.
  Students must also complete Professional
  Advantage Certification within the
  College of Business to complete the
  certificate. Professional Advantage (PA)
  Certification provides training identified
  as critical by sales and business
  professionals. Students earn PA points by
  participating in PA approved events.
- No more than 25% of total credit hours required for the certificate may be transfer credits. Students must earn at least 75% of credits that apply to the certificate from Kansas State University OR an approved university affiliate of Kansas State University in a foreign country.

### **Non-Marketing Majors-Core Courses**

### **Change To:**

### **Professional Strategic Selling Certificate:**

- The Professional Strategic Selling
   Certificate is designed to prepare
   students for a career in sales. The
   program exposes students to the
   fundamentals of sales and through
   innovative curriculum and sales labs,
   allows them to develop the skills needed
   to be successful. The certificate is open to
   all majors within the university.
- The certificate consists of 15 credit hours, one current core course in Business Administration and four courses related to sales. Entry into the PSS Certificate program is competitive. Students must apply and be accepted to the program via a behaviorally-based interview process conducted by faculty and corporate partners.
- Students must earn a minimum 2.50
  grade point average on courses taken to
  fulfill the requirements of the certificate.
  Students must also complete Professional
  Advantage Certification within the
  College of Business to complete the
  certificate. Professional Advantage (PA)
  Certification provides training identified
  as critical by sales and business
  professionals. Students earn PA points by
  participating in PA approved events.
- No more than 25% of total credit hours required for the certificate may be transfer credits. Students must earn at least 75% of credits that apply to the certificate from Kansas State University OR an approved university affiliate of Kansas State University in a foreign country.
- Certificate can be completed by degree seeking students at Kansas State
   University or obtained as a credential on its own (free-standing). Students who do not intend to become a candidate for a bachelor's degree at Kansas State

### **Non-Marketing Majors-Core Courses**

- MKTG 400 Introduction to Marketing Credits: 3
- MKTG 542 Fundamentals of Professional Selling Credits: 3
- MKTG 560 Sales Force Leadership Credits: 3
- MKTG 570 Advanced Selling **Credits**: 3

### **Marketing Majors-Core Courses**

- MKTG 542 Fundamentals of Professional Selling Credits: 3
- MKTG 560 Sales Force Leadership Credits: 3
- MKTG 570 Advanced Selling **Credits:** 3

#### **Elective Course**

**Non-Marketing Majors** choose one of the following four courses.

**Marketing Majors** choose two from the following courses. Cannot include MKTG 550.

- COMM 321 Public Speaking II Credits: 3
- COMM 322 Interpersonal Communication Credits: 3
- COMM 323 Nonverbal Communication
   Credits: 3
- COMM 526 Persuasion Credits: 3
- HM 424 Hospitality Marketing and Sales
   Credits: 3
- MANGT 662 Procurement, Logistics and Supply Chain Design Credits: 3
- MKTG 550 Business Marketing Credits:
   3

University must apply for admission as a non-degree, certificate-seeking student.

Such students must submit the admission application, application fee, and transcripts. Applicants must provide documentation of high school or GED completion and, if college courses have been attempted, official transcripts demonstrating a cumulative GPA of 2.0 or higher for all post-secondary coursework.

Students who later choose to pursue a bachelor's degree must apply for admission as a degree-seeking student.

### **Non-Marketing Majors-Core Courses**

- MKTG 400 Introduction to Marketing **Credits:** 3
- MKTG 542 Fundamentals of Professional Selling Credits: 3
- MKTG 560 Sales Force Leadership Credits: 3
- MKTG 570 Advanced Selling Credits: 3

### **Marketing Majors-Core Courses**

- MKTG 542 Fundamentals of Professional Selling Credits: 3
- MKTG 560 Sales Force Leadership Credits: 3
- MKTG 570 Advanced Selling Credits: 3

### **Elective Course**

**Non-Marketing Majors** choose one of the following four courses.

**Marketing Majors** choose two from the following courses. Cannot include MKTG 550.

- COMM 321 Public Speaking II Credits: 3
- COMM 322 Interpersonal Communication Credits: 3
- COMM 323 Nonverbal Communication Credits: 3
- COMM 526 Persuasion Credits: 3
- HM 424 Hospitality Marketing and Sales
   Credits: 3
- MANGT 662 Procurement, Logistics and Supply Chain Design Credits: 3
- MKTG 550 Business Marketing **Credits**:

3

• PFP 756 - Financial Counseling **Credits:** 3

• PFP 756 - Financial Counseling **Credits**: 3

Total Credit Hours: (15)

Total Credit Hours: (15)

### Rationale:

Change is being made so certificate can be completed as a free-standing certificate by a non-degree seeking student.

Impact on Other Units: None

**Effective Date:** Spring 2017

### **College of Human Ecology (10-27-16)**

### Non-expedited Course Change Proposals 599 and below

### Department of Apparel, Textiles, and Interior Design

**Course Add** 

ID 300

**Global Experiences in Interior Design** 

**Credits:** (1-3)

An experiential learning course that prepares students for and immerses them in an international study tour designed to enhance their global and cultural awareness. Lectures and tours target important interior/architectural design, furniture, and objects of material culture.

When Offered: Fall, Spring, Summer

K-State 8 Tag: None

Pre-Requisite: Instructor's Permission

**Rationale:** Study tours are offered to all Interior Design undergraduate students, regardless of their level of progress within the program. A catalog number of 300 reflects that study tour opportunities and experiences are appropriate for any student classification. The existing number of ID600 will continue to be retained for use by students taking their second or third study tour, or for graduate students from other disciplines on campus.

**IMPACT:** None

Effective: Summer 2017

### School of Family Studies and Human Services

**Course Add** 

**PFP 468** 

**Professional Practice Management in Personal Financial Planning** 

Credits: (1)

Issues and solutions for challenges of managing family financial planning practices.

When Offered: Spring

K-State 8 Tag: None

Pre-Requisite: PFP 305, KSU cumulative GPA of 2.5 or higher.

**Rationale:** The PFP program is switching from two general career classes to a specific pre-internship class and a professional practice management course. This switch aligns with the addition of an internship requirement.

IMPACT: None

Effective: Spring 2017

#### **Course Add**

#### **PFP 579**

**Pre-Internship Orientation in Personal Financial Planning** 

Credits: (1)

Consideration and application of professional knowledge and skills necessary for selection and placement in a financial planning firm for a supervised experience.

When Offered: Spring

K-State 8 Tag: None

**Rationale:** The PFP program is implementing an internship requirement. This course is needed to prepare students for their internship, as well as help them locate employers.

IMPACT: None

Effective: Spring 2017

#### **Course Add**

#### **PFP 580**

**Internship in Personal Financial Planning** 

Credits: (3)

Internship experience in personal financial planning or an allied field.

When Offered: Summer

K-State 8 Tag: None

Pre-Requisite: PFP 579

**Rationale:** The PFP program is implementing an internship requirement. This course will track students over the course of their internship.

IMPACT: None

Effective: Spring 2017

### Non-expedited Undergraduate CURRICULUM Change Proposal

### School of Family Studies and Human Services

### Personal Financial Planning (B.S.)

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.

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.

Admission to the personal financial planning program requires completion of FSHS 105 with a grade of B or better.

### Bachelor's Degree Requirements General Requirements (41-44-credit hours) Communications (8-9 credit hours)

COMM 105 - Public Speaking IA Credits: (2)

COMM 106 - Public Speaking I Credits: (3)

ENGL 100 - Expository Writing I Credits: (3) ENGL 200 - Expository Writing II Credits: (3)

### Social Sciences (9 credit hours)

ECON 110 - Principles of Macroeconomics Credits: (3)
PSYCH 110 - General Psychology Credits: (3)
SOCIO 211 - Introduction to Sociology Credits: (3)

### **Humanities (6 credit hours)**

Only a course of 3 credit hours or more will apply.

### Natural and physical sciences (7 credit hours)

Life science elective and Physical Science elective. One course must be taken from each area; one course must include a laboratory.

### Personal Financial Planning (B.S.)

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.

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Admission to the personal financial planning program requires completion of FSHS 105 with a grade of B or better.

### Bachelor's Degree Requirements General Requirements (35-36 credit hours) Communications (8-9 credit hours)

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)

#### Social Sciences (6 credit hours)

ECON 110 - Principles of Macroeconomics Credits: (3) PSYCH 110 - General Psychology Credits: (3)

### **Humanities (6 credit hours)**

Only a course of 3 credit hours or more will apply.

### Natural and physical sciences (7 credit hours)

Life science elective and Physical Science elective.

One course must be taken from each area; one course must include a laboratory.

### Quantitative Studies (7-9 credit hours)

CIS 102 - Introduction to Spreadsheet Applications Credits: (1)

or

#### CMST 108 - PC Desktop Software Credits: (3)

STAT 350 - Business and Economic Statistics I Credits: (3) Choose one from the following:

MATH 100 - College Algebra Credits: (3)

٥r

A college-level calculus course Credits: (3)

### Integrative Human Ecology Courses (4credit hours)

FSHS 350 - Family Relationships and Gender Roles Credits: (3)

<del>or</del>

GNHE 310 - Human Needs Credits: (3)

GNHE 210 - Foundations of Human Ecology Credits: (1)

Professional Studies (65 credit hours) Grades of C or higher required.

Professional FSHS courses (41 credit hours)

# PFP 100 - Family Financial Planning as a Career Credits: (1) Must be taken twice.

PFP 105 - Introduction to Personal Financial Planning Credits: (3)

FSHS 110 - Introduction to Human Development Credits: (3)

FSHS 301 - The Helping Relationship Credits: (3)

PFP 310 - Family and Consumer Economics Credits: (3)

PFP 305 - Advanced Personal Financial Planning Credits: (3)

PFP 456 - Financial Counseling and Communication Credits: (3)

PFP 460 - Retirement Planning Concepts Credits: (3)

PFP 462 – Personal Investment Concepts I Credits: (3)

PFP 464 - Estate Planning Concepts Credits: (3)

PFP 466 – Personal Risk Management and Insurance Planning Credits: (3)

PFP 472 - Personal Income Tax Concepts Credits: (3)

PFP 482 – Personal Investment Concepts II Credits: (3)

PFP 595 - Professional Seminar in Personal Financial

Planning 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)

#### Quantitative Studies (7 credit hours)

CIS 102 - Introduction to Spreadsheet Applications Credits: (1)

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)

### Integrative Human Ecology Courses (1 credit hours)

GNHE 210 - Foundations of Human Ecology Credits: (1)

## Professional Studies (65 credit hours) Grades of C or higher required.

#### Professional courses (44 credit hours)

PFP 105 - Introduction to Personal Financial Planning Credits: (3)

FSHS 110 - Introduction to Human Development Credits: (3)

FSHS 301 - The Helping Relationship Credits: (3)

PFP 305 - Advanced Personal Financial Planning Credits: (3)

PFP 310 - Family and Consumer Economics Credits: (3)

PFP 456 - Financial Counseling and Communication Credits: (3)

PFP 460 - Retirement Planning Concepts Credits: (3)

PFP 462 – Personal Investment Concepts I Credits: (3)

PFP 464 - Estate Planning Concepts Credits: (3)

PFP 466 – Personal Risk Management and Insurance Planning Credits: (3)

### PFP 468 – Professional Practice Management in PFP (1)

PFP 472 - Personal Income Tax Concepts Credits: (3)

PFP 482 – Personal Investment Concepts II Credits: (3)

PFP 579 – Orientation to PFP Internship (1)

PFP 580 - PFP Internship (3)

PFP 595 - Professional Seminar in Personal Financial Planning Credits: (3)

#### Other supporting courses (21 credit hours)

ACCTG 231 - Accounting for Business Operations Credits: (3) ACCTG 241 - Accounting for Investing and Financing Credits:

ACCTG 241 - Accounting for Investing and Financing Credit

ECON 120 - Principles of Microeconomics Credits: (3)

MANGT 390 - Business Law I Credits: (3)

MKTG 400 - Introduction to Marketing Credits: (3)

MKTG 542 - Fundamentals of Professional Selling Credits: (3)

Choose one from the following:

MKTG 542 - Fundamentals of Professional Selling Credits:

Choose one from the following:

AGEC 513 - Agricultural Finance Credits: (3) FINAN 450 - Principles of Finance Credits: (3)

AGEC 513 - Agricultural Finance Credits: (3) FINAN 450 - Principles of Finance Credits: (3)

### Select One Track Option (19-20 Hours)

### Family Financial Planning (6 hours)

ECON 530 - Money and Banking Credits: (3)

FSHS 350 – Family Relationships and Gender Roles Credits:

<mark>(3)</mark>

13-14 hours of electives

### Sales (6 hours)

MKTG 560 Sales Force Leadership Credits: (3)
MKTG 570 – Advanced Selling Credits: (3)
13-14 hours of electives

### Entrepreneurship (9 hours)

ENTRP 340 – Intro to Entrpreneurship Credits: (3)

**AND** 

Choose 6 hours from Entreprenuership Minor:

ENGL 455 – Exploring Creativity Credits: (3)

ENTRP 350 – Technology & Innovation Management Credits:

<mark>(3)</mark>

ENTRP 466 Digital Business Credits: (3)

ENTRP 520: Social Entrepreneuership Credits: (3)

ENTRP 540: Entreprenuerial Consulting Credits: (3)

Electives (10-14 credit hours)

**Total hours required for graduation (120)** 

Electives (11-14 credit hours)

Total hours required for graduation (120)

**Rationale:** The PFP program is working to align program curriculum with professional standards and expectations to better prepare students for the work place. Within the core curriculum, this is being done by reducing general education requirements, adding an internship course, and adding three professional track options: family financial planning, sales, and entrepreneurship. In addition, the requirement of the two one-hour PFP 100 careers courses will be replaced by a one-hour pre-internship course and a one hour professional practices course. CMST 108 is a course offered on the Polytechnic campus. Since we no longer offer a program on the Polytechnic campus, we are removing it from the curriculum.

**Impact:** The curriculum changes impact SOCIO, ECON, FSHS, GNHE, ENGL, ENTRP, and MKTG. We have reached out to each unit to inform them of these changes.

MKTG: Dawn Deeter-Schmelz, Professor & J.J. Vanier Distinguished Chair of Relational Selling and Marketing, Director, Kansas State University National Strategic Selling Institute responded on September 6, 2016 in support of the addition of the MKTG courses.

ENTRP: Chad Jackson, Director Center for the Advancement of Entrepreneurship, Department of Management, responded September 6, 2016 in support of the ENTRP course options

ENGL: Karin Westman, Dept. Head, English responded September 8, 2016 in support of the ENGL course options.

ECON: Daniel Kuester, Roger Trenary Chair and Director of Undergraduate Studies, Department of Economics responded September 6, 2016 in support of the ECON course options.

SOCIO: Laszlo Kulcsar, Department Head, Sociology, Anthropology and Social Work responded September 15, 2016 with an objection to dropping a SOCIO course from the curriculum. Kristy Archuleta responded on September 22, 2016 to Dr. Kulcsar with further explanation of the decision to drop the course to allow the curriculum to meet the requirements of the registration board (CFP Board). Dr. Kulcsar replied September 27, 2016 that even though he understood the difficulty to juggle the conflicting pressures and the reasoning and current limits, but he still wanted "...my objection to be on record, the rest is on your program and college to handle."

FSHS and GNHE: Both are within the College of Human Ecology and were involved in the curriculum change discussions.

Effective: Spring 2017

### **College of Agriculture (11-2-16)**

### **Undergraduate Non-expedited Course Changes (000-599)**

### Agricultural Economics

ADD: AGEC 470. Cooperative Management. (3) Fall. This course focuses on the

unique aspects of the cooperative business model and its evolution over time. Students will utilize course material to gain a deeper understanding of the history

and need for cooperatives by applying economic, finance, marketing, and

management tools to cooperatives. Pre req.: AGEC 120 or AGEC 121 or ECON

120. K-State 8 – Historical Perspectives and Empirical and Quantitative

Reasoning.

RATIONALE: KSU does not currently offer a course devoted to the study of cooperatives.

Given many KSU graduates will work for a cooperatively owned and managed

business, such as agricultural cooperatives, credit unions, and electric

cooperatives, gaining a deeper understanding of cooperative management will be

of great interest to KSU on campus and distance students.

K-STATE 8 TAG RATIONALE:

Historical Perspectives is appropriate because this course has students study the history of cooperatives, the economic foundations that cooperatives were built

upon, and then apply those lessons to today's cooperative environment. In addition, other cooperative forms that have evolved over time are studied such as

New Generation Cooperatives.

Empirical and Quantitative Reasoning is appropriate because this course has students study the implications of financial and management decisions made by the cooperative on their patron-owners. A simulation model is used to reinforce these lessons by having students make decisions and to see how it impacts their cooperative. In addition, the students will complete assignments that has them

research a topic and report back what they learned.

IMPACT: No negative impact to other programs.

### Food Science and Industry

ADD: FDSCI 310. Food Science Professional Preparation. (1) Spring

This course prepares students to pursue and be successful in food science careers. Students will develop professional resumes, identify internship and career opportunities, hone interviewing skills, examine standards of professionalism with respect to personal integrity and business ethics, and practice professional

communication in oral and written formats.

Prerequisite: Open to Food Science Majors with Sophomore Standing

**RATIONALE:** 

As part of the "Core Food Science Courses" within the KSU Food Science undergraduate curriculum, students are currently required to take FDSCI 101 Foundations in Food Science (an orientation class for incoming freshmen) as well as FDSCI 500 Food Science Seminar (a "capstone-styled" course that addresses recent developments in the food science industry and in food science research; generally intended for seniors). Both courses (FDSCI 101 and FDSCI 500) provide students with some content related to professional career preparation, though this is not the primary intended focus of either course. Additionally, students have consistently indicated, both in FDSCI 500 course evaluation surveys and in senior exit interviews, that the career preparation information presented in FDSCI 500, though valuable, is not maximally effective because it is "too late"—that is, by the time students enroll in FDSCI 500 (typically as seniors) they have often already completed internships, participated in job interviews, and frequently already have received job offers. Students report a desire to receive more in-depth career preparation guidance, but suggest it would be much more useful if received earlier in their program, ideally in the second semester of their sophomore year. The course being proposed here. FDSCI 310 Food Science Professional Preparation, is therefore intended specifically to address and respond to this feedback from students.

The primary purpose of this proposed FDSCI 310 course is to prepare and equip students to pursue and be successful in food science careers. Students will develop professional resumes, identify internship and career opportunities, hone interviewing skills, examine standards of professionalism with respect to personal integrity and business ethics, and practice professional communication in oral and written formats.

IMPACT: No impact on other departments.

### Horticulture and Natural Resources

FROM: HORT 595. Horticulture Study Abroad. (3). Fall, Spring, Summer. Seminar and

travel course designed to prepare students before an international study abroad experience focused on horticulture. *Upon completion of travel*, students will analyze, critique, and report their experiences. Pre-requisite: Instructor

permission. Repeatable. K-State 8: Global Issues.

TO: HORT 595. Horticulture Study Abroad. (3). Fall, Spring, Summer.

Seminar and travel course designed to prepare students before an international study abroad experience focused on horticulture. Upon completion of travel, students will analyze, critique, and report their experiences. <u>In addition, students will be introduced and immersed in historical components, both disciplinary and culturally.</u> Pre-requisite: Instructor permission. Repeatable. K-State 8: Global

Issues and Perspectives; and Historical Perspectives.

RATIONALE: We propose adding the Historical Perspective K-State 8 tag to the current Global

Issues and Perspectives tag. A major component to the study abroad trips is for students to gain, first hand, a deeper understanding and knowledge about the global horticulture industry in the specific country(ies) visited. Through this course, students are readily exposed to significant historical horticulture components, in addition to a more broad exposure to historical concepts of the location(s) and region(s) visited. Moreover, the addition of this tag will provide an opportunity for Horticulture students to obtain the Historical tag, which can

sometimes be challenging if a student doesn't complete a course with the specific

tag through their Humanities course electives.

IMPACT: No impacts outside the College.

EFFECTIVE DATE: Fall 2017

ADD WOEM 562. Advanced Wildlife Habitat Management. (4) Fall. Theory and

practice of managing terrestrial and aquatic vegetation for wildlife production. Pr

BIOL 433. K-State 8: None.

RATIONALE Current course offerings that include habitat management instruction provide an

introduction to managing wildlife habitat, and offer little hands-on experience. The proposed course would provide in-depth classroom content on evaluating and managing native and non-native vegetation for specific wildlife management outcomes, and hands-on field experience in habitat management techniques.

IMPACT Wildlife and Outdoor Enterprise Management faculty met with Fisheries,

Wildlife, and Conservation Biology faculty to discuss proposed changes in March

of 2016. Both parties approve of this change.

### **Undergraduate Curriculum Changes**

Agricultural Economics Major: Quantitative Option

TO: FROM: **Quantitative Option Quantitative Option** Agricultural Economics (18 credit hours) Agricultural Economics (18 credit hours) AGEC 105 - Agricultural Economics and Agribusiness AGEC 105 - Agricultural Economics and Agribusiness Orientation Credits: 1 Orientation Credits: 1 AGEC 115 - Decision Tools for Agricultural Economics AGEC 115 - Decision Tools for Agricultural Economics and Agribusiness Credits: 2 and Agribusiness Credits: 2 AGEC 120 - Agricultural Economics and Agribusiness AGEC 120 - Agricultural Economics and Agribusiness Credits: 3 Credits: 3 or or AGEC 121 - Honors Agricultural Economics and AGEC 121 - Honors Agricultural Economics and Agribusiness Credits: 3 Agribusiness Credits: 3 AGEC 315 - Contemporary Issues in Global Food and AGEC 315 - Contemporary Issues in Global Food and Agricultural Systems Credits: 3 Agricultural Systems Credits: 3 AGEC 500 - Production Economics Credits: 3 AGEC 500 - Production Economics Credits: 3 AGEC 501 - Data Analysis and Optimization Credits: 3 AGEC 501 - Data Analysis and Optimization Credits: 3 AGEC 505 - Agricultural Market Structures Credits: 3 AGEC 505 - Agricultural Market Structures Credits: 3 Agricultural Economics Electives (15 credit hours) Agricultural Economics Electives (15 credit hours) Include at least two numbered 598 and above. Include at least two numbered 598 and above. AGEC 308 - Farm and Ranch Management Credits: 3 AGEC 308 - Farm and Ranch Management Credits: 3 AGEC 318 - Food and Agribusiness Management AGEC 318 - Food and Agribusiness Management Credits: 3 Credits: 3 AGEC 410 - Agricultural Policy Credits: 3 AGEC 410 - Agricultural Policy Credits: 3 AGEC 420 - Commodity Futures Credits: 3 AGEC 420 - Commodity Futures Credits: 3 AGEC 460 - International Food and Agribusiness Study AGEC 460 - International Food and Agribusiness Study Tour **Credits:** 0-6 (Limit 3 credit hours) Tour **Credits:** 0-6 (Limit 3 credit hours) AGEC 513 - Agricultural Finance Credits: 3 AGEC 513 - Agricultural Finance Credits: 3 AGEC 515 - Food and Agribusiness Marketing Credits: AGEC 515 - Food and Agribusiness Marketing Credits: AGEC 516 - Agricultural Law and Economics Credits: 3 AGEC 516 - Agricultural Law and Economics Credits: 3 AGEC 520 - Market Fundamentals and Futures/Options AGEC 520 - Market Fundamentals and Futures/Options Trading Credits: 3 Trading Credits: 3 AGEC 525 - Natural Resource and Environmental AGEC 525 - Natural Resource and Environmental **Economics Credits: 3 Economics Credits: 3** AGEC 570 - Food Manufacturing, Distribution and AGEC 570 - Food Manufacturing, Distribution and Retailing Credits: 3 Retailing **Credits:** 3 AGEC 598 - Farm Management Strategies Credits: 3 AGEC 598 - Farm Management Strategies Credits: 3 AGEC 599 - Food and Agribusiness Management AGEC 599 - Food and Agribusiness Management Strategies Credits: 3 Strategies Credits: 3 AGEC 605 - Price Analysis and Forecasting Credits: 3 AGEC 605 - Price Analysis and Forecasting Credits: 3 AGEC 610 - Current Agriculture and Natural Resource AGEC 610 - Current Agriculture and Natural Resource Policy Issues Credits: 3 Policy Issues Credits: 3 AGEC 615 - Global Agricultural Development Credits: AGEC 615 - Global Agricultural Development Credits: AGEC 623 - International Agricultural Trade Credits: 3 AGEC 623 - International Agricultural Trade Credits: 3 AGEC 632 - Agribusiness Logistics Credits: 3 AGEC 632 - Agribusiness Logistics Credits: 3 AGEC 680 - Risk Management Credits: 3 AGEC 680 - Risk Management Credits: 3

AGEC 710 - Comparative Food and Agriculture Systems AGEC 710 - Comparative Food and Agriculture Systems **Credits: 3** Credits: 3 AGEC 712 - Optimization Techniques for Agricultural AGEC 712 - Optimization Techniques for Agricultural **Economics Credits: 3 Economics Credits: 3** ECON 631 - Principles of Transportation Credits: 3 GENAG 515 - Honors/Scholars Project Credits: 2 GENAG 515 - Honors/Scholars Project Credits: 2 Agricultural and Food Science Technology Restricted Agricultural and Food Science Technology Electives (6 Electives (6 credit hours) credit hours) AGRON 220 - Crop Science Credits: 4 AGRON 220 - Crop Science Credits: 4 HORT 201 - Principles of Horticultural Science Credits: HORT 201 - Principles of Horticultural Science Credits: AGRON 305 - Soils Credits: 4 AGRON 305 - Soils Credits: 4 AGRON 330 - Weed Science Credits: 3 AGRON 330 - Weed Science Credits: 3 ASI 102 - Principles of Animal Science Credits: 3 ASI 102 - Principles of Animal Science Credits: 3 ASI 105 - Animal Sciences and Industry Credits: 1 ASI 105 - Animal Sciences and Industry Credits: 1 ASI 106 - Dairy and Poultry Science Credits: 1 ASI 106 - Dairy and Poultry Science Credits: 1 ASI 318 - Fundamentals of Nutrition Credits: 3 ASI 318 - Fundamentals of Nutrition Credits: 3 ASI 320 - Principles of Feeding Credits: 3 ASI 320 - Principles of Feeding Credits: 3 ATM 160 - Engineered Systems and Technology in ATM 160 - Engineered Systems and Technology in Agriculture Credits: 3 Agriculture Credits: 3 FDSCI 302 - Introduction to Food Science Credits: 3 FDSCI 302 - Introduction to Food Science Credits: 3 FDSCI 305 - Fundamentals of Food Processing Credits: FDSCI 305 - Fundamentals of Food Processing Credits: GRSC 101 - Introduction to Grain Science and Industry GRSC 101 - Introduction to Grain Science and Industry Credits: 3 **Credits: 3** See department list for other courses. See department list for other courses. Communication (14 credit hours) Communication (14 credit hours) COMM 105 - Public Speaking IA Credits: 2 COMM 105 - Public Speaking IA Credits: 2 ENGL 100 - Expository Writing I Credits: 3 ENGL 100 - Expository Writing I Credits: 3 ENGL 200 - Expository Writing II Credits: 3 ENGL 200 - Expository Writing II Credits: 3 Communication Elective Credits: 3 Communication Elective Credits: 3 Select from: English (above 200), Communication Select from: English (above 200), Communication studies (above 300) or a modern language studies (above 300) or a modern language AGCOM 400 - Agricultural Business Communications AGCOM 400 - Agricultural Business Communications Credits: 3 Credits: 3 ENGL 516 - Written Communication for the Sciences ENGL 516 - Written Communication for the Sciences Credits: 3 Credits: 3 Economics/Business (12 credit hours) Economics/Business (12 credit hours) ACCTG 231 - Accounting for Business Operations ACCTG 231 - Accounting for Business Operations Credits: 3 Credits: 3 ACCTG 241 - Accounting for Investing and Financing ACCTG 241 - Accounting for Investing and Financing Credits: 3 Credits: 3 ECON 110 - Principles of Macroeconomics Credits: 3 ECON 110 - Principles of Macroeconomics Credits: 3 ECON 510 - Intermediate Macroeconomics Credits: 3 ECON 510 - Intermediate Macroeconomics Credits: 3 Finance Overlay Finance Overlay AGEC 513 - Agricultural Finance Credits: 3 AGEC 513 - Agricultural Finance Credits: 3

FINAN 450 - Principles of Finance Credits: 3	FINAN 450 - Principles of Finance Credits: 3
FINAN 450 - Principles of Finance Credits: 3  Mathematics/Statistics (25 credit hours) CIS 200 - Programming Fundamentals Credits: 4  MATH 220 - Analytic Geometry and Calculus I Credits: 4  MATH 221 - Analytic Geometry and Calculus II Credits: 4  MATH 222 - Analytic Geometry and Calculus III Credits: 4  MATH 551 - Applied Matrix Theory Credits: 3  STAT 350 - Business and Economic Statistics I Credits: 3  and  STAT 351 - Business and Economic Statistics II Credits: 3  or STAT 510 - Introductory Probability and Statistics I Credits: 3  and	FINAN 450 - Principles of Finance Credits: 3  Mathematics/Statistics (24 credit hours) CIS 111 - Introduction to Computer Programming Credits: 3  MATH 220 - Analytic Geometry and Calculus I Credits: 4  MATH 221 - Analytic Geometry and Calculus II Credits: 4  MATH 222 - Analytic Geometry and Calculus III Credits: 4  MATH 551 - Applied Matrix Theory Credits: 3  STAT 350 - Business and Economic Statistics I Credits: 3  and STAT 351 - Business and Economic Statistics II Credits: 3  or STAT 510 - Introductory Probability and Statistics I Credits: 3
STAT 511 - Introductory Probability and Statistics II	and
Credits: 3	STAT 511 - Introductory Probability and Statistics II Credits: 3
Natural Sciences (8 credit hours) Select a combination of 2 courses for a total of 8 credit hours. BIOL 198 - Principles of Biology Credits: 4 CHM 110 - General Chemistry Credits: 3 and CHM 111 - General Chemistry Laboratory Credits: 1 PHYS 113 - General Physics I Credits: 4	Natural Sciences (8 credit hours) Select a combination of 2 courses for a total of 8 credit hours. BIOL 198 - Principles of Biology Credits: 4 CHM 110 - General Chemistry Credits: 3 and CHM 111 - General Chemistry Laboratory Credits: 1 PHYS 113 - General Physics I Credits: 4
Quantitative Electives (6 credit hours)  AGEC 605 - Price Analysis and Forecasting Credits: 3  AGEC 712 - Optimization Techniques for Agricultural Economics Credits: 3  ECON 630 - Introduction to Econometrics Credits: 3  ECON 735 - Mathematical Economics Credits: 3  IMSE 541 - Statistical Quality Control Credits: 3  IMSE 560 - Introduction to Operations Research I Credits: 3  MATH 240 - Elementary Differential Equations Credits: 4  MATH 312 - Finite Applications of Mathematics Credits: 3  MATH 540 - Advanced Ordinary Differential Equations Credits: 3	Quantitative Electives (6 credit hours)  AGEC 605 - Price Analysis and Forecasting Credits: 3  AGEC 712 - Optimization Techniques for Agricultural Economics Credits: 3  ECON 630 - Introduction to Econometrics Credits: 3  ECON 686 - Economic Forecasting Credits: 3  ECON 735 - Mathematical Economics Credits: 3  GEOG 508 - Geographic Information Systems 1  Credits: 3  IMSE 541 - Statistical Quality Control Credits: 3  IMSE 560 - Introduction to Operations Research I  Credits: 3  MATH 240 - Elementary Differential Equations Credits: 4  MATH 312 - Finite Applications of Mathematics
MATH 670 - Mathematical Modeling Credits: 3 MATH 755 - Dynamic Modeling Processes Credits: 3 MANGT 421 - Introduction to Operations Management	Credits: 3 MATH 540 - Advanced Ordinary Differential Equations Credits: 3
Credits: 3	MATH 670 - Mathematical Modeling Credits: 3

MANGT 521 - Quantitative Management Credits: 3

MKTG 642 - Marketing Research Credits: 3

STAT 410 - Probabilistic Systems Modeling Credits: 3

STAT 705 - Regression and Analysis of Variance **Credits:** 3

STAT 706 - Basic Elements of Statistical Theory Credits: 3

Social Sciences/Humanities (12-credit hours)

Social Science Elective Credits: 3

Select from Psychology, Sociology, Political Science, Anthropology, History, Geography, Gender, Women, and Sexuality Studies, or American Ethnic Studies or

FSHS 350 - Family Relationships and Gender Roles **Credits:** 3

PHILO 135 - Introduction to Social and Political Philosophy Credits: 3

PSYCH 110 - General Psychology Credits: 3

or

SOCIO 211 - Introduction to Sociology Credits: 3

Humanities Elective Credits: 3

Select from History, Music, Art, English (above 210),

<del>Philosophy, Theatre, Dance, Modern</del>

Language

<del>or</del>

ARCH 301 - Appreciation of Architecture Credits: 3

Unrestricted electives as needed to meet 127 credit hours

Total credit hours required for graduation: (127)

Must satisfy K-State 8 general education requirements.

MATH 755 - Dynamic Modeling Processes **Credits:** 3 MANGT 421 - Introduction to Operations Management **Credits:** 3

MANGT 521 - Quantitative Management Credits: 3

MKTG 642 - Marketing Research **Credits:** 3

STAT 410 - Probabilistic Systems Modeling Credits: 3 STAT 705 - Regression and Analysis of Variance

Credits: 3

STAT 706 - Basic Elements of Statistical Theory **Credits:** 3

Social Sciences/Humanities (9 credit hours)

Social Science Elective Credits: 3

Select from Psychology, Sociology, Political Science, Anthropology, History, Geography, Gender, Women, and Sexuality Studies, or American Ethnic Studies or

FSHS 350 - Family Relationships and Gender Roles **Credits:** 3

PHILO 110 - Introduction to Formal Logic Credits: 3

PSYCH 110 - General Psychology Credits: 3

SOCIO 211 - Introduction to Sociology Credits: 3

Unrestricted electives as needed to meet 127 credit hours

*Total credit hours required for graduation: (127)* 

Must satisfy K-State 8 general education requirements.

RATIONALE:

PHILO 110 Intro to Formal Logic is a better fit for quantitative reasoning than PHILO 135 Intro to Social & Political Philosophy, and PHILO 110 is also required in the Pre-law Specialty Option. CIS 200 has changed and is now a course intended primarily only for CIS majors, so enrollment is limited and the course has additional pre-requisites. Instructors in CIS recommend CIS 111 as the appropriate course for our students in the Quantitative Option. Geographic Information Systems are an important and interesting quantitative area. Including GEOG 508 in the Quantitative Electives block provides students the opportunity to pursue additional quantitative knowledge and skill in this field. ECON 686 is an appropriate course to be included in the Quantitative Electives block and provides students another course option.

The other changes to the Curriculum Guide form are clean-up items and a typographical error. The Social Science/Humanities credits listed as 12 is a typo and should be 9 just like in all of our other options. This change was made

several years ago to all options. PHILO 110 is specified as the 3 credits of Humanities for students. ECON 631 is not supposed to be listed as an AGEC elective in the Quantitative Option and needs to be removed in the catalog as such.

**IMPACT:** 

There is little expected impact on PHILO, CIS, ECON, and GEOG as the Quantitative Option typically only has two students per class standing in it. PHILO 110 is typically offered fall, spring, and summer; CIS 111 is typically offered fall and spring. GEOG 508 and its pre-requisite of GEOG 302 are typically only offered one time per year, but since it is used as only a Quantitative Elective, it is not expected that both students in each class standing would select this course. The Departments of Philosophy (via email to Bruce Glymour 8/30/2016), Computer Science (via email Scott DeLoach 8/30/016), Geography (via email to Charles Martin 8/30/2016), and Economics (via email William Blankenau 8/30/016) have been consulted and indicate they are fine with the proposed changes (via return emails on 8/30/2016, 8/30/2016, 8/31/2016, and 8/30/2016, respectively).

EFFECTIVE DATE: Fall 2017

### Grain Science and Industry

### Bakery Science and Management (B.S.) - Cereal Chemistry Option

FROM: TO:

### CENERAL REQUIREMENTS ACCTG 231 - Accounting for Business Operations Credits: 3 BIOCH 521 - General Biochemistry Credits: 3 BIOCH 522 - General Biochemistry Laboratory Credits: 2 BIOL 198 - Principles of Biology Credits: 4 BIOL 455 - General Microbiology Credits: 4 CHM 210 - Chemistry I Credits: 4 CHM 230 - Chemistry II Credits: 4 CHM 500 - General Physical Chemistry Credits: 3 CHM 531 - Organic Chemistry I Credits: 3 CHM 532 - Organic Chemistry Laboratory Credits: 2 CHM 550 - Organic Chemistry II Credits: 3 COMM 105 - Public Speaking IA Credits: 2 AGCOM 400 - Agricultural Business Communications Credits: 3 ENGL 516 - Written Communication for the Sciences Credits: 3 ECON 110 - Principles of Macroeconomics Credits: 3 ENGL 100 - Expository Writing I Credits: 3 ENGL 200 - Expository Writing II Credits: 3 FDSCI 501 - Food Chemistry Credits: 3

FDSCI 600 - Food Microbiology **Credits:** 2 FDSCI 601 - Food Microbiology Lab **Credits:** 2

FDSCI 727 - Chemical Methods of Food

FNDH 132 - Basic Nutrition Credits: 3

Analysis Credits: 2

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BIOL 455 - General Microbiology Credits: 4
CHM 210 - Chemistry I Credits: 4
CHM 230 - Chemistry II Credits: 4
PHYS 213 - Engineering Physics I Credits: 5
PHYS 214 - Engineering Physics II Credits: 5
QUANTITATIVE STUDIES (11 credit hours)
MATH 220 - Analytic Geometry and Calculus I Credits: 4
MATH 221 - Analytic Geometry and Calculus II Credits: 4
STAT 325 - Introduction to Statistics Credits: 3
COMMUNICATIONS (11 credit hours)
ENGL 100 - Expository Writing I Credits: 3
ENGL 200 - Expository Writing II Credits: 3
COMM 105 - Public Speaking IA Credits: 2
Communication elective (choose one):
AGCOM 400 - Agricultural Business Communications
Credits: 3
ENGL 516 - Written Communication for the Sciences
Credits: 3
COMM 311 - Business and Professional Speaking Credits:
3
BUSINESS AND ECONOMICS (9 credit hours)
ECON 110 - Principles of Macroeconomics Credits: 3
```

ACCTG 231 - Accounting for Business Operations Credits:

**(1)** 

**(2)** 

NATURAL SCIENCES (26 credit hours)

BIOL 198 - Principles of Biology Credits: 4

GRSC 100 - Grain Science & Industry	Management Elective (choose one):	(3)
Orientation Credits: 1	GRSC 530 - Management Applications in Grain Processing	
GRSC 101 - Introduction to Grain Science and	Industries Credits: 3	
Industry Credits: 3	MANGT 420 - Management Concepts Credits: 3	
GRSC 150 - Principles of Milling Credits: 2	MANGT 530 - Industrial and Labor Relations Credits: 3 MANGT 531 - Human Resources Management Credits: 3	
GRSC 151 - Principles of Milling	MANGI 331 - Human Resources Management Credits: 3	
Laboratory <b>Credits:</b> 1 GRSC 310 - Materials Handling <b>Credits:</b> 3	BAKERY SCIENCE CORE REQUIREMENTS (38	(4)
GRSC 591 - Internship in Grain Science Credits: 1	credit hours)	(4)
GRSC 600 - Practicum in Bakery Technology	FDSCI 600 - Food Microbiology Credits: 2	
I Credits: 1	FDSCI 601 - Food Microbiology Credits: 2	
GRSC 601 - Practicum in Bakery Technology	FNDH 132 - Basic Nutrition Credits: 3	
II Credits: 1	GRSC 100 - Freshman Orientation in Grain Science	
GRSC 602 - Cereal Science Credits: 3	Credits: 1	
GRSC 625 - Flour and Dough Testing Credits: 3	GRSC 101 - Introduction to Grain Science and Industry	
GRSC 635 - Baking Science I Credits: 2	Credits: 3	
GRSC 636 - Baking Science I Laboratory Credits: 2	GRSC 150 - Principles of Milling Credits: 2	
GRSC 637 - Baking Science II Credits: 3	GRSC 151 - Principles of Milling Laboratory Credits: 1	
GRSC 638 - Baking Science II Laboratory Credits: 1	GRSC 310 - Materials Handling Credits: 3	
GRSC 651 - Food and Feed Product	GRSC 591 - Internship in Grain Science Credits: 1	
Protection Credits: 4	GRSC 600 - Practicum in Bakery Technology I Credits: 1	
GRSC 670 - Bakery Layout Credits: 1	<u>or</u>	
MATH 220 - Analytic Geometry and Calculus	GRSC 601 - Practicum in Bakery Technology II Credits: 1	
I Credits: 4	GRSC 602 - Cereal Science Credits: 3	
MATH 221 - Analytic Geometry and Calculus	GRSC 625 - Flour and Dough Testing Credits: 3	
II Credits: 4	GRSC 635 - Baking Science I Credits: 2	
PHYS 213 - Engineering Physics I Credits: 5	GRSC 636 - Baking Science I Laboratory Credits: 2	
PHYS 214 - Engineering Physics II Credits: 5	GRSC 637 - Baking Science II Credits: 3	
STAT 325 - Introduction to Statistics Credits: 3	GRSC 638 - Baking Science II Laboratory Credits: 1	
Free Elective Credits: 3	GRSC 651 - Food and Feed Product Protection Credits: 4	
Social Sciences and Humanities Credits: 3	GRSC 670 - Bakery Layout Credits: 1	
Specialization Elective Credits: 8	CERTAL CHEMICATRY OPTION PROVIDENTIAL	
	CEREAL CHEMISTRY OPTION REQUIREMENTS	
	(27 credit hours)	
	BIOCH 521 - General Biochemistry Credits: 3	
	BIOCH 522 - General Biochemistry Laboratory Credits: 2 CHM 500 - General Physical Chemistry Credits: 3	
	CHM 530 - General Physical Chemistry Credits: 3 CHM 531 - Organic Chemistry I Credits: 3	
	CHM 532 - Organic Chemistry Laboratory Credits: 2	
	CHM 550 - Organic Chemistry II Credits: 3	
	FDSCI 501 - Food Chemistry Credits: 3	
	FDSCI 727 - Chemical Methods of Food Analysis Credits:	
	2	
	Specialization Electives Credits: 6	(5)
Specialization Electives	Specialization Electives (Choose from the following)	(6)
		( )
	CHM 371 - Chemical Analysis Credits: 4	
	FDSCI 690 - Principles of HACCP and HARPC Credits: 3	
FDSCI 690 - Principles of HACCP and HARPC Credits: 3	FDSCI 710 - Kosher and Halal Food Regulations Credits: 2	
•	FDSCI 728 - Physical Methods of Food Analysis Credits: 2	
	FDSCI 740 - Research and Development of Food Products	
	Credits: 4	
	FDSCI 751 - Food Laws and the Regulatory Process	
	Credits: 2	
GRSC 201 - Fundamental Baking Calculations Credits: 1	GRSC 201 - Fundamental Baking Calculations Credits: 1	
GRSC 491 - Faculty-Led Study Abroad Credits: 1-3	GRSC 491 - Faculty-Led Study Abroad Credits: 1-3	

GRSC 499 - Undergraduate Research in Grain Science Credits: 0-3

GRSC 500 Milling Science I Credits: 2

GRSC 501 Milling Science I Laboratory Credits: 2

GRSC 540 - Engineering Applications to Grain/Food Products Credits: 3

GRSC 541 - Engineering Applications to Grain/Food

**Products** Laboratory Credits: 1

GRSC 560 - Electricity and Its Control for the Grain Processing Industry Credits: 3

GRSC 592 - Extended Internship in Grain Science Credits:

GRSC 620 - Extrusion Processing in the Food and Feed Industries Credits: 4

GRSC 712 - Vibrational Spectroscopic Analysis and Chemometrics Credits: 1-2

GRSC 713 - Contemporary Chromatographic Analysis of Food Credits: 1

GRSC 745 - Fundamentals of Bioprocessing Credits: 3

LEAD 212 - Introduction to Leadership Concepts Credits: 2-3 (enroll for 2 credit hours)

#### **FREE ELECTIVE Credits: 3**

### **SOCIAL SCIENCES AND HUMANITIES Credits: 3**

GRSC 499 - Undergraduate Research in Grain Science Credits: 0-3

GRSC 530 - Management Applications in Grain Processing Industries Credits: 3

GRSC 540 - Process Calculations in Food Systems Credits:

GRSC 541 - Process Calculations in Food Systems

Laboratory Credits: 1

GRSC 560 - Electricity and Industrial Power Distribution Credits: 3

GRSC 592 - Extended Internship in Grain Science Credits:

GRSC 620 - Extrusion Processing in the Food and Feed Industries Credits: 4

GRSC 712 - Vibrational Spectroscopic Analysis and Chemometrics Credits: 1-2

GRSC 713 - Contemporary Chromatographic Analysis of Food Credits: 1

GRSC 745 - Fundamentals of Bioprocessing Credits: 3 LEAD 212 - Introduction to Leadership Concepts Credits: 2-3

LEAD 350 - Culture and Context in Leadership Credits: 3

MANGT 420 - Management Concepts Credits: 3

MANGT 530 - Industrial and Labor Relations Credits: 3

MANGT 531 - Human Resources Management Credits: 3

#### **FREE ELECTIVE Credits: 3**

### **SOCIAL SCIENCES AND HUMANITIES Credits: 3**

AMETH – AMETH 160 to 501

ANTH – Any course

ARCH – ARCH 301

ART – Any course

COMM – COMM 320 to 535

DANCE – Any course

DEN – DEN 325, 450

ECON - ECON 120 to 799

ENGL – ENGL 150, 210 to 299, 310, 320 to 399, 420 to 499, 536 to 599, 605 to 660, 670 to 695, 700 to 760, 790 to

<mark>799</mark>

ENVD - ENVD 250, 251, 655, 670, 671

FSHS – Any course

GEOG – GEOG 100, 200, 201, 300 to 799

GWSS – Any course

HIST – Any course

Modern Language – Any course

MUSIC – Any course

PHILO – Any course

POLSC – Any course

PSYCH – Any course

SOCIO – Any course

SOCWK - Any course

THTRE – Any course

#### NOTE

Six of the hours must be from classes at the 300 level or above. Requirements for transfer students vary depending on transfer hours accepted by K. State.

Must satisfy K. State 8 general education requirements.

#### NOTE

- Up to half of the credits required for a four-year degree may be completed at an accredited two-year institution.
- Each student must complete at least 30 K-State resident credits to be considered for a degree from K-State. A student must complete 20 of the last 30 hours of resident credits through K-State. In other words, no more than 10 hours of transfer credit hours may be applied toward the last 30 hours you take for your degree.
- A minimum of 45 hours must be taken at the course level of 300 or above.

Each student must satisfy K-State 8 general education requirements. K-State 8 can be met by both K-State and transfer courses.

**Total credit hours required for graduation: (128)** 

Total credit hours required for graduation: (128)

#### RATIONALE:

- (1) Further *course categorization* was made. Current curriculum does not have categories that are descriptive of the requirements. "General requirements" overall category has been replaced with several specific categories and titled as "natural sciences", "quantitative studies", "communications", business and economics", bakery science core requirements", and "cereal chemistry option requirements".
- (2) A *communication elective block* has been added. This expands the choices available to students as well as increasing their ability to fit a communication elective in their schedules.
- (3) A management elective block was added. BSM-CC majors did not have any room for taking management/business courses. This elective block adds flexibility to students' selection of management electives as well as adding uniformity to the management electives required across all three departmental majors.
- (4) Students are now required to take *one practicum* instead of two. AIB practicum is extremely enrolment limited. This plus the fact students generally gain experience in the material covered in one of the practicums as part of their internship makes it unnecessary to enroll in both.
- (5) Specialization electives were dropped from 8-hours to 6-hours. This two-hour credit saving along with one-hour saved from practicum, total of three-hours, were used to add a three-hour management elective as explained above.
- **(6)** Several new courses were added to the *Specialization Electives*: CHM 371, FDSCI 710, 728, 740, 751, LEAD 350, and the entire list of Management electives.

These FDSCI courses are often taken by our students through course variance requests. This change will help to minimize future course variances.

LEAD 350 will provide another option for our students to fulfill the global issues and diversity section of the K-State 8.

CHM 371 was added back to the specialization electives. This course covers principles of quantitative analysis including the gravimetric, titrimetric, spectrophotometric, electroanalytical, and separations methods. This will provide good foundational skills to the students majoring in BSM-CC. The courses listed under Management electives were also added to this section so that the students may utilize their unused management electives as specialization electives.

GRSC 500 and 501 were deleted from the specialization electives. BSM students rarely, if ever, enroll in either GRSC 500 or 501. As neither course is utilized as a specialization elective, their presence on that list is unnecessary.

- (7) Graduation requirements were summarized in this section to provide quick guidelines for the advisors and the students.
- **(8)** Other changes. There are several corrections made due to "course title" changes which are concurrently addressed in Fall 2016 GSI course proposals.

IMPACT:

(1), (4), (5), (7), and (8). No impact on other departments.

(2), (3), (6). The following Department Heads were contacted on October 3, 2016 regarding the proposed curriculum changes.

BUS (Dr. Chwen Sheu, csheu@ksu.edu and CBA Office of Student Services, cbastusv@ksu.edu) – Dr. Sheu responded that the Department of Management supports the use of ENTRP 340.

CHM (Dr. Eric Maatta, eam@ksu.edu) - He responded in support of the use of all proposed Chemistry courses, but noted that CHEM 371 tends to have excessive demand in the Fall semesters, but that ample space is available in the spring terms.

COMM (Dr. Tim Steffensmeier, steffy@ksu.edu) - He responded in support of the use of COMM 106 and COMM 311.

LEAD (Dr. Mary Hale Tolar, mtolar@ksu.edu) - She responded in support of the use of LEAD 212 and 350.

MANGT (Dr. Bill Turnley, turnley@ksu.edu) was contacted on October 3, 2016. No response has been received to date.

Credits: 5

Credits: 3

**EFFECTIVE** 

Fall 2017 DATE:

### Bakery Science and Management (B.S.) - Production Management Option

FROM: TO:

### **GENERAL REQUIREMENTS:** ACCTG 231 - Accounting for Business Operations Credits: 3 AGEC 120 - Agricultural Economics and Agribusiness Credits: 3 ECON 120 - Principles of Microeconomics Credits: 3 AGCOM 400 - Agricultural Business Communications Credits: 3 ENGL 516 - Written Communication for the Sciences Credits: 3 BIOCH 265 - Introductory Organic and Biochemistry Credits: 5 CHM 350 - General Organic Chemistry Credits: 3 CHM 351 - General Organic Chemistry Laboratory Credits: 2 BIOL 198 - Principles of Biology Credits: 4

BIOL 455 - General Microbiology Credits: 4

COMM 106 - Public Speaking I Credits: 3

ENGL 100 - Expository Writing I Credits: 3

ENGL 200 - Expository Writing II Credits: 3

ECON 110 - Principles of Macroeconomics Credits: 3

CHM 210 - Chemistry I Credits: 4

CHM 230 - Chemistry II Credits: 4

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BIOL 198 - Principles of Biology Credits: 4
BIOL 455 - General Microbiology Credits: 4
PHYS 113 - General Physics I Credits: 4
PHYS 114 - General Physics II Credits: 4
QUANTITATIVE STUDIES (6 credit hours)
MATH 205 - General Calculus and Linear Algebra Credits:
STAT 325 - Introduction to Statistics Credits: 3
COMMUNICATIONS (12 credit hours)
ENGL 100 - Expository Writing I Credits: 3
ENGL 200 - Expository Writing II Credits: 3
COMM 106 - Public Speaking I Credits: 3
Communication elective (choose one):
AGCOM 400 Agricultural Business Communications
Credits: 3
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ENGL 516 Written Communication for the Sciences

**COMM 311 Business and Professional Speaking Credits: 3** 

CHM 351 - General Organic Chemistry Laboratory Credits:

NATURAL SCIENCES (29 credit hours)

BIOCH 265 - Introductory Organic and Biochemistry

CHM 350 - General Organic Chemistry Credits: 3

CHM 210 - Chemistry I Credits: 4

CHM 230 - Chemistry II Credits: 4

**(2)** 

**(1)** 

۱	FDSCI 303 - Fundamentals of Food Processing Credits: 3
I	FDSCI 600 - Food Microbiology Credits: 2
I	FDSCI 601 - Food Microbiology Lab Credits: 2
I	FNDH 132 - Basic Nutrition Credits: 3
I	GRSC 100 - Grain Science & Industry
I	Orientation Credits: 1
I	GRSC 101 - Introduction to Grain Science and
I	Industry Credits: 3
I	GRSC 150 - Principles of Milling Credits: 2
I	GRSC 151 - Principles of Milling Laboratory Credits: 1
	GRSC 210 - CAD Flow Sheets for Grain Processes <b>Credits:</b> 3
I	GRSC 310 - Materials Handling Credits: 3
	GRSC 530 - Management Applications in the Grain Processing Industries <b>Credits:</b> 3
	GRSC 540 - Engineering Applications to Grain/Food Products <b>Credits:</b> 3
	GRSC 541 - Engineering Applications to Grain/Food Products Laboratory <b>Credits:</b> 1
I	GRSC 591 - Internship in Grain Science Credits: 1
I	GRSC 600 - Practicum in Bakery Technology I Credits: 1
I	GRSC 601 - Practicum in Bakery Technology II Credits: 1
I	GRSC 602 - Cereal Science Credits: 3
I	GRSC 625 - Flour and Dough Testing Credits: 3
I	GRSC 635 - Baking Science I Credits: 2
I	GRSC 636 - Baking Science I Laboratory Credits: 2
I	GRSC 637 - Baking Science II Credits: 3
I	GRSC 638 - Baking Science II Laboratory Credits: 1
I	GRSC 651 - Food and Feed Product Protection Credits: 4
I	GRSC 670 - Bakery Layout Credits: 1
I	MANGT 420 - Management Concepts Credits: 3
	MATH 205 - General Calculus and Linear Algebra <b>Credits:</b> 3
I	PHYS 113 - General Physics I Credits: 4
I	PHYS 114 - General Physics II Credits: 4
I	STAT 325 - Introduction to Statistics Credits: 3
I	Business Electives Credits: 9
I	Free Electives <b>Credits:</b> 3
	Specialization Electives Credits: 5
	Business Elective (9 credit hours) ACCTG 241 - Accounting for Investing and Financing Credits: 3 ACCTG 331 - Intermediate Accounting Processes Credits: 3
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AGEC 500 - Production Economics Credits: 3

FINAN 450 - Principles of Finance Credits: 3

AGEC 515 - Food and Agribusiness Marketing Credits: 3

FDSCI 305 - Fundamentals of Food Processing Credits: 3

### ECON 110 - Principles of Macroeconomics Credits: 3 AGEC 120 - Agricultural Economics and Agribusiness Credits: 3 or ECON 120 - Principles of Microeconomics Credits: 3 ACCTG 231 - Accounting for Business Operations Credits: **Business Electives (12 credit hours):** ACCTG 241 - Accounting for Investing and Financing

Credits: 3

**BUSINESS AND ECONOMICS (21 credit hours)** 

ACCTG 331 - Intermediate Accounting Processes Credits:

AGEC 500 - Production Economics Credits: 3

AGEC 515 - Food and Agribusiness Marketing Credits: 3

FINAN 450 - Principles of Finance Credits: 3

IMSE 501 - Industrial Management Credits: 3 IMSE 501 - Industrial Management Credits: 3 MANGT 300 - Introduction to Total Quality Management MANGT 300 - Introduction to Total Quality Management Credits: 1 Credits: 1 MANGT 420 - Management Concepts Credits: 3 MANGT 530 - Industrial and Labor Relations Credits: 3 MANGT 530 - Industrial and Labor Relations Credits: 3 MANGT 531 - Human Resources Management Credits: 3 MKTG 400 - Introduction to Marketing Credits: 3 MKTG 400 - Introduction to Marketing Credits: 3 MKTG 542 - Fundamentals of Professional Selling Credits: MKTG 542 - Fundamentals of Professional Selling Credits: Additional Business Electives: The following courses must be taken as business electives The following courses must be taken as business electives to complete requirements for a Business Minor while to complete requirements for a Business Minor while completing the Production Management Option: completing the Production Management Option: ACCTG 241 - Accounting for Investing and Financing ACCTG 241 - Accounting for Investing and Financing Credits: 3 FINAN 450 - Principles of Finance Credits: 3 FINAN 450 - Principles of Finance Credits: 3 MKTG 400 - Introduction to Marketing Credits: 3 MKTG 400 - Introduction to Marketing Credits: 3 **BAKERY SCIENCE CORE REQUIREMENTS (38** credit hours) FDSCI 600 - Food Microbiology Credits: 2 FDSCI 600 - Food Microbiology Credits: 2 FDSCI 601 - Food Microbiology Lab Credits: 2 FDSCI 601 - Food Microbiology Lab Credits: 2 FNDH 132 - Basic Nutrition Credits: 3 FNDH 132 - Basic Nutrition Credits: 3 GRSC 100 - Grain Science & Industry Orientation Credits: GRSC 100 - Freshman Orientation in Grain Science Credits: 1 GRSC 101 - Introduction to Grain Science and Industry GRSC 101 - Introduction to Grain Science and Industry Credits: 3 Credits: 3 GRSC 150 - Principles of Milling Credits: 2 GRSC 150 - Principles of Milling Credits: 2 GRSC 151 - Principles of Milling Laboratory Credits: 1 GRSC 151 - Principles of Milling Laboratory Credits: 1 GRSC 310 - Materials Handling Credits: 3 GRSC 310 - Materials Handling Credits: 3 GRSC 591 - Internship in Grain Science Credits: 1 GRSC 591 - Internship in Grain Science Credits: 1 GRSC 600 - Practicum in Bakery Technology I Credits: 1 GRSC 600 - Practicum in Bakery Technology I Credits: 1 **(4)** GRSC 601 - Practicum in Bakery Technology II Credits: 1 GRSC 601 - Practicum in Bakery Technology II Credits: 1 GRSC 602 - Cereal Science Credits: 3 GRSC 602 - Cereal Science Credits: 3 GRSC 625 - Flour and Dough Testing Credits: 3 GRSC 625 - Flour and Dough Testing Credits: 3 GRSC 635 - Baking Science I Credits: 2 GRSC 635 - Baking Science I Credits: 2 GRSC 636 - Baking Science I Laboratory Credits: 2 GRSC 636 - Baking Science I Laboratory Credits: 2 GRSC 637 - Baking Science II Credits: 3 GRSC 637 - Baking Science II Credits: 3 GRSC 638 - Baking Science II Laboratory Credits: 1 GRSC 638 - Baking Science II Laboratory Credits: 1 GRSC 651 - Food and Feed Product Protection Credits: 4 GRSC 651 - Food and Feed Product Protection Credits: 4 GRSC 670 - Bakery Layout Credits: 1 GRSC 670 - Bakery Layout Credits: 1 PRODUCTION MANAGEMENT OPTION **(5)** REQUIREMENTS (16 credit hours) FDSCI 305 - Fundamentals of Food Processing Credits: 3 FDSCI 305 - Fundamentals of Food Processing Credits: 3 GRSC 210 CAD Flow Sheets for Grain Processes Credits: GRSC 405 - Grain Analysis Techniques Credits: 2 GRSC 530 Management Applications in the Grain **Processing Industries Credits: 3** GRSC 540 - Engineering Applications to Grain/Food GRSC 540 - Process Calculations in Food Systems Credits: Products Credits: 3 GRSC 541 - Engineering Applications to Grain/Food

Products Laboratory Credits: 1

MANGT 420 Management Concepts Credits: 3

GRSC 530 - Management Applications in Grain Processing

**Industries Credits: 3** 

Specialization Electives Credits: 5	Specialization Electives Credits: 8
Specialization Electives:	Specialization Electives:  ACCTG 241 - Accounting for Investing and Financing  Credits: 3  ACCTG 331 - Intermediate Accounting Processes Credits:  3  AGEC 500 - Production Economics Credits: 3  AGEC 515 - Food and Agribusiness Marketing Credits: 3
FDSCI 690 - Principles of HACCP and HARPC Credits: 3	FDSCI 690 - Principles of HACCP and HARPC Credits: 3  FDSCI 710 - Kosher and Halal Food Regulations Credits: 2  FDSCI 728 - Physical Methods of Food Analysis Credits: 2  FDSCI 740 - Research and Development of Food Products  Credits: 4  FDSCI 751 - Food Laws and the Regulatory Process  Credits: 2  FINAN 450 - Principles of Finance Credits: 3
GRSC 201 - Fundamental Baking Calculations Credits: 1 GRSC 491 - Faculty-Led Study Abroad Credits: 1-3 GRSC 499 - Undergraduate Research in Grain Science Credits: 0-3  GRSC 500 - Milling Science I Credits: 2 GRSC 501 - Milling Science I Laboratory Credits: 2	FINAN 450 - Principles of Finance Credits: 3 GRSC 201 - Fundamental Baking Calculations Credits: 1 GRSC 491 - Faculty-Led Study Abroad Credits: 1-3 GRSC 499 - Undergraduate Research in Grain Science Credits: 0-3
GRSC 560 - Electricity and Its Control for the Grain Processing Industry Credits: 3 GRSC 592 - Extended Internship in Grain Science Credits: 1	GRSC 530 - Management Applications in Grain Processing Industries Credits: 3 GRSC 560 - Electricity and Industrial Power Distribution Credits: 3 GRSC 592 - Extended Internship in Grain Science Credits: 1
GRSC 620 - Extrusion Processing in the Food and Feed Industries Credits: 4 GRSC 712 - Vibrational Spectroscopic Analysis and Chemometrics Credits: 1-2 GRSC 713 - Contemporary Chromatographic Analysis of Food Credits: 1 GRSC 745 - Fundamentals of Bioprocessing Credits: 3	GRSC 620 - Extrusion Processing in the Food and Feed Industries Credits: 4 GRSC 712 - Vibrational Spectroscopic Analysis and Chemometrics Credits: 1-2 GRSC 713 - Contemporary Chromatographic Analysis of Food Credits: 1 GRSC 745 - Fundamentals of Bioprocessing Credits: 3
LEAD 212 - Introduction to Leadership Concepts Credits: 2-3-(enroll for 2 credits)	IMSE 501 - Industrial Management Credits: 3 LEAD 212 - Introduction to Leadership Concepts Credits: 2-3 LEAD 350 - Culture and Context in Leadership Credits: 3 MANGT 300 - Introduction to Total Quality Management Credits: 1 MANGT 420 - Management Concepts Credits: 3 MANGT 530 - Industrial and Labor Relations Credits: 3 MANGT 531 - Human Resources Management Credits: 3 MKTG 400 - Introduction to Marketing Credits: 3 MKTG 542 - Fundamentals of Professional Selling Credits:
FREE ELECTIVES Credits: 3	FREE ELECTIVES Credits: 3

### **SOCIAL SCIENCES AND HUMANITIES Credits: 3**

AMETH – AMETH 160 to 501

ANTH – Any course

ARCH – ARCH 301

ART – Any course

COMM – COMM 320 to 535

DANCE – Any course

DEN – DEN 325, 450

ECON - ECON 120 to 799

ENGL – ENGL 150, 210 to 299, 310, 320 to 399, 420 to

499, 536 to 599, 605 to 660, 670 to 695, 700 to 760, 790 to

<mark>799</mark>

ENVD – ENVD 250, 251, 655, 670, 671

FSHS – Any course

GEOG – GEOG 100, 200, 201, 300 to 799

GWSS – Any Course

HIST – Any course

Modern Language – Any course

MUSIC - Any course

PHILO – Any course

POLSC – Any course

PSYCH – Any course

SOCIO – Any course

SOCWK – Any course

THTRE – Any course

#### NOTE

Six of the hours must be from classes at the 300 level or above. Requirements for transfer students vary depending on transfer hours accepted by K. State.

Must satisfy K. State 8 general education requirements.

Total credit hours required for graduation: (128)

#### NOTE

- Up to half of the credits required for a four-year degree may be completed at an accredited two-year institution.
- Each student must complete at least 30 K-State resident credits to be considered for a degree from K-State. A student must complete 20 of the last 30 hours of resident credits through K-State. In other words, no more than 10 hours of transfer credit hours may be applied toward the last 30 hours you take for your degree.
- A minimum of 45 hours must be taken at the course level of 300 or above.

Each student must satisfy K-State 8 general education requirements. K-State 8 can be met by both K-State and transfer courses.

Total credit hours required for graduation: (128)

## RATIONALE:

- (1) Further *course categorization* was made. Current curriculum does not have categories that are descriptive of the requirements. "General requirements" overall category has been replaced with several specific categories and titled as "natural sciences", "quantitative studies", "communications", business and economics", bakery science core requirements", and "production management option requirements".
- (2) A *communication elective block* has been added. This expands the choices available to students as well as increasing their ability to fit a communication elective in their schedules.
- (3) Number of *business electives* was increased from 9 to 12 credit hours. Other changes made is this elective block are: (i) MANGT 420 and GRSC 530 were moved from the core requirements category to the business electives, (ii) one more course MANGT 531 was added to the list. These changes will add flexibility to students' selection of business, and also help to minimize future course variance requests.
- (4) Students are now required to take *one practicum* instead of two. AIB practicum is extremely enrolment limited. This plus the fact students generally gain experience in the material covered in one of the practicums as part of their internship makes it unnecessary to enroll in both.

**(8)** 

- (5) Several changes were made in the *Production Management Option* requirements: (i) GRSC 210 CAD Flow Sheets for Grain Processes (3), and GRS 541 Engineering Applications to Grain/Food Products Laboratory (1) were dropped, which was a faculty determination that these course contents are not fully pertinent to be considered as core requirement for BSM-PM majors. (ii) MANGT 420 and GRSC 530 were moved to the business electives as explained above. (iii) GRSC 405 Grain Analysis Techniques (2) was added back. Recent restructure and refocus of GRSC 405 course material and coverage render this course of value as a core requirement for BSM-PM majors. Total of 5 credit hours were saved from these changes. 3-hours were used to add a social science elective, and remaining 2-hours were added to the specialization electives to increase it from 5 to 7-hours.
- (6) Several new courses were added to the *Specialization Electives*: FDSCI 710, 728, 740, 751, LEAD 350, and the entire list of Business electives. These FDSCI courses are often taken by our students through course variance requests. This change will help to minimize future course variances. LEAD 350 will provide another option for our students to fulfill the global issues and diversity section of the K-State 8. The courses listed under Business electives were also added to this section so that the students may utilize their unused business electives as specialization electives.

GRSC 500 and 501 were deleted from the specialization electives. BSM students rarely, if ever, enroll in either GRSC 500 or 501. As neither course is utilized as a specialization elective, their presence on that list is unnecessary.

- (7) Social science electives were not available for BSM-PM majors. With the recent proposed curriculum changes now we are able to add one which was a much needed category to help our students to gain competency in social sciences and humanities. Also a list of eligible courses was added to provide a clear guideline to the students.
- (8) Graduation requirements were summarized in this section to provide quick guidelines for the advisors and the students.
- (9) Other changes. There are several corrections made due to "course title" changes which are concurrently addressed in Fall 2016 GSI course proposals.

IMPACT:

- (1), (4), (5), (7), (8) and (9). No impact on other departments.
- (2), (3), (6). The following Department Heads were contacted on October 3, 2016 regarding the proposed curriculum changes.

ACCTG (Dr. Brett Wilkinson) – responded that the Department of Accounting supports the continued listing of ACCTG 231, 241 and 331 provided enrollments do not change.

BUS (Dr. Chwen Sheu, csheu@ksu.edu and CBA Office of Student Services, cbastusv@ksu.edu) - Dr. Sheu responded that the Department of Management supports the use of ENTRP 340.

COMM (Dr. Tim Steffensmeier, steffy@ksu.edu) - He responded in support of the use of COMM 106 and COMM 311.

LEAD (Dr. Mary Hale Tolar, mtolar@ksu.edu) - She responded in support of the use of LEAD 212 and 350.

MANGT (Dr. Bill Turnley, turnley@ksu.edu) was contacted on October 3, 2016. No response has been received to date.

**EFFECTIVE** 

DATE: Fall 2017

Feed Science and Management (B.S.) - Feed Production Option

FROM: TO:

**(1)** 

Three options are offered in the Feed Science and Management degree program: Feed Production, Pet Food Production and Biofuels Production.

The Feed Production option is intended for those wishing to follow the conventional feed science program to prepare for careers in the feed manufacturing and animal nutrition fields including pet food manufacturing and other allied industries.

#### **GENERAL REQUIREMENTS:**

ACCTG 231 - Accounting for Business

Operations Credits: 3

AGEC 120 - Agricultural Economics and

Agribusiness Credits: 3

ASI 318 - Fundamentals of Nutrition Credits: 3

BIOCH 265 - Introductory Organic and

Biochemistry Credits: 5

CHM 350 - General Organic Chemistry Credits: 3

CHM 351 - General Organic Chemistry

Laboratory Credits: 2

BIOL 198 - Principles of Biology Credits: 4

BIOL 455 - General Microbiology Credits: 4

CHM 210 - Chemistry I Credits: 4

CHM 230 - Chemistry II Credits: 4

COMM 105 - Public Speaking IA Credits: 2

ECON 110 - Principles of Macroeconomics Credits: 3

ENGL 100 - Expository Writing I Credits: 3

ENGL 200 - Expository Writing II Credits: 3

ENGL 516 - Written Communication for the

Sciences Credits: 3

GRSC 100 - Grain Science & Industry

Orientation Credits: 1

GRSC 101 - Introduction to Grain Science and

Industry **Credits:** 3

GRSC 150 Principles of Milling Credits: 2

GRSC 151 Principles of Milling

Laboratory Credits: 1

GRSC 210 - CAD Flow Sheets for Grain

Processes Credits: 3

GRSC 310 - Materials Handling Credits: 3

GRSC 510 - Feed Technology I Credits: 3

GRSC 511 Feed Technology I Laboratory Credits: 1

GRSC 512 - Feed Technology II Credits: 3

GRSC 513 Feed Regulations and Quality

Laboratory Credits: 1

GRSC 530 - Management Applications in the Grain

Processing Industries Credits: 3

GRSC 555 Cereal Food Plant Design and

Construction Credits: 3

GRSC 560 Electricity and Its Control for the Grain

Processing Industry Credits: 3

GRSC 561 - Qualities of Feed Ingredients Credits: 3

GRSC 591 - Internship in Grain Science Credits: 1

GRSC 651 - Food and Feed Product

Protection Credits: 4

Two options are offered in the Feed Science and Management degree program: Feed Production and Biofuels Production.

The Feed Production option is intended for those wishing to follow the conventional feed science program to prepare for careers in the feed manufacturing and animal nutrition fields including pet food manufacturing and other allied industries.

#### NATURAL SCIENCES (29 credit hours)

CHM 210 - Chemistry I Credits: 4

CHM 230 - Chemistry II Credits: 4

BIOCH 265 - Introductory Organic and Biochemistry Credits: 5

CHM 350 - General Organic Chemistry Credits: 3

CHM 351 - General Organic Chemistry Laboratory

Credits: 2

ASI 318 - Fundamentals of Nutrition Credits: 3

BIOL 198 - Principles of Biology Credits: 4

BIOL 455 - General Microbiology Credits: 4

PHYS 113 - General Physics I Credits: 4

PHYS 114 - General Physics II Credits: 4

#### **OUANTITATIVE STUDIES (6 credit hours)**

MATH 205 - General Calculus and Linear Algebra Credits: 3

STAT 325 - Introduction to Statistics Credits: 3

#### COMMUNICATIONS (11 credit hours)

COMM 105 - Public Speaking IA Credits: 2

ENGL 100 - Expository Writing I Credits: 3

ENGL 200 - Expository Writing II Credits: 3

Communication elective (choose one):

AGCOM 400 - Agricultural Business Communications

COMM 311 Business and Professional Speaking Credits: 3

ENGL 516 - Written Communication for the Sciences Credits: 3

MATH 205 - General Calculus and Linear Algebra Credits: 3 PHYS 113 - General Physics I Credits: 4 PHYS 114 - General Physics II Credits: 4 STAT 325 - Introduction to Statistics Credits: 3 Free Electives Credits: 6 Social Sciences and Humanities Credits: 6		
ECON 110 - Principles of Macroeconomics Credits: 3 ACCTG 231 - Accounting for Business Operations Credits: 3 AGEC 120 - Agricultural Economics and Agribusiness Credits: 3	BUSINESS AND ECONOMICS (15 credit hours) ECON 110 - Principles of Macroeconomics Credits: 3 ACCTG 231 - Accounting for Business Operations Credits: 3 AGEC 120 - Agricultural Economics and Agribusiness Credits: 3 or ECON 120 - Principles of Microeconomics Credits: 3 Management Electives (6) ACCTG: 241 AGEC: 202, 220, 300 or above ECON: 500 or above ENTRP: 340 FINAN: 450 LEAD: 212, 350 MANGT: 300 or above MKTG: 390 or above	(3)
ASI 318 - Fundamentals of Nutrition Credits: 3 GRSC 100 - Grain Science & Industry Orientation Credits: 1 GRSC 101 - Introduction to Grain Science and Industry Credits: 3 GRSC 150 - Principles of Milling Credits: 2	CORE REQUIREMENTS (54 credit hours) ASI 318 - Fundamentals of Nutrition Credits: 3 GRSC 100 - Freshman Orientation in Grain Science Credits: 1 GRSC 101 - Introduction to Grain Science and Industry Credits: 3	(4)
GRSC 151 Principles of Milling Laboratory Credits: 1 GRSC 210 - CAD Flow Sheets for Grain Processes Credits: 3 GRSC 310 - Materials Handling Credits: 3 GRSC 510 - Feed Technology I Credits: 3	GRSC 210 - CAD Flow Sheets for Grain Processes Credits: 3 GRSC 310 - Materials Handling Credits: 3 GRSC 510 - Feed Technology I Credits: 3	
GRSC 511 Feed Technology I Laboratory Credits: 1 GRSC 512 - Feed Technology II Credits: 3 GRSC 513 - Feed Regulations and Quality Laboratory Credits: 1 GRSC 530 - Management Applications in the Grain Processing Industries Credits: 3	GRSC 612 Feed Technology II and Laboratory Credit: 4  GRSC 530 - Management Applications in the Grain Processing Industries Credits: 3	(5)
GRSC 555 — Cereal Food Plant Design and Construction Credits: 3 GRSC 560 - Electricity and Its Control for the Grain Processing Industry Credits: 3		(4) (4)
GRSC 561 - Qualities of Feed Ingredients Credits: 3 GRSC 591 - Internship in Grain Science Credits: 1	GRSC 561 - Qualities of Feed Ingredients Credits: 4 GRSC 591 - Internship in Grain Science Credits: 1 GRSC 620 - Extrusion Processing in the Food and Feed Industries Credits: 4	(6)
GRSC 651 - Food and Feed Product Protection Credits: 4	GRSC 651 - Food and Feed Product Protection Credits: 4 GRSC 615 - Animal Food Safety Credits: 3 Feed Production Emphasis Credits: 18	(7) (8)

Pet Food Emphasis Credits: 18 FEED PRODUCTION EMPHASIS Grain Science Electives: Select 9 credits from the list below <u>a</u>nd Specialization Electives: Select 9 credits from the list below PET FOOD EMPHASIS (9)ASI 520 Companion and Laboratory Animal Management Credits: 3 GRSC 645 Pet Food Processing Credits: 4 GRSC 677 Companion Animal Nutrition Credits: 1 Grain Science Electives: Select 6 credits from the list **below** <u>and</u> Specialization Electives: Select 4 credits from the list below **Grain Science Electives:** (10)GRSC 150 Principles of Milling Credits: 2 GRSC 151 Principles of Milling Laboratory Credits: 1 GRSC 491 Faculty-Led Study Abroad Credits: 1-3 GRSC 499 Undergraduate Research in Grain Science Credits: 0-3 GRSC 555 Cereal Food Plant Design Credits: 3 GRSC 560 Electricity and Industrial Power Distribution Credits: 3 GRSC 592 Extended Internship in Grain Science Credits: 1 GRSC 602 Cereal Science Credits: 3 GRSC 645 Pet Food Processing Credits: 4 **Specialization Electives:** (11)ASI: 102, 300 or above ENTOM: 300 or above FDSCI: 300 or above BIOCH 521 General Biochemistry Credits: 3 BIOCH 522 General Biochemistry Laboratory Credits: 2 CHM 531 Organic Chemistry I Credits: 3 CHM 532 Organic Chemistry I Laboratory Credits: 2 FNDH 711 Pet Food Sensory Analysis Credits: 2

THTRE – Any course

## NOTE

Six of the hours must be from classes at the 300 level or above. Requirements for transfer students vary depending on transfer hours accepted by K. State.

Must satisfy K State 8 general education requirements.

#### NOTE

- Up to half of the credits required for a four-year degree may be completed at an accredited two-year institution.
- Each student must complete at least 30 K-State resident credits to be considered for a degree from K-State. A student must complete 20 of the last 30 hours of resident credits through K-State. In other words, no more than 10 hours of transfer credit hours may be applied toward the last 30 hours you take for your degree.
- A minimum of 45 hours must be taken at the course level of 300 or above.
- Each student must satisfy K-State 8 general education requirements. K-State 8 can be met by both K-State and transfer courses.

**Total credit hours required for graduation: (127)** 

**Total credit hours required for graduation: (127)** 

#### RATIONALE:

- (1) Further course categorization was made. Current curriculum does not have categories that are descriptive of the requirements. "General requirements" overall category has been replaced with several specific categories and titled as "natural sciences", "quantitative studies", "communications", business and economics", "feed science core requirements", and "emphasis areas".
- (1) A *communication elective block* has been added. This expands the choices available to students as well as increasing their ability to fit a communication elective in their schedules.
- (2) ECON 120 and AGEC 120 *alternate*. Provides greater flexibility in the curriculum for the students.
- (3) A new *block of management electives* was added and designed in a less prescribed manner. The new format will give students a broader offering of courses that will provide more flexibility in the Animal Food Science & Management program.
- (4) GRSC 150, 151, 555 and 560 were *dropped from core requirements*. These courses are now listed in the *grain science elective* block for students who plan to pursue a career in feed mill management. The change will allow students the ability to select courses related to their areas of specialization in management, nutrition, or research.
- (5) Changes made in Feed *Technology I and II* courses.

Dropping GRSC 511 Feed Technology I Laboratory:

The laboratory is not required for the revised course (GRSC 510 Feed Technology I). The content of GRSC 510 has been revised to cover more introductory information on the animal food industries. The course content will focus on the history, structure, regulations, and management. The one-hour laboratory will be part of GRSC 561.

Combining GRSC 512 Feed Technology II and GRSC 513 Feed Technology II Laboratory: Course content will be reworked to provide a more in depth study of the feed manufacturing process. Additional technical information will be added to each manufacturing process lecture. The course number will be increased and changed to GRSC 612 Feed Technology II and Laboratory (4) based on the new content. The course will also target animal science graduate students who want to learn about the feed manufacturing process. This will also increase the number of graduate level courses in Grain Science.

- **(6)** GRSC 620 was *moved* to the *core requirement* category.
- (7) Adding a *new feed safety course*, GRSC 615 Animal Food Safety (3). Please see the course description and rationale provided under Fall 2016 Grain Science Course Proposals.
- (8) New emphasis areas were added. The Animal Food Science and Management (AFSM) curriculum will drop the Pet Food Production Management option, and offer a single Production Management option with two emphasis areas: Feed production or Pet food production. Students will choose an emphasis in either feed production or pet food, which will create greater flexibility under one degree program.

- (9) Adding a *new course*, GRSC 677 Companion Animal Nutrition (1) to the Pet Food emphasis. *Combining* GRSC 645 Pet Food Processing (3) and 646 Pet Food Processing Laboratory (1) under GRSC 645 for total of 4 credit hours. Please see the rationale provided under Fall 2016 Grain Science Course Proposals.
- (10) A list of *Grain Science electives* was added. This will give students a broader offering of courses that will provide more flexibility.
- (11) A new block of *specialization electives* was added. The list was defined in a less prescribed way. The new format will give students a broader offering of courses that will provide more flexibility in the Animal Food Science and Management program.
- (12) Former "Feed Production Option Required Courses" block was *cleaned up* and *reorganized* by dropping or moving these courses. AGEC 420 is now covered under Management Electives list. GRSC 620 was moved to core requirements, and the entire specialization block was reformatted as reported above.
- (13) Changes in *Social Science electives & Humanities*. The requirement was dropped from 6-hours to 3-hours to accommodate the other changes made in the management electives. Also a list of eligible courses was added to provide a clear guideline to the students.
- (14) Graduation requirements were summarized in this section to provide quick guidelines for the advisors and the students.
- (15) Other changes. There are several corrections made due to "course title" changes which are concurrently addressed in Fall 2016 GSI course proposals.

IMPACT:

- (1), (5), (6), (7), (9), (11), (12), (13), (14), (15) and (16). No impact on other departments.
- (2), (3), (4), (8), (10). The following Department Heads were contacted on October 3, 2016 regarding the proposed curriculum changes.

ACCTG (Dr. Brett Wilkinson, bwilkinson@ksu.edu) – responded that the Department of Accounting supports the continued listing of ACCTG 231, 241 and 331 provided enrollments do not change.

BIOCH (Dr. Phillip Klebba, peklebba@ksu.edu) was contacted on October 3, 2016. No response has been received to date.

CHM (Dr. Eric Maatta, eam@ksu.edu) - He responded in support of the use of all proposed Chemistry courses, but noted that CHEM 371 tends to have excessive demand in the Fall semesters, but that ample space is available in the spring terms.

COMM (Dr. Tim Steffensmeier, steffy@ksu.edu) - He responded He responded in support of the use of COMM 106 and COMM 311.

ECON (Dr. William Blankenau, blankenw@ksu.edu) - He responded in support of the use of all proposed ECON courses.

ENTRP (Dr. Chwen Sheu, csheu@ksu.edu and CBA Office of Student Services, cbastusv@ksu.edu) - Dr. Sheu responded that the Department of Management supports the use of ENTRP 340.

FINAN (Dr. Eric Higgins, ehiggins@ksu.edu) responded in support of the use of FINAN 450.

FNDH (Dr. Mark Haub, haub@ksu.edu) responded with no opposition to the proposal.

LEAD (Dr. Mary Hale Tolar, mtolar@ksu.edu) - She responded in support of the use of LEAD 212 and 350.

MANGT (Dr. Bill Turnley, turnley@ksu.edu) was contacted on October 3, 2016. No response has been received to date.

MKTG (Dr. Esther Swilley, <u>esthers@ksu.edu</u>) – She responded in support of the use of MKTG courses numbered 390 and higher.

EFFECTIVE DATE:

**FALL 2017** 

FROM	ТО
Feed Science and Management (B.S.) Pet Food	
Production Option	
Three options are offered in the Feed Science and	
Management degree program: Feed Production, Pet	
Food Production and Biofuels Production.	
The Pet Food Production option focuses on training	
students in the science of pet food production, and	
provide technical skills needed to produce safe and	
effective food items for dogs, eats, and other non-food	
animals (rodents, ferrets, reptiles, amphibians, exotic	
birds, aquarium fish, zoo animals, etc.	
Bachelor's degree requirements	
General Requirements:	
ACCTG 231 Accounting for Business Operations	
Credits: 3	
AGEC 120 - Agricultural Economics and Agribusiness	
Credits: 3	
ASI 318 Fundamentals of Nutrition Credits: 3	
BIOCH 265 - Introductory Organic and Biochemistry	
Credits: 5	
<del>or</del>	
CHM 350 - General Organic Chemistry Credits: 3	
and	
CHM 351 General Organic Chemistry Laboratory	
Credits: 2	
BIOL 198 Principles of Biology Credits: 4	
BIOL 455 General Microbiology Credits: 4	
CHM 210 - Chemistry I Credits: 4	
CHM 230 Chemistry II Credits: 4	
COMM 105 Public Speaking IA Credits: 2	
ECON 110 - Principles of Macroeconomics Credits: 3	
ENGL 100 Expository Writing I Credits: 3	
ENGL 200 Expository Writing II Credits: 3	
ENGL 516 - Written Communication for the Sciences	
Credits: 3	
GRSC 100 Grain Science & Industry Orientation	
Credits: 1	
GRSC 101 Introduction to Grain Science and Industry	
Credits: 3	
GRSC 150 - Principles of Milling Credits: 2	
GRSC 151 Principles of Milling Laboratory Credits:	
GRSC 210 - CAD Flow Sheets for Grain Processes	
Credits: 3	
GRSC 310 Materials Handling Credits: 3	
GRSC 510 - Feed Technology I Credits: 3	
GRSC 511 Feed Technology I Laboratory Credits: 1	
GRSC 512 Feed Technology II Credits: 3	

GRSC 513 Feed Regulations and Quality Laboratory	
Credits: 1	
GRSC 530 Management Applications in the Grain	
Processing Industries Credits: 3	
GRSC 555 Cereal Food Plant Design and	
Construction Credits: 3	
GRSC 560 Electricity and Its Control for the Grain	
Processing Industry Credits: 3	
GRSC 561 Qualities of Feed Ingredients Credits: 3	
GRSC 591 Internship in Grain Science Credits: 1	
GRSC 651 Food and Feed Product Protection Credits:	
4	
MATH 205 General Calculus and Linear Algebra	
Credits: 3	
PHYS 113 - General Physics I Credits: 4	
PHYS 114 General Physics II Credits: 4	
STAT 325 Introduction to Statistics Credits: 3	
Free Electives Credits: 6	
Social Sciences and Humanities Credits: 6	
Pet Food Production Option Required Courses (19	
eredit hours):	
ASI 520 Companion Animal Management Credits: 3	
GRSC 620 Extrusion Processing in the Food and	
Feed Industries Credits: 4	
GRSC 645 Pet Food Processing Credits: 3	
GRSC 646 Pet Food Processing Laboratory Credits: 1	
Specialization Electives Credits: 8	
Specialization Electives:	
ACCTG 241 - Accounting for Investing and Financing	
Credits: 3	
ACCTG 331 Intermediate Accounting Processes	
Credits: 3	
AGEC 410 Agricultural Policy Credits: 3	
AGEC 515 Food and Agribusiness Marketing	
Credits: 3	
AGEC 632 Agribusiness Logistics Credits: 3	
ASI 320 Principles of Feeding Credits: 3	
ASI 500 - Genetics Credits: 3	
BIOCH 521 General Biochemistry Credits: 3	
ECON 631 Principles of Transportation Credits: 3	
FINAN 450 - Principles of Finance Credits: 3	
GRSC 491 Faculty Led Study Abroad Credits: 1-3	
GRSC 499 Undergraduate Research in Grain Science	
Credits: 0-3	
GRSC 592 Extended Internship in Grain Science	
Credits: 1	
IMSE 501 - Industrial Management Credits: 3	
MANGT 390 Business Law I Credits: 3	
MANGT 420 Management Concepts Credits: 3	
MANGT 530 - Industrial and Labor Relations Credits:	
3	
MANGT 531 Human Resources Management	
Credits: 3	
	<u> </u>

#### Note

Six of the hours must be from classes at the 300 level or above. Requirements for transfer students vary depending on transfer hours accepted by K. State. Must satisfy K. State 8 general education requirements.

Total credit hours required for graduation: (127)

RATIONALE: Dropping Pet Food Production Option and merging Feed production and Pet food

production options under single program guide.

Changing the name of the curriculum to Animal Food Science and Management would include pet food. The pet food option will be handled as an emphasis similar to other departments thus creating one program with two emphases in feed production and pet

food.

IMPACT: No impact on other departments.

**EFFECTIVE** 

DATE: Fall 2017

## Milling Science and Management (B.S.) - Chemistry Option

FROM: TO:

## General Requirements

ACCTG 231 - Accounting for Business

Operations Credits: 3

AGEC 120 - Agricultural Economics and

Agribusiness Credits: 3

BIOCH 521 - General Biochemistry Credits: 3

BIOCH 522 - General Biochemistry

Laboratory Credits: 2

BIOL 198 - Principles of Biology Credits: 4

BIOL 455 - General Microbiology Credits: 4

CHM 210 - Chemistry I Credits: 4

CHM 230 - Chemistry II Credits: 4

CHM 500 - General Physical Chemistry Credits: 3

CHM 531 - Organic Chemistry I Credits: 3

CHM 532 - Organic Chemistry Laboratory Credits: 2

CHM 550 - Organic Chemistry II Credits: 3

COMM 105 - Public Speaking IA Credits: 2

ECON 110 - Principles of Macroeconomics Credits: 3

ENGL 100 - Expository Writing I Credits: 3

ENGL 200 - Expository Writing II Credits: 3

FDSCI 727 - Chemical Methods of Food

Analysis Credits: 2

GRSC 100 - Grain Science & Industry

Orientation Credits: 1

GRSC 101 Introduction to Grain Science and

**Industry Credits: 3** 

GRSC 150 - Principles of Milling Credits: 2

## NATURAL SCIENCES (26 credit hours)

BIOL 198 - Principles of Biology Credits: 4

BIOL 455 - General Microbiology Credits: 4

CHM 210 - Chemistry I Credits: 4

CHM 230 - Chemistry II Credits: 4

PHYS 213 - Engineering Physics I Credits: 5

PHYS 214 - Engineering Physics II Credits: 5

## **QUANTITATIVE STUDIES (11 credit hours)**

MATH 220 - Analytic Geometry and Calculus I Credits:

MATH 221 - Analytic Geometry and Calculus II Credits:

STAT 325 - Introduction to Statistics Credits: 3

## **COMMUNICATIONS (11 credit hours)**

ENGL 100 - Expository Writing I Credits: 3

ENGL 200 - Expository Writing II Credits: 3

COMM 105 - Public Speaking IA Credits: 2

Communication elective (choose one):

AGCOM 400 - Agricultural Business Communications

ENICE 51

ENGL 516 - Written Communication for the Sciences Credits: 3

COMM 311 - Business and Professional Speaking Credits: 3

#### **BUSINESS AND ECONOMICS (12 credit hours)**

ECON 110 - Principles of Macroeconomics Credits: 3 AGEC 120 - Agricultural Economics and Agribusiness

Credits: 3

01

(1)

(2)

GRSC 151 - Principles of Milling Laboratory Credits: 1 ECON 120 - Principles of Microeconomics Credits: 3 ACCTG 231 - Accounting for Business Operations GRSC 210 - CAD Flow Sheets for Grain Credits: 3 Processes Credits: 3 Management Elective (choose one): **(3)** GRSC 310 - Materials Handling Credits: 3 GRSC 530 - Management Applications in Grain GRSC 500 - Milling Science I Credits: 2 Processing Industries Credits: 3 MANGT 420 - Management Concepts Credits: 3 GRSC 501 - Milling Science I Laboratory Credits: 2 MANGT 530 - Industrial and Labor Relations Credits: 3 GRSC 502 - Milling Science II Credits: 2 MANGT 531 - Human Resources Management Credits: 3 GRSC 503 - Milling Science II Laboratory Credits: 2 GRSC 602 - Cereal Science Credits: 3 MILLING SCIENCE CORE REQUIREMENTS **(4)** (35-36 credit hours) GRSC 625 - Flour and Dough Testing Credits: 3 GRSC 100 - Freshman Orientation in Grain Science GRSC 530 Management Applications in the Grain Credits: 1 Processing Industries Credits: 3 GRSC 635 - Baking Science I Credits: 2 GRSC 150 - Principles of Milling Credits: 2 GRSC 636 - Baking Science I Laboratory Credits: 2 GRSC 151 - Principles of Milling Laboratory Credits: 1 GRSC 210 - CAD Flow Sheets for Grain Processes GRSC 651 - Food and Feed Product Protection Credits: 4 Credits: 3 GRSC 584 - Milling Processing Technology GRSC 310 - Materials Handling Credits: 3 Management Credits: 3 GRSC 500 - Milling Science I Credits: 2 GRSC 591 - Internship in Grain Science Credits: 1 GRSC 501 - Milling Science I Laboratory Credits: 2 MATH 220 - Analytic Geometry and Calculus GRSC 502 - Milling Science II Credits: 2 I Credits: 4 GRSC 503 - Milling Science II Laboratory Credits: 2 MATH 221 - Analytic Geometry and Calculus GRSC 591 - Internship in Grain Science Credits: 1 II Credits: 4 GRSC 602 - Cereal Science Credits: 3 PHYS 213 - Engineering Physics I Credits: 5 GRSC 625 - Flour and Dough Testing Credits: 3 PHYS 214 - Engineering Physics II Credits: 5 GRSC 635 - Baking Science I Credits: 2 STAT 325 - Introduction to Statistics Credits: 3 GRSC 636 - Baking Science I Laboratory Credits: 2 GRSC 651 - Food and Feed Product Protection Credits: 4 Free Elective Credits: 3 Choose one: **(5)** Social Sciences and Humanities Credits: 6 GRSC 555 - Cereal Food Plant Design Credits: 3 GRSC 556 - Pneumatic Conveying of Dry Solids Credits: GRSC 580 - Advanced Flow Sheets Credits: 2 GRSC 584 - Milling Processing Technology Management Credits: 3 CHEMISTRY OPTION REQUIREMENTS (24-25 credit hours) BIOCH 521 - General Biochemistry Credits: 3 BIOCH 522 - General Biochemistry Laboratory Credits: 2 CHM 500 - General Physical Chemistry Credits: 3 CHM 531 - Organic Chemistry I Credits: 3 CHM 532 - Organic Chemistry Laboratory Credits: 2 CHM 550 - Organic Chemistry II Credits: 3 FDSCI 727 - Chemical Methods of Food Analysis Credits: 2 Specialization Electives: 6 Specialization Electives: 6-7 **(6)** ACCTG 231 - Accounting for Business Operations ACCTG 231 - Accounting for Business Operations Credits: 3 Credits: 3 ACCTG 241 - Accounting for Investing and Financing ACCTG 241 - Accounting for Investing and Financing AGEC 318 - Food and Agribusiness Management AGEC 318 - Food and Agribusiness Management

Credits: 3

Credits: 3

AGEC 420 - Commodity Futures Credits: 3 AGEC 420 - Commodity Futures Credits: 3 AGEC 500 - Production Economics Credits: 3 AGEC 500 - Production Economics Credits: 3 AGEC 513 - Agricultural Finance Credits: 3 AGEC 513 - Agricultural Finance Credits: 3 AGEC 515 - Food and Agribusiness Marketing Credits: 3 AGEC 515 - Food and Agribusiness Marketing Credits: 3 AGEC 520 - Market Fundamentals and Futures/Options AGEC 520 - Market Fundamentals and Futures/Options Trading Credits: 3 Trading Credits: 3 AGEC 632 - Agribusiness Logistics Credits: 3 AGEC 632 - Agribusiness Logistics Credits: 3 AGRON 340 - Grain Grading Credits: 2 AGRON 340 - Grain Grading Credits: 2 COMM 311 Business and Professional Speaking Credits: 3 ENGL 516 Written Communication for the Sciences Credits: 3 GRSC 201 - Fundamental Baking Calculations Credits: 1 GRSC 491 - Faculty-Led Study Abroad Credits: 1-3 GRSC 491 - Faculty-Led Study Abroad Credits: 1-3 GRSC 499 - Undergraduate Research in Grain Science GRSC 499 - Undergraduate Research in Grain Science Credits: 0-3 Credits: 0-3 GRSC 530 - Management Applications in Grain **Processing Industries Credits: 3** GRSC 540 - Engineering Applications to Grain/Food GRSC 540 – Process Calculations in Food Systems Credits: 3 Products Credits: 3 GRSC 541 - Engineering Applications to Grain/Food GRSC 541 - Process Calculations in Food Systems Products Laboratory Credits: 1 Laboratory Credits: 1 GRSC 555 - Cereal Food Plant Design Credits: 3 GRSC 556 - Pneumatic Conveying of Dry Solids Credits: GRSC 560 - Electricity and Its Control for the Grain GRSC 560 - Electricity and Industrial Power Distribution Processing Industry Credits: 3 Credits: 3 GRSC 580 - Advanced Flow Sheets Credits: 2 GRSC 580 - Advanced Flow Sheets Credits: 2 GRSC 584 - Milling Processing Technology Management Credits: 3 GRSC 592 - Extended Internship in Grain Science GRSC 592 - Extended Internship in Grain Science Credits: 1 Credits: 1 GRSC 615 – Animal Food Safety Credits: 3 GRSC 620 - Extrusion Processing in the Food and Feed GRSC 620 - Extrusion Processing in the Food and Feed **Industries Credits: 4** Industries Credits: 4 GRSC 712 - Vibrational Spectroscopic Analysis and GRSC 712 - Vibrational Spectroscopic Analysis and Chemometrics Credits: 1-2 Chemometrics Credits: 1-2 GRSC 713 - Contemporary Chromatographic Analysis of GRSC 713 - Contemporary Chromatographic Analysis of Food Credits: 1 Food Credits: 1 GRSC 745 - Fundamentals of Bioprocessing Credits: 3 GRSC 745 - Fundamentals of Bioprocessing Credits: 3 LEAD 212 - Introduction to Leadership Concepts Credits: LEAD 350 - Culture and Context in Leadership Credits: 3 MANGT 390 - Business Law I Credits: 3 MANGT 390 - Business Law I Credits: 3 MANGT 420 - Management Concepts Credits: 3 MANGT 420 - Management Concepts Credits: 3 MANGT 530 - Industrial and Labor Relations Credits: 3 MANGT 530 - Industrial and Labor Relations Credits: 3 MANGT 531 - Human Resources Management Credits: 3 MANGT 531 - Human Resources Management Credits: 3 FREE ELECTIVE Credits: 3 SOCIAL SCIENCES AND HUMANITIES Credits: 6

(Must be taken from more than one department)

AMETH – AMETH 160 to 501

COMM – COMM 320 to 535

ANTH – Any course ARCH – ARCH 301 ART – Any course

DANCE – Any course DEN – DEN 325, 450 ECON - ECON 120 to 799 ENGL – ENGL 150, 210 to 299, 310, 320 to 399, 420 to 499, 536 to 599, 605 to 660, 670 to 695, 700 to 760, 790 ENVD – ENVD 250, 251, 655, 670, 671 FSHS – Any course GEOG – GEOG 100, 200, 201, 300 to 799 GWSS – Any course HIST – Any course <u> Modern Language – Any course</u> MUSIC – Any course PHILO – Any course POLSC – Any course PSYCH – Any course SOCIO – Any course SOCWK – Any course THTRE – Any course NOTE **(7)** Up to half of the credits required for a four-year degree Six of the hours must be from classes at the 300 level or above. Requirements for transfer students vary depending may be completed at an accredited two-year institution. Each student must complete at least 30 K-State resident Must satisfy K-State 8 general education requirements. credits to be considered for a degree from K-State. A student must complete 20 of the last 30 hours of resident credits through K-State. In other words, no more than 10 hours of transfer credit hours may be applied toward the last 30 hours you take for your degree. A minimum of 45 hours must be taken at the course level of 300 or above. Each student must satisfy K-State 8 general education requirements. K-State 8 can be met by both K-State and transfer courses. Total credit hours required for graduation: (128)

Total credit hours required for graduation: (129)

on transfer hours accepted by K. State.

## RATIONALE:

NOTE

- (1) Further course categorization was made. Current curriculum does not have categories that are descriptive of the requirements. "General requirements" overall category has been replaced with several specific categories and titled as "natural sciences", "quantitative studies", "communications", business and economics", "milling science core requirements", and "chemistry option requirements".
- (2) A communication elective block was added. MSM did not have any communication course after COMM 105/106 which was a concern regarding soft skills of our students.
- (3) A management elective block was added. MSM Cereal Option majors did not have any room for taking management/business courses. This elective block adds flexibility to students' selection of management electives as well as adding uniformity to the management electives required across all three departmental majors.
- (4) Changes in MSM core requirements.

GRSC 101 Introduction to Grain Science and Industry was dropped from core requirement for two reasons. (i) GRSC 150/151 Principles of Milling and Lab serve as an introduction class for the milling science majors. (ii) Among the three GSI majors MSM is the most prescribed and

tight curriculum. The three-hours gained from GRSC 101 will be used to add a communication elective as explained above.

GRSC 530 was moved from core requirement to the newly added *management electives* block.

- (5) MSM Cereal Option majors are not able to take all of the higher level courses in core milling areas courses (GRSC 555, 556, 580 and 584) after GRSC 502/503 Mill Science II and Lab. This block will let students to choose one course from four alternatives rather than offering GRSC 584 as their only option.
- (6) Several new courses were added to the *specialization electives*: LEAD 212, 350, GRSC 555, 556, 50, 584, 615, and the entire list of the management electives.

LEAD 212, 350 will provide another option for our students to fulfill the global issues and diversity section of the K-State 8.

The courses listed under the management electives were also added to this section so that the students may utilize their unused management electives as specialization electives.

GRSC 201 Fundamental Baking calculations was deleted from the specialization electives since MSM students rarely, if ever, enroll in GRSC 201.

- (7) Graduation requirements were summarized in this section to provide quick guidelines for the advisors and the students.
- (8) Other changes. There are several corrections made due to "course title" changes which are concurrently addressed in Fall 2016 GSI course proposals.

IMPACT:

- (1), (4), (5), (7), and (8). No impact on other departments.
- (2), (3), (6). The following Department Heads were contacted on October 3, 2016 regarding the proposed curriculum changes.

BUS (Dr. Chwen Sheu, csheu@ksu.edu and CBA Office of Student Services, cbastusv@ksu.edu) - Dr. Sheu responded that the Department of Management supports the use of ENTRP 340.

LEAD (Dr. Mary Hale Tolar, mtolar@ksu.edu) - She responded in support of the use of LEAD 212 and 350.

**EFFECTIVE** 

Fall 2017 DATE:

#### Milling Science and Management (B.S.) - Operations Option

FROM: TO:

#### **GENERAL REQUIREMENTS**

ACCTG 231 - Accounting for Business

Operations Credits: 3

AGEC 120 - Agricultural Economics and

Agribusiness Credits: 3

AGRON 340 - Grain Grading Credits: 2

BIOL 198 - Principles of Biology Credits: 4

BIOL 455 - General Microbiology Credits: 4

CHM 210 - Chemistry I Credits: 4

CHM 230 - Chemistry II Credits: 4

BIOCH 265 - Introductory Organic and

Biochemistry Credits: 5

CHM 350 - General Organic Chemistry Credits: 3

and

#### NATURAL SCIENCES (29 credit hours)

BIOL 198 - Principles of Biology Credits: 4

BIOL 455 - General Microbiology Credits: 4

CHM 210 - Chemistry I Credits: 4

CHM 230 - Chemistry II Credits: 4

BIOCH 265 - Introductory Organic and Biochemistry

Credits: 5

CHM 350 - General Organic Chemistry Credits: 3

CHM 351 - General Organic Chemistry Laboratory

Credits: 2

PHYS 113 - General Physics I Credits: 4

PHYS 114 - General Physics II Credits: 4

## **QUANTITATIVE STUDIES (7 credit hours)**

MATH 220 - Analytic Geometry and Calculus I Credits:

**(1)** 

CHM 351 - General Organic Chemistry		
	STAT 325 - Introduction to Statistics Credits: 3	
Laboratory Credits: 2	COMMUNICATIONS (11 credit hours)	
COMM 105 - Public Speaking IA Credits: 2	ENGL 100 - Expository Writing I Credits: 3	
ECON 110 - Principles of Macroeconomics Credits: 3	ENGL 200 - Expository Writing II Credits: 3	
ENGL 100 - Expository Writing I Credits: 3	COMM 105 - Public Speaking IA Credits: 2	(2)
ENGL 200 - Expository Writing II Credits: 3	Communication elective (choose one):  AGCOM 400 - Agricultural Business Communications	(2)
GRSC 100 - Grain Science & Industry Orientation Credits: 1	Credits: 3	
GRSC 101 Introduction to Grain Science and	ENGL 516 - Written Communication for the Sciences	
Industry Credits: 3	Credits: 3 COMM 311 - Business and Professional Speaking	
GRSC 150 - Principles of Milling Credits: 2	Credits: 3	
GRSC 151 - Principles of Milling Laboratory Credits: 1		
GRSC 210 - CAD Flow Sheets for Grain	BUSINESS AND ECONOMICS (12 credit hours)	
Processes Credits: 3	ACCTG 231 - Accounting for Business Operations Credits: 3	
GRSC 310 - Materials Handling Credits: 3	AGEC 120 - Agricultural Economics and Agribusiness	
GRSC 405 - Grain Analysis Techniques Credits: 2	Credits: 3	
GRSC 500 - Milling Science I Credits: 2	or	
GRSC 501 - Milling Science I Laboratory Credits: 2	ECON 120 - Principles of Microeconomics Credits: 3 ECON 110 - Principles of Macroeconomics Credits: 3	
GRSC 502 - Milling Science II Credits: 2	Management Elective (choose one):	(3)
GRSC 503 - Milling Science II Laboratory Credits: 2	GRSC 530 - Management Applications in Grain	(-)
GRSC 530 Management Applications in the Grain	Processing Industries Credits: 3	
Processing Industries Credits: 3	MANGT 420 - Management Concepts Credits: 3 MANGT 530 - Industrial and Labor Relations Credits: 3	
GRSC 540 - Engineering Applications to Grain/Food	MANGT 530 - Industrial and Labor Relations Credits: 3  MANGT 531 - Human Resources Management Credits: 3	
Products Credits: 3		
GRSC 541 Engineering Applications to Grain/Food Products Laboratory Credits: 1	MILLING SCIENCE CORE REQUIREMENTS	(4)
-	(33 credit hours)	
L GRSC 555 - Cereal Food Plant Design and	GRSC 100 - Freshman Orientation in Grain Science	
GRSC 555 - Cereal Food Plant Design and Construction <b>Credits:</b> 3	GRSC 100 - Freshman Orientation in Grain Science Credits: 1	
	Credits: 1	
Construction Credits: 3	Credits: 1  GRSC 150 - Principles of Milling Credits: 2	
Construction <b>Credits:</b> 3 GRSC 556 - Pneumatic Conveying of Dry Solids <b>Credits:</b> 2 GRSC 560 - Electricity and Its Control for the Grain	Credits: 1  GRSC 150 - Principles of Milling Credits: 2 GRSC 151 - Principles of Milling Laboratory Credits: 1	
Construction Credits: 3 GRSC 556 - Pneumatic Conveying of Dry Solids Credits: 2 GRSC 560 - Electricity and Its Control for the Grain Processing Industry Credits: 3	Credits: 1  GRSC 150 - Principles of Milling Credits: 2	
Construction Credits: 3 GRSC 556 - Pneumatic Conveying of Dry Solids Credits: 2 GRSC 560 - Electricity and Its Control for the Grain Processing Industry Credits: 3 GRSC 580 - Advanced Flow Sheets Credits: 2	Credits: 1  GRSC 150 - Principles of Milling Credits: 2  GRSC 151 - Principles of Milling Laboratory Credits: 1  GRSC 210 - CAD Flow Sheets for Grain Processes  Credits: 3  GRSC 310 - Materials Handling Credits: 3	
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Construction Credits: 3 GRSC 556 - Pneumatic Conveying of Dry Solids Credits: 2 GRSC 560 - Electricity and Its Control for the Grain Processing Industry Credits: 3 GRSC 580 - Advanced Flow Sheets Credits: 2 GRSC 584 - Milling Processing Technology Management Credits: 3 GRSC 591 - Internship in Grain Science Credits: 1 GRSC 602 - Cereal Science Credits: 3 GRSC 625 - Flour and Dough Testing Credits: 3 GRSC 635 - Baking Science I Credits: 2 GRSC 636 - Baking Science I Laboratory Credits: 2 GRSC 651 - Food and Feed Product Protection Credits: 4 MATH 220 - Analytic Geometry and Calculus I Credits: 4 PHYS 113 - General Physics I Credits: 4 PHYS 114 - General Physics II Credits: 4	GRSC 150 - Principles of Milling Credits: 2 GRSC 151 - Principles of Milling Laboratory Credits: 1 GRSC 210 - CAD Flow Sheets for Grain Processes Credits: 3 GRSC 310 - Materials Handling Credits: 3 GRSC 500 - Milling Science I Credits: 2 GRSC 501 - Milling Science I Laboratory Credits: 2 GRSC 502 - Milling Science II Credits: 2 GRSC 503 - Milling Science II Laboratory Credits: 2 GRSC 504 - Internship in Grain Science Credits: 1 GRSC 605 - Cereal Science Credits: 3 GRSC 625 - Flour and Dough Testing Credits: 3 GRSC 635 - Baking Science I Credits: 2 GRSC 636 - Baking Science I Laboratory Credits: 2 GRSC 651 - Food and Feed Product Protection Credits: 4  OPERATIONS OPTION REQUIREMENTS (25 credit hours) AGRON 340 - Grain Grading Credits: 2 GRSC 405 - Grain Analysis Techniques Credits: 2	(5)
Construction Credits: 3 GRSC 556 - Pneumatic Conveying of Dry Solids Credits: 2 GRSC 560 - Electricity and Its Control for the Grain Processing Industry Credits: 3 GRSC 580 - Advanced Flow Sheets Credits: 2 GRSC 584 - Milling Processing Technology Management Credits: 3 GRSC 591 - Internship in Grain Science Credits: 1 GRSC 602 - Cereal Science Credits: 3 GRSC 625 - Flour and Dough Testing Credits: 3 GRSC 635 - Baking Science I Credits: 2 GRSC 636 - Baking Science I Laboratory Credits: 2 GRSC 651 - Food and Feed Product Protection Credits: 4 MATH 220 - Analytic Geometry and Calculus I Credits: 4 PHYS 113 - General Physics I Credits: 4 PHYS 114 - General Physics II Credits: 4	GRSC 150 - Principles of Milling Credits: 2 GRSC 151 - Principles of Milling Laboratory Credits: 1 GRSC 210 - CAD Flow Sheets for Grain Processes Credits: 3 GRSC 310 - Materials Handling Credits: 3 GRSC 500 - Milling Science I Credits: 2 GRSC 501 - Milling Science I Laboratory Credits: 2 GRSC 502 - Milling Science II Credits: 2 GRSC 503 - Milling Science II Laboratory Credits: 2 GRSC 503 - Milling Science II Laboratory Credits: 2 GRSC 505 - Internship in Grain Science Credits: 1 GRSC 602 - Cereal Science Credits: 3 GRSC 625 - Flour and Dough Testing Credits: 3 GRSC 635 - Baking Science I Credits: 2 GRSC 636 - Baking Science I Laboratory Credits: 2 GRSC 651 - Food and Feed Product Protection Credits: 4  OPERATIONS OPTION REQUIREMENTS (25 credit hours) AGRON 340 - Grain Grading Credits: 2	(5)

	GRSC 555 - Cereal Food Plant Design Credits: 3 GRSC 556 - Pneumatic Conveying of Dry Solids Credits: 2 GRSC 560 - Electricity and Industrial Power Distribution Credits: 3 GRSC 580 - Advanced Flow Sheets Credits: 2 GRSC 584 - Milling Processing Technology Management Credits: 3
Specialization Electives:-4 ACCTG 241 - Accounting for Investing and Financing Credits: 3 ACCTG 331 - Intermediate Accounting Processes Credits: 3 AGEC 318 - Food and Agribusiness Management Credits: 3 AGEC 420 - Commodity Futures Credits: 3 AGEC 513 - Agricultural Finance Credits: 3 AGEC 515 - Food and Agribusiness Marketing Credits: 3 AGEC 520 - Market Fundamentals and Futures/Options Trading Credits: 3 AGEC 632 - Agribusiness Logistics Credits: 3	Specialization Electives: 5 ACCTG 241 - Accounting for Investing and Financing Credits: 3 ACCTG 331 - Intermediate Accounting Processes Credits: 3 AGEC 318 - Food and Agribusiness Management Credits: 3 AGEC 420 - Commodity Futures Credits: 3 AGEC 513 - Agricultural Finance Credits: 3 AGEC 515 - Food and Agribusiness Marketing Credits: 3 AGEC 520 - Market Fundamentals and Futures/Options Trading Credits: 3 AGEC 632 - Agribusiness Logistics Credits: 3
CHM 371 - Chemical Analysis Credits: 4  COMM 311 — Business and Professional Speaking  Credits: 3  ENGL 516 — Written Communication for the Sciences  Credits: 3  GRSC 201 — Fundamental Baking Calculations Credits: 1  GRSC 491 - Faculty-Led Study Abroad Credits: 1-3  GRSC 499 - Undergraduate Research in Grain Science  Credits: 0-3	GRSC 491 - Faculty-Led Study Abroad Credits: 1-3 GRSC 499 - Undergraduate Research in Grain Science Credits: 0-3 GRSC 530 - Management Applications in Grain Processing Industries Credits: 3 GRSC 541 - Process Calculations in Food Systems Laboratory Credits: 1
GRSC 592 - Extended Internship in Grain Science Credits: 1	GRSC 592 - Extended Internship in Grain Science Credits: 1 GRSC 615 Animal Food Safety Credits: 3
GRSC 620 - Extrusion Processing in the Food and Feed Industries Credits: 4 GRSC 712 - Vibrational Spectroscopic Analysis and Chemometrics Credits: 1-2 GRSC 713 - Contemporary Chromatographic Analysis of Food Credits: 1 GRSC 745 - Fundamentals of Bioprocessing Credits: 3	GRSC 620 - Extrusion Processing in the Food and Feed Industries Credits: 4 GRSC 712 - Vibrational Spectroscopic Analysis and Chemometrics Credits: 1-2 GRSC 713 - Contemporary Chromatographic Analysis of Food Credits: 1 GRSC 745 - Fundamentals of Bioprocessing Credits: 3 LEAD 212 Introduction to Leadership Concepts Credits: 2-3 LEAD 350 Culture and Context in Leadership Credits: 3
MANGT 390 - Business Law I Credits: 3 MANGT 420 - Management Concepts Credits: 3 MANGT 530 - Industrial and Labor Relations Credits: 3 MANGT 531 - Human Resources Management Credits: 3	MANGT 390 - Business Law I Credits: 3 MANGT 420 - Management Concepts Credits: 3 MANGT 530 - Industrial and Labor Relations Credits: 3 MANGT 531 - Human Resources Management Credits: 3
Free Elective Credits: 3	Free Elective Credits: 3
Social Sciences and Humanities Credits: 9	Social Sciences and Humanities Credits: 9 (Must be taken from more than one department)

**(6)** 

AMETH – AMETH 160 to 501

ANTH – Any course

ARCH – ARCH 301

ART – Any course

COMM – COMM 320 to 535

DANCE – Any course

<u>DEN – DEN 325, 4</u>50

ECON - ECON 120 to 799

ENGL – ENGL 150, 210 to 299, 310, 320 to 399, 420 to

499, 536 to 599, 605 to 660, 670 to 695, 700 to 760, 790

to 799

ENVD – ENVD 250, 251, 655, 670, 671

FSHS – Any course

GEOG – GEOG 100, 200, 201, 300 to 799

GWSS – Any course

HIST – Any course

Modern Language – Any course

MUSIC – Any course

PHILO – Any course

POLSC – Any course

PSYCH – Any course

SOCIO – Any course

SOCWK – Any course

THTRE – Any course

#### NOTE

Class work must include a minimum of 18 hours of classes from the approved list of K. State University K. State 8 General Education classes and must be taken at K. State. Six of the hours must be from classes at the 300 level or above. Requirements for transfer students vary depending on transfer hours accepted by K. State.

#### NOTE

- Up to half of the credits required for a four-year degree may be completed at an accredited two-year institution.
- Each student must complete at least 30 K-State resident credits to be considered for a degree from K-State. A student must complete 20 of the last 30 hours of resident credits through K-State. In other words, no more than 10 hours of transfer credit hours may be applied toward the last 30 hours you take for your degree.
- A minimum of 45 hours must be taken at the course level of 300 or above.
- Each student must satisfy K-State 8 general education requirements. K-State 8 can be met by both K-State and transfer courses.

Total credit hours required for graduation: (129)

**Total credit hours required for graduation: (129)** 

#### RATIONALE:

- (1) Further course categorization was made. Current curriculum does not have categories that are descriptive of the requirements. "General requirements" overall category has been replaced with several specific categories and titled as "natural sciences", "quantitative studies", "communications", business and economics", "milling science core requirements", and "operations option requirements".
- (2) A *communication elective block* was added. MSM did not have any communication course after COMM 105/106 which was a concern regarding soft skills of our students.
- (3) A management elective block was added. This elective block adds flexibility to students' selection of management electives as well as adding uniformity to the management electives required across all three departmental majors.
- (4) Changes in MSM core requirements.

GRSC 101 Introduction to Grain Science and Industry was dropped from core requirement for two reasons. (i) GRSC 150/151 Principles of Milling and Lab serve as an introduction class for the milling science majors. (ii) Among the three GSI majors MSM is the most prescribed and

**(7)** 

tight curriculum. The three-hours gained from GRSC 101 will be used to add a *communication elective* as explained above.

GRSC 530 was moved from core requirement to the newly added management electives block.

- (5) GRSC 541 was moved from MSM Operation Option requirement to the specialization elective block.
- **(6)** New courses were added to the *specialization electives*: LEAD 212, 350, GRSC 615, and the entire list of the management electives.

LEAD 212, 350 will provide another option for our students to fulfill the global issues and diversity section of the K-State 8.

The courses listed under the management electives were also added to this section so that the students may utilize their unused management electives as specialization electives.

GRSC 201 Fundamental Baking Calculations was deleted from the specialization electives since MSM students rarely, if ever, enroll in GRSC 201.

- (7) Graduation requirements were summarized in this section to provide quick guidelines for the advisors and the students.
- (8) Other changes. There are several corrections made due to "course title" changes which are concurrently addressed in Fall 2016 GSI course proposals.

IMPACT:

- (1), (4), (5), (7), and (8). No impact on other departments.
- (2), (3), (6). The following Department Heads were contacted on October 3, 2016 regarding the proposed curriculum changes.

ACCTG (Dr. Brett Wilkinson) – responded that the Department of Accounting supports the continued listing of ACCTG 231, 241 and 331 provided enrollments do not change.

BUS (Dr. Chwen Sheu, csheu@ksu.edu and CBA Office of Student Services, cbastusv@ksu.edu) - Dr. Sheu responded that the Department of Management supports the use of ENTRP 340.

LEAD (Dr. Mary Hale Tolar, mtolar@ksu.edu) - She responded in support of the use of LEAD 212 and 350.

**EFFECTIVE** 

DATE: Fall 2017

B.S. in (Wildlife and Outdoor Enterprise Management)

FROM: TO:	
General Requirements (67 credit hours)	General Requirements (67 credit hours)
Communications (9 credit hours)	Communications (9 credit hours)
COMM 106 – Public Speaking I (3)	COMM 106 – Public Speaking I (3)
ENGL 100 – Expository Writing I (3)	ENGL 100 – Expository Writing I (3)
ENGL 200 – Expository Writing II (3)	ENGL 200 – Expository Writing II (3)
Natural Sciences (16 hours)	Natural Sciences (16 hours)
BIOL 198 – Principles of Biology (4)	BIOL 198 – Principles of Biology (4)
BIOL 201 – Organismic Biology (5)	BIOL 201 – Organismic Biology (5)
CHM 110 – General Chemistry (3)	CHM 110 – General Chemistry (3)
CHM 111 – General Chemistry Lab (1)	CHM 111 – General Chemistry Lab (1)
GEOL 100 – Earth in Action (3)	GEOL 100 – Earth in Action (3)
or	or
GEOG 300 – Geography of Tourism (3)	GEOG 300 – Geography of Tourism (3)
Social Systems (9 credit hours)	Social Systems (9 credit hours)
ECON 110 – Principles of Macroeconomics (3)	ECON 110 – Principles of Macroeconomics (3)
ECON 120 – Principles of Microeconomics (3)	ECON 120 – Principles of Microeconomics (3)
SOCIO 211 – Introduction to Sociology (3)	SOCIO 211 – Introduction to Sociology (3)
Off	
PSYCH 110 General Psychology 3	
Mathematics and Statistics (6 credit hours)	Mathematics and Statistics (6 credit hours)
MATH 100 – College Algebra (3)	MATH 100 – College Algebra (3)
STAT 350 – Business and Economics Statistics I (3)	STAT 350 – Business and Economics Statistics I (3)
<b>Business (15 credit hours)</b>	Business (15 credit hours)
ACCTG 231 – Accounting for Business Operations (3)	ACCTG 231 – Accounting for Business Operations (3)
ACCTG 241 – Accounting for Investment & Finance	ACCTG 241 – Accounting for Investment & Finance
(3)	(3)
FINAN 450 – Principles of Finance (3)	FINAN 450 – Principles of Finance (3)
MANGT 420 – Management Concepts (3)	MANGT 420 – Management Concepts (3)
MKTG 400 – Introduction to Marketing (3)	MKTG 400 – Introduction to Marketing (3)
Hospitality (12 credit hours)	Hospitality (12 credit hours)
HM 220 – Environmental Issues in Hospitality (3)	HM 220 – Environmental Issues in Hospitality (3)
HM 341 – Principles of Food Production Management	HM 341 – Principles of Food Production Management
(3)	(3)
HM 361 – Principles of Lodging Operations (3)	HM 361 – Principles of Lodging Operations (3)
HM 621 – Hospitality Law (3)	HM 621 – Hospitality Law (3)
Wildlife and Outdoor Enterprise Management Core	Wildlife and Outdoor Enterprise Management Core
( <mark>55</mark> credit hours)	( <u>51</u> credit hours)
Natural Resources Management (35 credit hours)	Natural Resources Management (46 credit hours)
AGRON 305 – Soils (4)	AGRON 305 – Soils (4)
AGRON 501 – Range Management (3)	AGRON 501 – Range Management (3)

ASI 635 – Gamebird Production & Management (3) BIOL 433 – Introduction to Fisheries, Wildlife, & Conservation Biology (3)

PMC 275 – Introduction to Natural Resource

Management (3)

PMC 330 – Dendrology (3)

WOEM 250 - Introduction to Wildlife & Outdoor

Enterprise Management (1)

WOEM 570 – Internship for WOEM (6-10)

WOEM 590 Problems in WOEM (0-6)

WOEM 595 – WOEM Senior Seminar (1)

WOEM 620 – Human-Wildlife Conflicts (4)

# Outdoor Skills, Guiding and Operations Courses (20 credit hours)

#### Fishing

WOEM 565 — Principles & Practices of Freshwater Fishing and Guiding (3)

## **Hunting**

WOEM 204 Hunter Education Instructor (1)

WOEM 207 - Wildlife Habitat/Food Plot Installation and

Maintenance (2)

WOEM 555 – Big Game Management (3)

WOEM 560 – Upland Gamebird Management (3)

WOEM 561 – Waterfowl and Wetlands Management (3)

#### **Shooting Sports**

WOEM 201 – Firearms, Cartridges & Ballistics (1)

WOEM 202 – Rifle & Handgun Range Design,

Construction & Operations (1)

WOEM 203 – Bowhunting Equipment & Skills (1)

WOEM 205 – Sporting Clays Range Development &

Operations (1)

WOEM 206 – Trap & Skeet Range Development &

Operations (1)

#### **Unrestricted electives (8 credit hours)**

Total Credit hours required for graduation (130)

ASI 635 – Gamebird Production & Management (3 BIOL 433 – Introduction to Fisheries, Wildlife, &

Conservation Biology (3)

PMC 275 – Introduction to Natural Resource

Management (3)

PMC 330 – Dendrology (3)

WOEM 250 - Introduction to Wildlife & Outdoor

Enterprise Management (1)

WOEM 570 – Internship for WOEM (6)

WOEM 595 – WOEM Senior Seminar (1)

WOEM 620 – Human-Wildlife Conflicts (4)

WOEM 207 – Introduction to Wildlife Habitat

Management (2)

WOEM 555 – Big Game Management (3)

WOEM 560 – Upland Gamebird Management (3)

WOEM 561 – Waterfowl and Wetlands Management

(3)

WOEM 562 – Advanced Wildlife Habitat Management

<u>(4)</u>

#### **Shooting Sports (5 credit hours)**

WOEM 201 – Firearms, Cartridges & Ballistics (1)

WOEM 202 - Rifle & Handgun Range Design,

Construction & Operations (1)

WOEM 203 – Bowhunting Equipment & Skills (1)

WOEM 205 – Sporting Clays Range Development &

Operations (1)

WOEM 206 – Trap & Skeet Range Development &

Operations (1)

#### **Unrestricted electives (8 credit hours)**

Total Credit hours required for graduation (126)

#### **RATIONALE**

This curriculum is revised to reduce total credit hours required, to reflect course name changes, the addition of a new advanced habitat management course, and to increase the scientific and theoretical rigor of the Wildlife and Outdoor Enterprise Management degree. However, the scope of the Wildlife and Outdoor Enterprise Management degree program remains to train professionals to manage private outdoor enterprises. PSYCH 110 is dropped as a Social Systems option because the course does not satisfy the Human Diversity within the U.S. K-State 8 requirement, while SOCIO 211 does. Students in the past have opted to take PSYCH 110 over SOCIO 211 not knowing that SOCIO 211 is the only course in

our required curriculum that satisfies the Human Diversity K-State 8, and have then been unable to graduate on time. WOEM 204 is dropped from the curriculum because we were made aware that Hunter Education Instructor certification is available free of charge from Kansas Department of Wildlife, Parks, and Tourism. WOEM 565 is replaced with WOEM 562 to better prepare students for the WOEM industry, increase the rigor of the WOEM curriculum, and reflect the expertise of WOEM teaching faculty. The reduction in total credit hours required for graduation reflects a previous reduction in required credits for WOEM 570 from 10 to 6 hours, and will better align the WOEM curriculum with the majority of other degrees in the College of Agriculture.

**IMPACT** 

All substantive changes are internal to the Horticulture and Natural Resources Department. While the Wildlife and Outdoor Enterprise Management degree has similarities to degree programs offered in the Division of Biology, WOEM faculty are in ongoing discussions with faculty in the Division of Biology who approve of these changes.

EFFECTIVE DATE Fall 2017

## Plant Pathology

Plant Pathology Minor

FROM: TO:

# Required courses (5 credit hours):

PLPTH 500 - Principles of Plant Pathology

**Credits: 3** 

PLPTH 585 - Crop Diseases Credits: 2

or

PLPTH 590 - Landscape Diseases Credits: 2

# Plus three additional hours in plant pathology, such as:

PLPTH 300 - Microbes, Plants, and the Human Perspective Credits: 3

PLPTH 587 - Turfgrass Diseases and Their Management **Credits:** 1

or

HORT 587 - Turfgrass Diseases and Their

Management Credits: 1

PLPTH 610 - Biotechnology Credits: 3

or

AGRON 610 - Biotechnology Credits: 3

PLPTH 730 - Plant Nematology **Credits:** 3

PLPTH 732 - Introduction to Plant Resistance to

Pests Credits: 2

PLPTH 755 - Plant Resistance to Diseases

Credits: 2

# At least 7 additional credit hours from the following:

Any other course in Plant Pathology

AGRON 330 - Weed Science Credits: 3

AGRON 645 - Soil Microbiology Credits: 3

AGRON 646 - Soil Microbiology Laboratory

Credits: 1

BIOL 455 - General Microbiology Credits: 4

BIOL 604 - Biology of the Fungi Credits: 3

ENTOM 300 - Economic Entomology Credits: 2

<del>or</del>-3

or

ENTOM 312 - General Entomology **Credits:** 3

ENTOM 320 - Horticultural Entomology

Credits: 3

# **Plant Pathology Minor:**

## **Required courses (5 credit hours):**

PLPTH 500 - Principles of Plant Pathology

**Credits: 3** 

PLPTH 585 - Crop Diseases Credits: 2

or

PLPTH 590 - Landscape Diseases Credits: 2

# Plus three additional hours in plant pathology:

PLPTH 495 - Undergraduate Research in Plant

Pathology Credits: 0-3

PLPTH 587 - Turfgrass Diseases and Their

Management Credits: 1

or

HORT 587 - Turfgrass Diseases and Their

Management Credits: 1

PLPTH 599 - Problems in Plant Pathology

Credits: 1-3

PLPTH 610 - Biotechnology Credits: 3

or

AGRON 610 - Biotechnology Credits: 3

PLPTH 730 - Plant Nematology Credits: 3

PLPTH 732 - Introduction to Plant Resistance to

Pests Credits: 2

PLPTH 755 - Plant Resistance to Diseases

Credits: 2

## **Select 7 additional credits from:**

Any other course in Plant Pathology

AGRON 330 - Weed Science Credits: 3

AGRON 645 - Soil Microbiology Credits: 3

AGRON 646 - Soil Microbiology Laboratory

Credits: 1

BIOL 455 - General Microbiology Credits: 4

## **BIOL 500 - Plant Physiology Credits: 3**

BIOL 604 - Biology of the Fungi **Credits:** 3

**BIOL 675 - Genetics of Microorganisms** 

**Credits: 3** 

**BIOL 676 - Molecular Genetics Lab Credits: 3** 

**BIOL 687 - Microbial Ecology Credits: 3** 

**BIOL 690 - Microbial Physiology and** 

**Metabolism Credits: 2** 

**BIOL 705 - Eukaryotics Genetics Credits: 3** 

ENTOM 620 - Insecticides: Properties and Laws

Credits: 2

ENTOM 745 - Plant Resistance to Insects

Credits: 2

ENTOM 767 - Insect Pest Management Credits:

3

HORT 582 - Foundations of Horticultural Pest

Management Credits: 1

HORT 588 - Turfgrass Weeds and Their

Management Credits: 1

HORT 589 - Turfgrass Insects and Their

Management Credits: 1

**Total credit hours: (15)** 

ENTOM 300 - Economic Entomology Credits: 3

or

ENTOM 312 - General Entomology **Credits:** 3 ENTOM 320 - Horticultural Entomology **Credits:** 

ENTOM 320 - Horticultural Entomology Credits

ENTOM 620 - Insecticides: Properties and Laws

Credits: 2

ENTOM 745 - Plant Resistance to Insects

Credits: 2

ENTOM 767 - Insect Pest Management Credits:

3

HORT 582 - Foundations of Horticultural Pest

Management Credits: 1

HORT 588 - Turfgrass Weeds and Their

Management Credits: 1

HORT 589 - Turfgrass Insects and Their

Management Credits: 1

**Total credit hours: (15)** 

RATIONALE:

The faculty member who taught PLPTH 300 retired and the course will no longer

be taught by the department. Since this course needed to be dropped, the department reviewed the Plant Pathology minor and took the opportunity to

include some additional Biology courses.

IMPACT: PLPTH 300 is one of six elective plant pathology courses within the minor, so

dropping it will not have an impact on the minor. Six additional courses from Biology were included as electives. Ruth Welti in Biology was contacted on September 23, 2016 and Dave Rintoul was contacted on October 7, 2016 seeking their approval for the inclusion of Biology courses in the Plant Pathology minor.

No response has been received to date.

EFFECTIVE DATE: Fall 2017

# **College of Engineering (11-3-16)**

Non-Expedited COURSE PROPOSALS Courses Numbered 000-599

# **New Courses**

# **Department of Electrical and Computer Engineering**

Add:

BME 001 - New Student Assembly.

Credits: 0

This course addresses the emphasis areas in the KSU biomedical engineering (BME) curriculum and facilitates the formation of a community consisting of BME students and faculty. Students learn about biomedical research pursued by KSU faculty and become aware of BME experiential learning programs, professional societies, and job/internship opportunities.

#### Note

The course meets every other week.

#### **Offered**

Fall

**UGE** course

No

## K-State 8

None

**Rationale:** This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering. This is the first-semester course for new BME students. It will function as an introduction to the field of BME, including an overview of current projects in our department. As a zero-hour class, it will not involve substantial coursework and will be "graded" on attendance. The goal is to provide an overview and also help foster a feeling of community/belonging among students in the department.

Effective: Fall 2017

Impact: None

## Add:

BME 200 – Introduction to Biomedical Engineering

## **Credits: 3**

Biomedical engineering addresses the application of engineering principles to challenges faced by the health care and life science communities. This course introduces students to the areas of study that comprise this broad field and provides students with guidance toward biomedical career opportunities. Topics of interest include the history of biomedical technology, medical devices, medical imaging, biomedical optics, biomechanics, biomaterials, tissue engineering, rehabilitation engineering, neural interfacing, prosthetics, assistive technology, telemedicine, home care, wearable devices, health care information technology, considerations for diverse populations, and medical ethics.

#### Note

Lecture

#### **Offered**

Fall

#### **UGE** course

No

#### K-State 8

Human Diversity within the US Historical Perspectives

# Rationale for Tags:

D = Human Diversity within the US: Biomedical engineers are tasked with creating medical care solutions for an incredibly wide spectrum of users, and the diversity of this user base is germane from concept creation to product implementation. The cultures, ethnic backgrounds, religious perspectives, and socio-economic situations of individuals all affect the relative impact of a biomedical solution. Specific areas of interest with regard to diversity include the following: population- and ethnic-based access to health care services; health care services for the disabled and other vulnerable groups; telemedicine as a means to provide care to underserved populations; smartphone-based medical devices as a means to even the playing field for healthcare delivery; issues one must consider when designing devices for individuals with different skin colors; and cultural acceptability of medical devices and varying notions of intrusiveness. Diversity and medical ethics are closely intertwined in this design space, and such issues will be addressed in this course.

 $\underline{\text{H} = \text{Historical Perspectives:}}$  This course will offer historical perspectives in areas such as the following: health care delivery over the ages and the significant advances that have occurred in the last 100 years; the historical use of medical devices for research and the ethical considerations that have led to internal review boards and informed consent; 'age-old' medical practices that continue to inform modern health care technology; and telemedicine as a means to re-enact personalized health care delivery as was the norm prior to the move toward centralized hospitals and clinics

**Rationale:** This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering. It will serve as an introduction to the field of biomedical engineering and give students an early view of the various facets of this broad field of study. In that role, the proposers trust

that the course will affirm students' choices to enroll in the biomedical engineering degree program and increase their excitement about the semesters to come. This course will essentially be a reworked version of the course *ECE 571 – Introduction to Biomedical Engineering*, which has served students in the KSU College of Engineering for more than 30 years and now supports 30 to 40 students every Spring in its new 3-credit format. In a similar role, BME 200 will be a course taken as an elective by students enrolled in non-BME degree programs, ideally leading to a Fall course section that accommodates 100 students, including students outside of engineering.

Impact: None

Effective: Fall 2017

Add:

BME 430 – Biomaterials

**Credits: 3** 

This course will provide an overview of interactions between materials and biological systems, techniques to assess biomaterial characteristics, and the role of biomaterial selection during the design of medical devices for select applications.

#### Note

Lecture

## **Offered**

Fall

**Requisite:** 

Pre-requisite: BIOL 198, CHM 230

**UGE** course

No

## K-State 8

No

**Rationale:** This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering.

**Impact:** Bio Ag Biomaterials **Effective:** Fall 2017

## Add:

BME 451 – Biomechanical Engineering

## Credits: 3

This course provides an introduction to the mechanics of biological tissues and systems at the macroscopic scale. It covers the structure and mechanics of biological tissue based on the principles of statics and dynamics, with an emphasis on bone, muscle, and connective tissue.

#### Note

Lecture

## **Offered**

Spring

# **Requisite:**

Pre-requisite: BIOL 198, PHYS 213, MATH 222

#### **UGE** course

No

## K-State 8

No

**Rationale:** This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering.

**Impact:** Kinesiology Department

Effective: Fall 2017

## Add:

BME 490 – Undergraduate BME Design Experience I

## Credits: 1

The undergraduate design courses are intended to be taken during the fall and spring semesters of each BME student's junior year. The first semester is designed for project selection and planning, and it includes a lecture component to cover important considerations such as human subject protections and electrical safety. The follow-on course, BME 491, will focus on the implementation of the design selected in 490.

## Note

Lecture

## **Offered**

Fall

## Requisite:

Pre-requisite: PHYS 214, BME 200 and Co-Req: BIOL 340 or KIN 360

#### UGE course

No

#### K-State 8

None

**Rationale:** This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering. The two-semester, junior-level undergraduate design experience is intended to give students an opportunity to implement skills learned in other courses. In this first semester, lectures will give students the basics of human safety and ethics considerations in biomedical engineering. Students will select a project for the following semester (BME491).

**Impact:** Biology and Kinesiology Department

Effective: Fall 2017

#### Add:

BME 491 – Undergraduate BME Design Experience II

#### Credits: 2

The undergraduate design courses are intended to be taken during the fall and spring semesters of each BME student's junior year. Students will participate in the guided design of a BME project selected in the previous semester. The course includes a lecture/meeting once per week, as well as a scheduled three-hour lab time for students to work on their design.

#### Note

Lab and Lecture

#### Offered

Spring

## Requisite:

Pre-requisite: BME 490 and (BIOL 340 or KIN 360)

#### UGE course

No

## K-State 8

None

**Rationale:** This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering. This is a lab/design course for BME students, designed as a follow-on to BME 490. Students will perform design projects under the supervision of one or more faculty members.

**Impact:** Biology and Kinesiology Department

**Effective:** Fall 2017

Add:

BME 575 – Clinical Systems Engineering

**Credits: 3** 

This course addresses the creation and use of biomedical "systems of systems" as applied in various health care delivery scenarios, including hospitals, home care settings, and environments that employ personalized wearable systems. The material focuses on technical areas typically associated with the field of "clinical engineering," emphasizing the use of design standards that promote system interoperability and reconfiguration. Hardware/software interfacing and information management will be addressed from the sensor level to the level of the clinical enterprise. The course will also address human elements related to such systems (e.g., human factors, safety, medical ethics, training, etc.) as well as global technical, political, and sociological issues that may promote or hinder their use in different countries and cultures.

#### Note

Lecture

#### **Offered**

Spring

**Requisite:** 

Pre-requisite: ECE 540 or equivalent

#### **UGE** course

No

## K-State 8

Ethical Reasoning and Responsibility Global Issues and Perspectives

 $\underline{E} = \underline{Ethical \ Reasoning \ and \ Responsibility:}}$  This course addresses a number of topics related to medical ethics: internal review boards (IRBs), informed consent, and human subject protection, especially in light of historical oversights; proper training and compliance for both patients and providers; management of intellectual property; medical data ownership and protection; medical device and procedure liability; and medical device regulation.

<u>G = Global Issues and Perspectives:</u> This course addresses global issues/constraints relevant to biomedical system design and use: international standards for device (hardware/software) interoperability; international disease classification codes; accepted standards for the storage of signals, images, patient demographic data, and medical histories; regulatory issues in different countries, including new device approvals; global deployment of biomedical systems where differences in culture, power grids, and information protection are germane; opportunities for clinical care in the developing world,

Rationale: This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering. The proposers intend this course to be taken late in the curriculum. Whereas earlier courses will focus on more partitioned elements of biomedical engineering, this course will address aggregate collections of devices (both hardware and software) that comprise clinical "systems of systems" and the interoperability principles that relate to their design and use. Further emphasis will be placed on human elements related to such systems (e.g., human factors, safety, medical ethics, training, etc.) as well as global technical, political, and sociological issues that may promote or hinder their use in different countries and cultures.

Impact: None

Effective: Fall 2017

Add:

BME 590 – Senior Design Experience I

Credits: 3

The two-semester BME senior design experience is a culminating design sequence intended for the last two semesters of each BME student's degree program. BME 590 – the first course in that sequence – integrates practice in verbal/written communication skills with the initiation of a collaborative design project to emulate a professional technical environment. The course addresses engineering ethics, design theory, project management, team dynamics, and socio-economic considerations related to design.

#### Note

Lecture

#### Offered

Fall and Spring

**Requisite:** 

Pre-requisite: ECE 540, BME 491 and ENGL 415

**UGE** course

No

#### K-State 8

Ethical Reasoning and Responsibility

Global Issues and Perspectives

Design ethics (E) will be addressed in the context of honorable business practices, intellectual property ownership, and the creation of products that meet both functional design requirements and safety constraints. This course will include the development of a business plan that requires an understanding of global issues (G), particularly for engineering outsourcing and global manufacturing and logistics.

**Rationale:** This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering. *BME 590 – Senior Design Experience I* will be the first course in a two-course sequence that offers a substantive, culminating design experience. The course will address design ethics, collaborative design, project management, and team dynamics, all of which are common to engineering

design teams regardless of sub-discipline. Therefore, in its initial implementation, this course will be cross-listed with *ECE 590 – Senior Design Experience I*, with the thought that the BME students will meet in the same classroom with ECE students. This arrangement should promote cross-disciplinary design teams, give the BME students a better sense of community, and help to minimize any additional instructor and facility loads imposed by the creation of the BME curriculum.

Impact: None

**Effective:** Fall 2017

Add:

BME 591 – Senior Design Experience II

**Credits: 3** 

The two-semester BME senior design experience is a culminating design sequence intended for the last two semesters of each BME student's degree program. BME 591 – the second course in that sequence – addresses the implementation and demonstration of the project design initiated in BME 590. The course includes oral presentations for design reviews and technical documentation, where the latter addresses project plans; design operations, analyses, architecture, and requirements; design descriptions; and a user manual.

#### Note

Lecture

#### Offered

Fall, Spring

**Requisite:** 

Pre-requisite: BME 590

**UGE** course

No

#### K-State 8

No

**Rationale:** This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering. *BME 591 – Senior Design Experience II* will be the second course in a two-course sequence that offers a substantive, culminating design experience. The primary purpose of this course is provide students with the framework to complete the design effort that they initiated in BME 590. This course will be cross-listed with *ECE 591 – Senior Design Experience II*, with the thought that the mentorship and resource needs of these BME students will mirror those of the ECE students. This arrangement should promote cross-disciplinary design teams, give the BME students a better sense of community, and help to minimize any additional instructor and facility loads imposed by the creation of the BME curriculum.

Impact: None

**Effective:** Fall 2017

## Add:

ECE 591 – Senior Design Experience II

Credits: 3

Second semester of the senior design experience that implements and demonstrates the project design begun in ECE 590. It includes oral presentations for design reviews and technical documentation such as Project Plan, Concept of Operations, Analyses, Architecture and Requirements, Design Descriptions, and User Manual.

#### Note

Lecture

## **Offered**

Fall and Spring

**Requisite:** 

Pre-requisite: ECE 590

## **UGE** course

No

## K-State 8

No

**Rationale:** Expand the current ECE 590 course to two semesters (this added course would be the second semester) to provide a better learning experience for the students, a longer time to develop their projects, and better conformance to ABET standards.

Impact: None

Effective: Spring 2018

## **Course Changes**

From:

# **ECE 590 - Senior Design Experience**

**Credits: 3** 

Integrates communications, both verbal and written, with ethics and a collaborative design project to emulate a technical professional environment.

## Note

Three hours recitation a week.

## Requisites

Prerequisite: ECE 511, 525, 540 and ENGL 415.

## **Typically Offered**

Fall, Spring

#### **UGE** course

No

## K-State 8

Ethical Reasoning and Responsibility

To:

# ECE 590 - Senior Design Experience I

**Credits: 3** 

Integrates communications, both verbal and written, with ethics and a collaborative design project to emulate a technical professional environment. <u>Introduces design theory, project management, team dynamics, and socio-economic context to design.</u>

#### Note

Three hours recitation a week.

## Requisites

Prerequisite: ECE 511, 525, 540 and ENGL 415.

## **Typically Offered**

Fall, Spring

## **UGE** course

No

## K-State 8

Ethical Reasoning and Responsibility Global Issues and Perspectives

**Rationale for K-State 8 tag:** The course will add the K-State 8 tag of G, "Global Issues and Perspectives," because it will include development of a business plan that requires an understanding of global issues, particularly for engineering outsourcing and global manufacturing and logistics.

**Rationale**: Expand this course to two semesters to provide a better learning experience for the students, longer opportunity to develop their projects, better conform to ABET standards, and include the K-State 8 tag "G" for Global Issues and Perspectives.

Impact: None

Effective: Fall 2017

# Non-Expedited COURSE PROPOSAL / Courses Numbered 600-999

# **Department of Electrical and Computer Engineering**

Add:

BME 674 – Medical Imaging

Credits: 3

This course addresses various modalities of medical imaging as an extension of biomedical instrumentation. Methods for image data acquisition, processing, and display form the core for this course, which also addresses industry standards for image storage and transmission. Diagnostic applications for medical images are emphasized along with safety and ethics issues that relate to the acquisition and management of biomedical image data.

## Note

Lecture

## **Offered**

**Spring** 

## **Requisite:**

Pre-requisite: ECE 512

#### **UGE** course

No

#### K-State 8

Natural and Physical Sciences

Rationale for K-State 8 tag: This course addresses the physical mechanisms involved in the creation of medical imaging data.

**Rationale:** This course is being proposed as part of the core curriculum for the undergraduate degree in Biomedical Engineering. The proposers intend this course to be taken late in the curriculum once a student has an established theoretical and computational base.

Impact: None

**Effective:** Fall 2017

# **Graduate Course and Curriculum additions and changes (11-1-16)**

#### **Non-Expedited Course Changes**

Department of Landscape Architecture and Regional & Community Planning (Master of Landscape Architecture Program, Non- & Post-Baccalaureate)

Course Change

Effective: Spring 2017

Impact on other units: Geography. Department contacted Geography department head who communicated that

there were no objections to listing GEOG 508 as a prerequisite for LAR 704.

#### Change From: Change To: LAR 704 Environmental Landscape Planning & Design LAR 704 Environmental Landscape Planning & Design Introduction to and understanding of environmental Introduction to and understanding of environmental planning, design and management of natural and social planning, design and management of natural and social landscape systems at a regional, watershed, or landscape systems beyond site scale. The course focuses ecosystem scale. Studies focus on systems inventory, on theories, techniques and processes for designing analysis and impact assessment, and geoprocessing sustainable landscapes and urban environments. theory and methods. Students will develop a final project starting with the conceptualization, through inventory, analysis and simulation, in order to develop a final design proposal. Credits: Credits: (<del>5</del>) (3) Pre-Requisites: **LAR 648** Pre-Requisites: LAR 580, or GEOG 508 or equivalent, or instructor permission When Offered: When Offered: Fall, Spring Fall, Spring K-State 8: None K-State 8: **Empirical and Quantitative** Reasoning; Natural and Physical Sciences K-State 8 Rationale: Empirical and Quantitative Reasoning; Natural and Physical Sciences (1) Apply quantitative methods for collecting, analyzing and synthesizing geospatial data to develop assessments of the physical environment and how a design or policy may impact the environment (2) Develop solutions (conceptual) by developing skills to support empirical data-driven design. Natural and Physical Sciences: (1) Students learn about basic landscape processes with regard to human, biotic and abiotic systems. (2) Students build knowledge

## **Department of Management**

**CHANGE FROM:** 

Rationale:

**MANGT 690** - International Management

planning problems

Credits: 3

Examination of business decision parameters and strategy in a multinational context. The influence of cultural, economic, political, and social differences on decision making and the operation of American

through review and inventory to support data-driven designs to address environmental

course and the proposed new course, LAR 580 will be the laboratory component.

Splitting LAR 704 (currently a 5 credit hour course) into two separate laboratory and studio based courses to provide students more flexibility. LAR 704 will remain the studio based

enterprises in the international environment.

#### Requisites

Prerequisite: FINAN 450, MANGT 420, MKTG 400, or FINAN 710.

**Typically Offered** 

Spring

**UGE** course

No

K-State 8

Global Issues and Perspectives

**Social Sciences** 

#### **CHANGE TO:**

#### **MANGT 590** - International Management

Credits: 3

Examination of business decision parameters and strategy in a multinational context. The influence of cultural, economic, political, and social differences on decision making and the operation of American enterprises in the international environment.

# Requisites

Prerequisite: FINAN 450, MANGT 420, MKTG 400.

**Typically Offered** 

Fall, Spring

**UGE** course

No

#### K-State 8

**Global Issues and Perspectives** 

Social Sciences

#### Rationale

This is a follow-up amendment to support the recently approved changes to the management major. This course number change will facilitate the needed increase in number of sections of MANGT 690 International Management offered each year by permitting qualified instructors to teach the course. A separate proposal is being submitted to create an equivalent graduate level course (MANGT 890 International Management) that will continue to be taught by a member of the graduate faculty.

## **Impact on Other Units**

None

#### **Effective Date**

Spring 2017

## Art

FROM: ART 628 – Foreign Studies in Art History. (1–6) I, II. Participation in art history study abroad. K-State 8: None. Pr.: 3 credit hours of art history and consent of instructor.

TO: ART 628 – Foreign Studies in Art History. (<u>3-6</u>) I, II, <u>S.</u> Participation in art history study abroad. K-State 8: <u>Aesthetic Interpretation</u>; Global Issues and Perspectives. Pr.: None.

K-STATE 8 RATIONALE: Students who take Art History as a study abroad course gain a perspective on cultural artifacts that is impossible to achieve through reproductions seen in the classroom. Students are able to more deeply develop their critical thinking skills by examining first hand the relationship between cultural

objects and the context within which they developed, be the subject (for instance) renaissance aft, the crafts of the bauhaus, or post modern conceptual art.

RATIONALE: By interacting directly with original art objects in their native contexts, students taking art history on a study abroad course are afforded one of the best ways to learn about art history. The department wants to open up this opportunity for students to earn credit for studying abroad to those who wish to engage first hand with visual culture and to those who may not have the room in their course schedules to take more than one art history class.

IMPACT: None

EFFECTIVE DATE: Spring 2017

FROM: ART 630 – Foreign Studies in Studio Art. (<del>1-6)</del> I, II, S. Participation in studio art study abroad. K-State 8:-None. Pr.: 3 credits studio art and instructor permission.

TO: ART 630 – Foreign Studies in Art. (3-6) I, II, S. Participation in studio art study abroad. K-State 8: Aesthetic Interpretation; Global Issues and Perspectives. Pr.: instructor permission.

K-STATE 8 RATIONALE: The close study of artistic work in their original cultural setting will spark inspiration, heighten creativity, develop the capacity for aesthetic discernment, and afford the student the platform from which to make sense of, and see the connection between, the range of works that have influenced contemporary American culture. An understanding of artistic and cultural traditions beyond our own is an important component of preparing for a lifetime of creative and cultural engagement.

RATIONALE: The Art Department will be participating in the KSU in Orvieto Summer Study Abroad program being designed for Summer 2017. We need to edit out ART 630 Foreign studies in Art to reflect that it meets K-State 8 criteria. We also need to eliminate the prerequisites as this course will be open to all KSU students. IMPACT: None

EFFECTIVE DATE: Summer 2017

FROM: ANTH 694 – Osteology. (3) II, even years. Detailed study of human skeleton, with special attention to health and demographic conditions in prehistoric cultures and the evaluation of physical characteristics and genetic relationships of prehistoric populations. Pr.: ANTH 280 or instructor consent. K-State 8: Natural and physical Sciences.

TO: ANTH 683 – Osteology. (4) II, even years. Detailed study of human skeleton, with special attention to health and demographic conditions in prehistoric cultures and the evaluation of physical characteristics and genetic relationships of prehistoric populations. Laboratory demonstration and exercise in working with skeletal material for analysis of sex, age, stature, and race. Complete metric and nonmetric analysis with consideration given to paleodemography, paleopathology in situ analysis and excavation, and preservation. Pr.: ANTH 280 or instructor consent. K-State 8: Natural and Physical Sciences; Empirical and Quantitative Reasoning.

K-State 8 RATIONALE: This is a natural science course, which has a lab class with quantitative methods.

RATIONALE: Osteology currently requires a lab, and therefore there is no reason to have course (694) (3 credits) and the lab (695) (1 credit) separate. In the past, under a previous professor, a student could tale 694 & 695 separately, but now under no conditions may a student fail to take the lab concurrently with the course. Therefore, to avoid confusion, we would like to make 694 a 4-credit class, and delete the lab (695).

Because we are adding the lab work to 694, we are adding the K-State 8 component associated with the lab work: empirical and quantitative reasoning. The class number is being changed to fit the new rubric.

IMPACT: No impact

EFFECTIVE DATE: Spring 2017

### Non-Expedited New Courses

#### **Curriculum and Instruction**

**EDSP 800. Practicum II.** (3) Fall, Spring. Observation and participation in teaching individuals with exceptional educational needs under the supervision of selected teachers in special education Pre-Requisite: EDSP 785 Practicum I.

**IMPACT:** No foreseeable impact.

RATIONALE: Addition of course to help avoid enrollment confusion for students taking multiple practica in the EDSP

program.

**EFFECTIVE DATE:** Spring 2017

Department of Landscape Architecture and Regional & Community Planning (Master of Landscape Architecture Program, Non- & Post-Baccalaureate)

**New Courses** 

Effective: Spring 2017 Impact on other units: None

Course: LAR 811 Unlocking Creativity

Catalog Description: Do you want to become creative? Good news, you already are! For students in all majors,

this course is designed to help you access your creative potential and become more imaginative, innovative, and courageous. Learning outcomes include overcoming blocks, refining your creative process, practicing activities to enhance creativity, and effectively

communicating ideas.

Credits: (3)

When Offered: Fall, Spring

K-State 8: Aesthetic Interpretation; Empirical and Quantitative Reasoning

K-State 8 Tag Rationale: (1) Aesthetic Interpretation: Unlocking Creativity provides students with experiences to

develop their understanding and responsiveness to literature and visual arts, and to a smaller extent performing arts. In the course, students will: Interpret artistic works of art and graphic communication; Read and create works of literature including observational writing, self-reflection, and poetry; Develop critical thinking in aesthetics by engaging in activities of drawing, diagramming, creative public presentation techniques, and film-making. (2) Empirical and Quantitative Reasoning: The course provides students with experiences to develop their abilities to gather information, develop and evaluate alternatives, and consider potential outcomes. In the course, students will: Learn about a variety of creative problem-solving processes and working methods; Engage in investigative processes aimed at deriving novel, tenable, and valuable solutions; Develop an individual creativity ethos and creative problem-solving process. Address complex real-world dilemmas and opportunities and

propose solutions.

Rationale: Course has been offered under a topics number but we would like the course to have its own

course number in order to cover K-State 8 tags. Two course numbers would be bound so that it may be taken as either undergraduate (311) or graduate credit (811). Students enrolled in

LAR 811 will prepare a term paper with graduate-level scholarly rigor.

## Department of Landscape Architecture and Regional & Community Planning (Master of Regional & Community Planning Program, Non- & Post-Baccalaureate)

**New Courses** 

Effective: Spring 2017

Impact on other units: None

Course: PLAN 667 Transportation Planning

Catalog Description: The background, framing theories, professional activities and policy debates of

transportation planning regarding transit, roads, non-motorized travel, energy use and climate change, land use, congestion, finance, economic development, health, safety, politics, asset management, politics, emerging technologies and the sharing economy.

Credits: (3)

When Offered: Fall, Spring

K-State 8: Global Issues & Perspectives

K-State 8 Tag Rationale:Transportation represents a critical global policy issue that touches every facet of human

endeavor. This class not only provides the policy context in a comparative perspective, but

also addresses key planning concerns regarding sustainability and equity.

Rationale: This new course has been offered once as a topics course and it will continue to be offered

regularly so we would like it to have its own course number.

Course: PLAN 670 Planning in POP Culture

Catalog Description: Planning in POP Culture is an exploratory educational adventure of regional and community

planning issues through the cultural media of song, literature, visual art, and film

Credits: (3)

When Offered: Fall, Spring, Summer

K-State 8: Ethical Reasoning & Responsibility; Human Diversity within the U.S.

K-State 8 Tag Rationale:(1) Ethical reasoning and responsibility: Through film, music, and other popular media

students will be exposed to and discuss in depth issues regarding such topics as social equity and environmental conflicts with urban development. Students explore, from a planning context, how to properly navigate social and environmental concerns in an ethical and responsible manner. (2) Human Diversity within the U.S.: Through film, music, and other popular media students will be exposed to and discuss in depth issues regarding such topics as identity, race, ethnicity, nationality, multiculturalism, and more. Students will explore the context of human diversity in the U.S. through popular media and art, seeking insight to the messages from the artists' points of view is a wide array of contexts (urban, suburban, rural,

and in distinct regions such as Southern Appalachia for example).

Rationale: The course has been offered several times under a topics number and we would

like to officially add it to the course catalog.

Course: PLAN 672 Collective Decisions

Catalog Description: Provides an introduction to planning as a collective decision-making tool; examines how

planners work within a decision-making environment to move from regional and community

planning concepts to implementing plans.

Credits: (3)

Requisites: PLAN 315 or instructor permission

When Offered: Fall, Spring

K-State 8: Ethical Reasoning & Responsibility; Human Diversity within the U.S.

K-State 8 Tag Rationale:(1) Ethical reasoning and responsibility: Through an exploration of stakeholders in the

planning process, students are exposed to collective decision-making in a manner that is both socially and environmentally ethical and responsible. This includes in-depth discussions and project based applications of the American Planning Association's Code of Ethics and

Professional Conduct for American Institute of Certified Planners and the Community
Development Society's Principles of Good Practice. (2) Human Diversity within the U.S.:
Through lectures, film, and hands-on projects, students will be exposed, discuss, and explore in depth issues regarding such topics as identity, race, ethnicity, nationality, multiculturalism, and more, in the planning context of collective decision-making.

The course has been offered several times under a topics number and we would like to

officially add it to the course catalog.

Course: PLAN 674 Regional Economic Development Policy

Catalog Description: Introduce students to the theory & practice of economic development at the sub-national

level. Evaluate the design and implementation of economic development activities.

Credits: (3)

Rationale:

When Offered: Fall, Spring K-State 8: Social Sciences

K-State 8 Tag Rationale: Economic development is the processes and policies that influence the well-being of

individuals, families, groups, institutions and society as a whole. Students in this class will learn economic development theories and their application through policy intervention, studying the impact of economic development on quality of life and the natural environment.

Rationale: The course has been offered several times under a topics number and we would like to

officially add it to the course catalog.

Department of Landscape Architecture and Regional & Community Planning (Master of Science in Community Development) (Graduate Certificate in Community Development)

**New Courses** 

Effective: Spring 2017 Impact on other units: None

Course: CDPLN703 Applied Community Development

Catalog Description: This course provides students the opportunity to apply knowledge to professional practice.

Students will produce a written report on a project of focus, which they have worked on directly, relating their experience to concepts and skills learned through the community development curriculum. Projects must exist at the time of the course and may consist of activities via internships, coursework or capstones outside of the community development

curriculum, or personal interests.

Credits: (1)

Requisites: Admission to the MSCD program and instructor permission. All others contact

gpideacc@ksu.edu.

When Offered: Fall, Spring, Summer

Rationale: We plan on offering this new course regularly so we would like it to have its own course

number rather than beginning as a topics course. The purpose of this new course is to formally recognize applied community development activities (such as internships) into our

professionally focused program.

Department of Landscape Architecture and Regional & Community Planning (Master of Landscape Architecture Program, Non- & Post-Baccalaureate)

**New Courses** 

Effective: Summer 2017

Impact on other units: None

Course: LAR 806 Portfolio Design

Catalog Description: The Portfolio Design course guides students in development of a professional portfolio of

work, with the goal of producing a product that can be used for internship application, job search, or career advancement. Students explore visual thinking and visual communication

with a culminating goal of producing a final portfolio.

Credits: (3)

Requisites: Graduate student standing and familiarity with Adobe Creative Suite or Creative Cloud

software

When Offered: Fall, Spring, Summer

Rationale: The course has been offered several times under a topics number and we would like to

officially add it to the course catalog.

## Department of Landscape Architecture and Regional & Community Planning (Master of Regional & Community Planning Program, Non- & Post-Baccalaureate)

**New Courses** 

Effective: Summer 2017

Impact on other units: None

Course: PLAN 668 Travel Demand Modeling

Catalog Description: The history, evolving theory, application, and debates surrounding travel demand modeling.

Instruction in one of the main travel demand modeling software packages. Practical use of

that software.

Credits: (3)

When Offered: Fall, Spring, Summer

K-State 8: Empirical & Quantitative Reasoning

K-State 8 Tag Rationale:Travel demand modeling applies quantitative reasoning through the analysis and display of

information to the real world problem of exploring how changes in the built environment and the transportation infrastructure will affect the flow of people and goods. This course also provides an intensive introduction to a major software product used by transportation

planning agencies throughout Kansas and the world.

Rationale: We plan on offering this new course regularly so we would like it to have its own course

number rather than beginning as a topics course.

#### Center on Aging

#### **Course Add**

## **GERON 772 Adult Development and Aging**

Credits: (3)

This course explores the biological, psychological, and social factors that are associated with aging. Although the focus is on the later years, information is presented from a life-span developmental framework. Empirical studies are reviewed and their strengths, limitations and implications for normative and optimal functioning are discussed.

When Offered: Spring

**Other Requirements:** Students properly enrolled in the Great Plains IDEA online Masters in

Gerontology or online Graduate Certificate in Gerontology.

Rationale: Currently LSHD 845 Adult Development & Aging is available to KSU on-campus students, offered in spring semesters. Adult Development & Aging is a required course for students in the Great Plains IDEA online Masters in Gerontology, and is offered yearly — usually by one of the partner institutions. There is a need for a permanent GERON numbered course to be used specifically for those students in the online Masters in Gerontology and online Graduate Certificate in Gerontology. Currently a topics number (GERON 725) is used when this course is taught. The course will not be offered on-campus and will not be taken by regular KSU students unless requested and approved by Family Studies and Human Services. This class is taught primarily by faculty at one of the partner institutions within the Great Plains IDEA program.

**IMPACT:** The director of the School of Family Studies and Human Services was contacted on 7/28/16 and agreed that there would be no impact to their programs and would be supportive of this change.

Effective: Spring 2017

### **Course Add**

## **GERON 773 Physical Health & Nutrition in Aging**

Credits: (3)

This course identifies the basic physiologic changes during aging and their impacts in health and disease. The focus will be on successful aging with special emphasis on physical activity and nutrition. Practical application to community settings is addressed.

When Offered: Fall

Other Requirements: Students properly enrolled in the Great Plains IDEA online Masters in

Gerontology or online Graduate Certificate in Gerontology.

Rationale: Currently FNDH 718 is available to KSU on-campus students, offered in spring semester of alternate odd numbered years according to the KSU graduate catalog. Physical Health and Nutrition in Aging is a required course for students in the online Great Plains IDEA Masters in Gerontology, and is offered yearly. There is a need for a permanent GERON numbered course to be used specifically for those students in the online Masters in Gerontology and online Graduate Certificate in Gerontology. Currently a topics number (GERON 725) is used when this course is taught. The course will not be offered on-campus and will not be taken by regular KSU students unless requested and approved by the Foods, Nutrition, Dietetics, and Health department head. This class is taught primarily by faculty at one of the partner institutions within the Great Plains IDEA program. The attached syllabus is the most recent available from a partner institution, where the course title varies slightly from what it will be named on the KSU campus.

**IMPACT:** The Foods, Nutrition, Dietetics, and Health department head has had conversations with the Center on Aging director in 2015 and again recently in spring 2016. Dr. Haub approves the plan for our department to add this course. It should have no direct impact on students in degree programs in FNDH. The gerontology department would allow FNDH students who wish to take the course online to enroll if space is available and at the request of the FNDH department.

Because the syllabus course title contains the term physical activity, the CHE Academic Affairs committee recommended the Department of Kinesiology be consulted. Dr. Gayle Doll, Center on Aging contacted Dr. Craig

Harms, Department Head, Kinesiology on September 12, 2016 to request approval of the course. Dr. Harms responded with approval of the new course offering on September 12, 2016.

Effective: Spring 2017

## **MANGT 890 International Management**

Credits: (3)

Examination of business decision parameters and strategy in a multinational context. The influence of cultural, economic, political, and social differences on decision making and the operation of American enterprises in the international environment.

#### Requisites

Prerequisite: MANGT 820

### **Typically Offered**

Spring

#### Rationale

We are splitting the current MANGT 690 International Management course into two course numbers, MANGT 590 for undergraduates and MANGT 890 for graduate students, in accordance with broader changes to the undergraduate management major. There will be one section of MANGT 590 that will be taught concurrently with MANGT 890 each spring by a member of the graduate faculty. The only difference from how this course is currently administered at the 600-level is that there will be two different course numbers. A separate proposal has been submitted to change the undergraduate course from MANGT 690 to MANGT 590.

#### **Impact on Other Units**

None

#### **Effective Date**

Spring 2017

### Sociology, Anthropology, and Social Work

ADD: ANTH 608 – Asian Religions. (3) II, even years. Explore religious beliefs and practices in major traditions of South, Southeast, Central, and East Asia, such as Hinduism, Buddhism, Jainism, Sikhism, Confucianism, Taoism, Shinto, and later Buddhist movements. Pr.: ANTH 200, 204, or 210. K-State 8: Global Issues and Perspectives; Social Sciences.

K-State 8 RATIONALE: This is a social sciences course with global scope.

RATIONALE: K-State is sorely lacking in religious studies courses, as it does not have a religious studies department. Asian Religions is a staple college class, covering religions from India eastwards to Japan. In this course, I will teach Hinduism, Sikhism, Jainism, Buddhism (across Asia), Confucianism, Taoism, Shinto, etc. I have taught this course once as a Topics course and it filled immediately. It was successful, and popular; while there is enough interest in this topic to teach it every year, unfortunately given the many other classes in my rotation, I will only be able to offer it every two years. This is an advanced 600-level course, since it requires a heavy load of dense and sophisticated reading material about Asian philosophy, religious beliefs, and cultural practices. Finally, it should be noted that in preparation for teaching this class I received an NEH grant to take a summer seminar in Asian Buddhisms (in 2015), which helped broaden my expertise in South and Central Asian religion, and develop better proficiency in East Asian religious practices.

**IMPACT: None** 

**EFFECTIVE DATE: Spring 2017** 

## **Non-Expedited Course Drop**

DROP: ANTH 695 – Laboratory in Osteology. (1) II, even years. Laboratory demonstration and exercise in working with skeletal material for analysis of sex, age, stature, and race. Complete metric and nonmetric analysis with consideration given to paleodemography, paleopathology in situ analysis and excavation, and preservation. Written reports on bone material remains will be necessary. Pr.: ANTH 694 or concurrent enrollment.

RATIONALE: We would like to discontinue the Osteology Lab (695), because we have submitted a change form to make 694 (Osteology) a 4-credit class with both lecture and lab included.

IMPACT: None

**EFFECTIVE DATE: Spring 2017** 

## **Non-Expedited Curriculum Changes**

# Department of Landscape Architecture and Regional & Community Planning (Master of Landscape Architecture Program, Non-Baccalaureate)

Effective Date: Spring 2017 Impact on Other Units: None

Rationale: Splitting LAR 704 (currently a 5 credit hour course) into two separate laboratory and studio

based courses to provide students more flexibility.

FROM: (Current list of course for the curriculum,		TO: (Proposed list of courses for the curriculum,			
curriculum description, and admission criteria.)			curriculum description, and admission criteria.)		
ENVIRON	ENVIRONMENTAL DESIGN STUDIES PROGRAM		ENVIRON	MENTAL DESIGN STUDIES PROGRAM	
FIRST Semester		FIRST Sen	nester		
COMM	Public Speaking 1A	2	COMM	Public Speaking 1A	2
105			105		
ENVD	Environmental Design Studio I	4	ENVD	Environmental Design Studio I	4
201			201		
ENVD	Survey of Design Professions	1	ENVD	Survey of Design Professions	1
203			203		
ENVD	History of the Designed Environment	3	ENVD	History of the Designed Environment	3
250	1		250	1	
MATH	College Algebra	3	MATH	College Algebra	3
100			100		
	*General Elective	3		*General Elective	3
		16			16
SECOND S	Semester		SECOND Semester		
ENGL	Expository Writing I	3	ENGL	Expository Writing I	3
100			100		
ENVD	Environmental Design Studio II	4	ENVD	Environmental Design Studio II	4
202			202		

ENVD	History of the Designed Environment	3	ENVD	History of the Designed Environment	3
251 PHYS	II Descriptive Physics	5	251 PHYS	II Descriptive Physics	5
115	Descriptive Physics	5	115	Descriptive Physics	5
113		 15	1113		15
LANDSCAP	PE ARCHITECTURE PROGRAM		LANDSCA	PE ARCHITECTURE PROGRAM	
THIRD Sem			THIRD Ser		
LAR 220	Site Design Studio I	4	LAR 220	Site Design Studio I	4
LAR 310	Design Graphics & Visual Thinking	2	LAR 310	Design Graphics & Visual Thinking I	2
LAR 350	Landscape Architecture Plant	3	LAR 350	Landscape Architecture Plant	3
	Materials			Materials	
LAR 420	Natural Systems & Site Analysis	4	LAR 420	Natural Systems & Site Analysis	4
LAR 433	History & Theory of Landscape Arch.	3	LAR 433	History & Theory of Landscape Arch.	3
LAR 510	Landscape Architecture Tech Module	1	LAR 510	Landscape Architecture Tech Module	1
	1			I	
		17			17
FOURTH Se	emester		FOURTH S	Semester	
LAR 248	Landscape Arch Materials & Methods	3	LAR 248	Landscape Arch Materials & Methods	3
LAR 320	Site Design Studio II	5	LAR 320	Site Design Studio II	5
LAR 322	Environmental Issues & Ethics	3	LAR 322	Environmental Issues & Ethics	3
LAR 520	Landscape Architecture Tech Module	1	LAR 520	Landscape Architecture Tech Module	1
	II			II	
	Science Course with Lab	4		Science Course with Lab	4
		16			16
FIFTH Sem			FIFTH Sem		
ENGL	Expository Writing II	3	ENGL	Expository Writing II	3
200			200		
LAR 410	Planting Design Studio	5	LAR 410	Planting Design Studio	5
LAR 438	Design Implementation I	4	LAR 438	Design Implementation I	4
LAR 530	Landscape Architecture Tech Module III	2	LAR 530	Landscape Architecture Tech Module III	2
PLAN	Introduction to City Planning	3	PLAN	Introduction to City Planning	3
315			315		
		17			17
SIX Semest	ter		SIX Semes	ster	
LAR 010	Landscape Architecture Field Trip	0	LAR 010	Landscape Architecture Field Trip	0
LAR 439	Design Implementation II	4	LAR 439	Design Implementation II	4
LAR 442	Site Planning and Design Studio	5	LAR 442	Site Planning and Design Studio	5
LAR 501	Landscape Architecture Seminar I	2	LAR 501	Landscape Architecture Seminar I	2
LAR 540	Landscape Architecture Tech Module	1	LAR 540	Landscape Architecture Tech Module	1
	IV			IV	
	*General Elective	6		*General Elective	6
		18			18
	•		SUMMER	•	
SUMMER S	Community Planning and Design	5	LAR 646	Community Planning and Design	5
LAR 646		2	LAR 650	Landscape Architecture Seminar II	2
	Landscape Architecture Seminar II		-		
LAR 646 LAR 650		7			7
LAR 646 LAR 650	Semester	7	SEVENTH		
LAR 646 LAR 650 SEVENTH S LAR 444	Semester Career Planning Seminar	7	LAR 444	Career Planning Seminar	1
LAR 646 LAR 650	Semester	7			

LAR 648 LAR 725	LA Specialization Studio Landscape Architecture Research	5 3	LAR 648 LAR 725	LA Specialization Studio Landscape Architecture Research	5 3
LAR 750	Methods  Landscape Architecture Seminar III	2	LAR 750	Methods  Landscape Architecture Seminar III	2
LAR 754	Professional Practice: Office Practices	1	LAR 754	Professional Practice: Office Practices	1
		14	=		14
EIGHTH Se	emester**		EIGHTH Se	emester**	
LAR 703	Landscape Architecture Off Campus Studio	5	LAR 703	Landscape Architecture Off Campus Studio	5
	(Internship, study abroad or KCDC)			(Internship, study abroad or KCDC)	
	Professional Electives	9		Professional Electives	9
+LAR 897	Proposal Writing	2	+LAR 897	Proposal Writing	2
03/		14-	697		14-
		16			16
NINTH Sei	mester		NINTH Sei	mester	
LAR 645	Professional Internship Report	1	LAR 645	Professional Internship Report	1
LAR 704	Environmental Land Plan & Design	5	LAR 704	Environmental Land Plan & Design	
	_		LAR 580	Planning & Design Intro to GIS	3 2 3
<b>LAR 700</b>	Project Programming	3	LAR 700	Project Programming	3
+LAR	Research in Landscape Architecture	3	+LAR	Research in Landscape Architecture	3
899		_	899		
LAR 753	Professional Practices: Professional	1	LAR 753	Professional Practices: Professional	1
	Responsibilities Professional Elective	2		Responsibilities Professional Elective	2
	*General Elective	<b>3</b> 3		*General Elective	<b>3</b> 3
	General Liective	16		General Liective	16
TENTH Se	mester		TENTH Se	mester	
LAR 560	Landscape Architecture Tech Module VI	1	LAR 560	Landscape Architecture Tech Module VI	1
<b>LAR 705</b>	Master's Project	3	LAR 705	Master's Project	3
<b>LAR 898</b>	Master's Report	2	LAR 898	Master's Report	2
+LAR 899	Research in Landscape Architecture	3	+LAR 899	Research in Landscape Architecture	3
	*General Elective	3		*General Elective	3
		7-9			7-9
	duate Hours	<del>126</del>		duate Hours	<u>128</u>
Graduate		33	Graduate		<u>31</u>
•	A) Degree Requirement	159		A) Degree Requirement	159
courses re	te 8 General Education areas are covered equired in the Landscape Architecture n. Information about the K-State 8 is ava be and in the university catalog.	•	courses re	te 8 General Education areas are covered equired in the Landscape Architecture n. Information about the K-State 8 is avab and in the university catalog.	•
architectu programs	All required courses taught in the landscape architecture and regional and community planning programs that are counted toward the degree must be passed with a grade of C or better.		architectu programs	ed courses taught in the landscape are and regional and community planning that are counted toward the degree mus th a grade of C or better.	
	um of fifteen (15) general elective credits aken. General elective may be taken in	5		um of fifteen (15) general elective credits aken. General elective may be taken in	5

pursuit of a minor. They may be taken any time prior to or during the Landscape Architecture program and may include KSU approved AP, IB, CLEP and transfer credit. Students may not count more than three (3) total hours of recreation credits toward graduation.

- \*\*Eighth semester: Two distinct study opportunities are offered during this semester, each requiring 14 credit hours. The study abroad and the internship options have course requirements that substitute for the 9 professional elective credit requirements. If the internship option is not selected during the eighth semester, a summer internship is required before graduation.
- + If a student elects the thesis option, LAR 897-Proposal Writing will be taken during the eighth semester for 2 credit hours. This course is completed by advance arrangement. LAR 897 students work independently to develop their thesis proposal with their major professor's supervision. LAR 899-Research in Landscape Architecture will be taken in the ninth semester in place of LAR 700 and in the tenth semester in place of LAR 705 and LAR 898.

pursuit of a minor. They may be taken any time prior to or during the Landscape Architecture program and may include KSU approved AP, IB, CLEP and transfer credit. Students may not count more than three (3) total hours of recreation credits toward graduation.

- \*\*Eighth semester: Two distinct study opportunities are offered during this semester, each requiring 14 credit hours. The study abroad and the internship options have course requirements that substitute for the 9 professional elective credit requirements. If the internship option is not selected during the eighth semester, a summer internship is required before graduation.
- + If a student elects the thesis option, LAR 897-Proposal Writing will be taken during the eighth semester for 2 credit hours. This course is completed by advance arrangement. LAR 897 students work independently to develop their thesis proposal with their major professor's supervision. LAR 899-Research in Landscape Architecture will be taken in the ninth semester in place of LAR 700 and in the tenth semester in place of LAR 705 and LAR 898.

# Department of Landscape Architecture and Regional & Community Planning (Master of Landscape Architecture Program-Post-Baccalaureate)

Effective Date: Spring 2017 Impact on Other Units: None

Rationale: Splitting LAR 704 (currently a 5 credit hour course) into two separate laboratory and studio

based courses to provide students more flexibility.

FROM: (C	Current list of course for the curriculum,		<b>TO:</b> (Proposed list of courses for the curriculum,			
curriculur	m description, and admission criteria.)		curriculur	curriculum description, and admission criteria.)		
FIRST Sen	nester		FIRST Sen	nester		
LAR 220	Site Design Studio I	4	LAR 220	Site Design Studio I	4	
LAR 310	Design Graphics & Visual Thinking	2	LAR 310	Design Graphics & Visual Thinking	2	
LAR 420	Natural Systems & Site Analysis	4	LAR 420	Natural Systems & Site Analysis	4	
LAR 433	History & Theory of Landscape Arch	3	LAR 433	History & Theory of Landscape Arch	3	
LAR 510	Landscape Architecture Tech Module	1	LAR 510	Landscape Architecture Tech Module I	1	
	1					
		14			14	
SECOND S	Semester		SECOND Semester			
LAR 248	Landscape Arch Materials & Methods	3	LAR 248	Landscape Arch Materials & Methods	3	
LAR 322	Environmental Issues & Ethics	3	LAR 322	Environmental Issues & Ethics	3	
LAR 442	Site Planning and Design Studio	5	LAR 442	Site Planning and Design Studio	5	
LAR 501	Landscape Architecture Seminar I	2	LAR 501	Landscape Architecture Seminar I	2	
LAR 520	Landscape Architecture Tech Module	1	LAR 520	Landscape Architecture Tech Module	1	
	II			II		
LAR 010	Landscape Architecture Field Trip	0	LAR 010	Landscape Architecture Field Trip	0	
		14			14	

SUMMER	•		SUMMER	•	
	Community Planning and Design	5	LAR 646	Community Planning and Design	5
LAR 650	Landscape Architecture Seminar II	2	LAR 650	Landscape Architecture Seminar II	2
		7			7
THIRD Sei	mester		THIRD Se	mester	
LAR 350	Landscape Architecture Plant	3	LAR 350	Landscape Architecture Plant	3
	Materials			Materials	
LAR 410	Planting Design Studio	5	LAR 410	Planting Design Studio	5
LAR 438	Design Implementation I	4	LAR 438	Design Implementation I	4
LAR 530	Landscape Architecture Tech Module	2	LAR 530	Landscape Architecture Tech Module	2
LAR 725	Landscape Architecture Research	3	LAR 725	Landscape Architecture Research	3
LAN 723	Methods	J	LAN 723	Methods	•
LAR 754	Professional Practice: Office Practices	1	LAR 754	Professional Practice: Office Practices	1
2,111,731	Troressionar ractice. Office Fractices	18	2,111,731	Troressionar ractice. Office Fractices	18
FOURTH S	Semester		FOURTH S	Semester	
LAR 439	Design Implementation II	4	LAR 439	Design Implementation II	4
LAR 704	Environmental Land Plan & Design	5	LAR 704	Environmental Land Plan & Design	
		_	LAR 580	Planning & Design Intro to GIS	<u>3</u> 2
LAR 540	Landscape Architecture Tech Module	1	LAR 540	Landscape Architecture Tech Module	1
	IV			IV	
	Professional Elective	3		Professional Elective	3
+LAR	Proposal Writing	2	+LAR	Proposal Writing	2
897			897		
		13-			13-
		15			15
FIFTH Sen	nester		FIFTH Ser	nester	
LAR 648	LA Specialization Studio	5	LAR 648	LA Specialization Studio	5
LAR 750	Landscape Architecture Seminar III	2	LAR 750	Landscape Architecture Seminar III	2
LAR 700	Project Programming	3	LAR 700	Project Programming	3
+LAR	Research in Landscape Architecture	3	+LAR	Research in Landscape Architecture	3
<b>899</b> LAR 550	Landscape Architecture Tech Module	2	<b>899</b> LAR 550	Landscape Architecture Tech Module	2
	V			V	
LAR 753	Professional Practices: Professional	1	LAR 753	Professional Practices: Professional	1
	Responsibilities			Responsibilities	
		13			13
SIXTH Ser	nester		SIXTH Ser	nester	
LAR 560	Landscape Architecture Tech Module VI	1	LAR 560	Landscape Architecture Tech Module VI	1
LAR 705	Master's Project	3	LAR 705	Master's Project	3
LAR 898	Master's Report	2	LAR 898	Master's Report	2
+LAR	Research in Landscape Architecture	3	+LAR	Research in Landscape Architecture	3
899	·		899	·	
		4 <del>-6</del>	1		4-6
Undergra	duate Hours	<del>52</del>	Undergra	duate Hours	54
Graduate		33	Graduate		31
	A) Degree Requirement	85			85
			Total (MLA) Degree Requirement		
All studer	nts will complete either a Master's Repor	rt or a	All studer	nts will complete either a Master's Repor	τ or a

+ If a student elects the thesis option, LAR 897 Proposal Writing will be taken during the fourth semester for 2 credit hours. LAR 899 Research in Landscape Architecture will be taken in both the fifth semester in place of LAR 700 and in the sixth semester in place of LAR 705 and LAR 898.

Writing will be taken during the fourth semester for 2 credit hours. LAR 899 Research in Landscape Architecture will be taken in both the fifth semester in place of LAR 700 and in the sixth semester in place of LAR 705 and LAR 898.

+ If a student elects the thesis option, LAR 897 Proposal

Total credit hours required for graduate school program of study=35.

Total credit hours required for graduate school program of study=31.

All required courses taught in the landscape architecture and regional & community planning programs that are counted toward the degree must be passed with a grade of C or better.

All required courses taught in the landscape architecture and regional & community planning programs that are counted toward the degree must be passed with a grade of C or better.

# Department of Landscape Architecture and Regional & Community Planning (Master of Regional & Community Planning Program-Non-Baccalaureate)

Effective Date: Spring 2017 Impact on Other Units: None

Rationale: -Splitting LAR 704 (currently a 5 credit hour course) into two separate laboratory and studio

based courses to provide students more flexibility.

-Instructor of PLAN 650 is no longer with the department and many elements of the course are covered in other required coursework. Transportation planning will be added to the

curriculum in its place as it is an integral facet of the planning profession.

FROM: (0	Current list of course for the curriculum,		TO: (Proposed list of courses for the curriculum,		
curriculum description, and admission criteria.)			curriculum description, and admission criteria.)		
ENVIRONMENTAL DESIGN STUDIES PROGRAM		ENVIRONM	ENTAL DESIGN STUDIES PROGRAM		
First Semester		First Semes	ter		
ENVD	Survey of the Design Professions	1	ENVD 203	Survey of the Design Professions	1
203					
MATH	College Algebra	3	MATH 100	College Algebra	3
100					
COMM	Public Speaking 1A	2	COMM	Public Speaking 1A	2
105			105		
	Humanities/Design Elective	3		Humanities/Design Elective	3
	Social Science/History Elective	3		Social Science/History Elective	3
	Social Science/Sociology Elective	3		Social Science/Sociology Elective	3
		15			15
Second S	emester		Second Sem	nester	
ENGL	Expository Writing I	3	ENGL 100	Expository Writing I	3
100					
	Humanities/Design Electives	6		Humanities/Design Electives	6
	Natural Science Elective with Lab	4		Natural Science Elective with Lab	4
	*General Elective	3		*General Elective	3
		16			16
REGIONA	L & COMMUNITY PLANNING PROGRAM		REGIONAL 8	& COMMUNITY PLANNING PROGRAM	
Third Ser	nester		Third Seme	ster	
PLAN	Introduction to City Planning	3	PLAN 315	Introduction to City Planning	3
315					

PLAN 316	Planning Principles Seminar	2	PLAN 316	Planning Principles Seminar	2
PLAN 510	Tech Module	1	PLAN 510	Tech Module	1
LAR 420	Natural Systems & Site Analysis	4	LAR 420	Natural Systems & Site Analysis	4
	Social Science/Economics Elective	3		Social Science/Economics Elective	3
	*General Elective	3		*General Elective	3
		16	1	-	16
Fourth Ser	mester		Fourth Sem	nester	
PLAN 415	World Cities	3	PLAN 415	World Cities	3
LAR 322	Environmental Issues & Ethics	3	LAR 322	Environmental Issues & Ethics	3
ENGL 200	Expository Writing II	3	ENGL 200	Expository Writing II	3
200	Statistics Elective	3		Statistics Elective	3
	Social Science/Geography Elective	3		Social Science/Geography Elective	3
	*General Elective	3		*General Elective	3
		18	1	-	18
Fifth Seme	ester		Fifth Semes	ster	
PLAN 640	Urban Design and Development	3	PLAN 640	Urban Design and Development	3
PLAN 660	Community Development Planning	3	PLAN 660	Community Development Planning	3
LAR 704	Env Landscape Planning and Design	5	LAR 704	Env Landscape Planning and Design	<u>3</u>
			LAR 580	Planning & Design Intro to GIS	<u>2</u>
	Natural Science Elective	3		Natural Science Elective	3
	Social Science/Political Science	3		Social Science/Political Science	3
	Elective			Elective	
		17	1	-	17
Sixth Sem	ester		Sixth Semes	ster	
PLAN 650	Housing & Development Programs	3	<u>PLAN 667</u>	Transportation Planning	<u>3</u>
PLAN 655	Land Development Planning	3	PLAN 655	Land Development Planning	3
LAR 500	Site Planning and Design	3	LAR 500	Site Planning and Design	3
PLAN 010	Planning Field Trip	0	PLAN 010	Planning Field Trip	0
010	**Professional Electives	6		**Professional Electives	6
		15	1		15
Seventh Se	emester		Seventh Se	mester	-10
PLAN	Infrastructure & Plan	3	PLAN 720	Infrastructure & Plan	3
720	Implementation	•		Implementation	
PLAN 801	Planning Methods I	3	PLAN 801	Planning Methods I	3
PLAN 803	Community Research Methods	3	PLAN 803	Community Research Methods	3
	Professional Elective	3		Professional Elective	3
PLAN 444	Internship Planning Seminar	1	PLAN 444	Internship Planning Seminar	1
		13	-	-	13

Eighth Ser	mester***		Eighth Seme	ester***	
PLAN	Off Campus Studies	5	PLAN 703	Off Campus Studies	5
703					
	(Internship, study abroad or KCDC)			(Internship, study abroad or KCDC)	
	Professional Electives	7-9		Professional Electives	7-9
+PLAN 897	Proposal Writing	2	+PLAN 897	Proposal Writing	2
		14-16			14-
Ninth Sem	nastar		Ninth Semes	ster	16
PLAN	Planning Administration	3	PLAN 730	Planning Administration	3
730	r lanning / lanning lation	J		riaming / taministration	J
PLAN	Planning Law	3	PLAN 753	Planning Law	3
753	Duomo and Malutain a	2	DI ANI 007	Duan and Multing	2
PLAN 897	Proposal Writing	3	PLAN 897	Proposal Writing	3
037	Professional Elective	3		Professional Elective	3
+PLAN	Research in Planning	3	+PLAN 899	Research in Planning	3
899	G			J	
		12-15			12-
					15
Tenth Sen	nester		Tenth Seme	ster	
PLAN 815	Planning Theory, Ethics & Practice	3	PLAN 815	Planning Theory, Ethics & Practice	3
PLAN	Community Plan Preparation	3	PLAN 836	<b>Community Plan Preparation</b>	
836 or PLAN 705	Master's Project		or <b>PLAN</b> <b>705</b>	Master's Project	3
PLAN	Master's Report	2	PLAN 898	Master's Report	2
898	- f · 151 ··	_		5 f : 151 ··	_
. DI ANI	Professional Elective	3	. DI ANI 000	Professional Elective	3
+PLAN 899	Research in Planning	3	+PLAN 899	Research in Planning	3
899		9-11			9-11
Undergra	duate Hours	112	Undergradu	ata Hours	112
Graduate					
	Hours	35	l (aradiiate Ho		45
		35 147	Graduate Ho		35 147
Total MRC	CP Degree Requirement	147	Total MRCP	Degree Requirement	147
Total MRC	CP Degree Requirement um of nine (9) general elective credits n	147 nust be	Total MRCP *A minimum	Degree Requirement n of nine (9) general elective credits m	147 nust be
*A minimitaken. Ge	CP Degree Requirement um of nine (9) general elective credits n neral electives may be taken in pursuit	147 nust be of a	Total MRCP *A minimum taken. Gene	Degree Requirement n of nine (9) general elective credits m ral electives may be taken in pursuit o	147 nust be of a
*A minimutaken. Ge	CP Degree Requirement um of nine (9) general elective credits n neral electives may be taken in pursuit ey may be taken any time prior to or du	147 nust be of a uring	Total MRCP *A minimum taken. Gene minor. They	Degree Requirement  n of nine (9) general elective credits mand the credit mand the credits mand the credit mand the credits mand the credits mand the credit mand the credi	147 nust be of a ring
*A minimitaken. Ge minor. The the Region	CP Degree Requirement um of nine (9) general elective credits n neral electives may be taken in pursuit ey may be taken any time prior to or du nal and Community Planning program a	147 must be of a uring and may	Total MRCP *A minimum taken. Gene minor. They the Regiona	Degree Requirement n of nine (9) general elective credits mand ral electives may be taken in pursuit of may be taken any time prior to or dual and Community Planning program a	147 nust be of a ring nd
*A minime taken. Ge minor. The the Region include KS	CP Degree Requirement um of nine (9) general elective credits n neral electives may be taken in pursuit ey may be taken any time prior to or du nal and Community Planning program a SU approved AP, IB, CLEP and transfer c	147 must be of a uring and may redit.	*A minimum taken. Gene minor. They the Regiona may include	Degree Requirement  n of nine (9) general elective credits mand ral electives may be taken in pursuit of may be taken any time prior to or dual and Community Planning program a KSU approved AP, IB, CLEP and trans	147 nust be of a ring nd fer
*A minimum taken. Ge minor. The Region include KS Students in the Region in the Regi	CP Degree Requirement um of nine (9) general elective credits n neral electives may be taken in pursuit ey may be taken any time prior to or du nal and Community Planning program a	147 must be of a uring and may redit.	*A minimum taken. Gene minor. They the Regiona may include credit. Stude	Degree Requirement n of nine (9) general elective credits mand ral electives may be taken in pursuit of may be taken any time prior to or dual and Community Planning program a	147 nust be of a ring nd fer
*A minimum taken. Geminor. The Region include KS Students of recreat	CP Degree Requirement um of nine (9) general elective credits neral electives may be taken in pursuit ey may be taken any time prior to or du nal and Community Planning program a SU approved AP, IB, CLEP and transfer c may not count more than three (3) tota	147 must be of a uring and may redit. I hours	*A minimum taken. Gene minor. They the Regiona may include credit. Stude total hours of	Degree Requirement of nine (9) general elective credits many be taken in pursuit of may be taken in pursuit of may be taken any time prior to or dual and Community Planning program a KSU approved AP, IB, CLEP and transents may not count more than three (	147 nust be of a ring nd fer 3)
*A minimum taken. Germinor. The Region include KS Students in of recreat	CP Degree Requirement um of nine (9) general elective credits neral electives may be taken in pursuit ey may be taken any time prior to or du nal and Community Planning program a SU approved AP, IB, CLEP and transfer c may not count more than three (3) tota ion credits toward graduation.	147 must be of a uring and may redit. I hours	*A minimum taken. Gene minor. They the Regiona may include credit. Stude total hours of **Profession	Degree Requirement of nine (9) general elective credits many be taken in pursuit of may be taken any time prior to or dual and Community Planning program a KSU approved AP, IB, CLEP and transents may not count more than three (of recreation credits toward graduation)	147 nust be of a ring nd fer 3) on.
*A minimitaken. Ge minor. The Region include KS Students of recreat **Profess credit hou	CP Degree Requirement um of nine (9) general elective credits neral electives may be taken in pursuit ey may be taken any time prior to or du nal and Community Planning program a SU approved AP, IB, CLEP and transfer c may not count more than three (3) tota tion credits toward graduation.	147 must be of a uring and may redit. I hours duate	*A minimum taken. Gene minor. They the Regiona may include credit. Stude total hours of **Profession include 6 un	Degree Requirement of nine (9) general elective credits many be taken in pursuit of may be taken any time prior to or dual and Community Planning program a KSU approved AP, IB, CLEP and transents may not count more than three (of recreation credits toward graduational Electives in the sixth semester mu	147 nust be of a ring nd fer 3) on.
***Eighth	CP Degree Requirement um of nine (9) general elective credits neral electives may be taken in pursuit ey may be taken any time prior to or du nal and Community Planning program a SU approved AP, IB, CLEP and transfer c may not count more than three (3) tota ion credits toward graduation.  ional Electives must include 6 undergra urs of PLAN courses.	nust be of a uring and may redit. I hours duate	*A minimum taken. Gene minor. They the Regiona may include credit. Stude total hours of the second state of the second se	Degree Requirement n of nine (9) general elective credits madelectives may be taken in pursuit of may be taken any time prior to or dual and Community Planning program a KSU approved AP, IB, CLEP and transpents may not count more than three (of recreation credits toward graduational Electives in the sixth semester mudergraduate credit hours of PLAN countries.	147 nust be of a ring nd fer 3) on.

have course requirements that substitute for the 9 professional elective credit requirements

All students will complete either a Master's Report or a Master's Thesis.

+If a student elects the thesis option, PLAN 897 Proposal Writing will be taken during the eighth semester for 2 credit hours. This course is completed by advance arrangement. PLAN 897 students work independently to develop their thesis proposal with their major professor's supervision. PLAN 899 Research in Planning will be taken in the ninth semester in place of PLAN 897 and in the tenth semester in place of PLAN 705, PLAN 898 and the professional elective.

All required courses taught in the landscape architecture and regional & community planning programs that are counted toward the degree must be passed with a grade of C or better.

The K-State 8 General Education areas are covered by courses required in the Regional and Community Planning curriculum. Information about the K-State 8 is available at <a href="http://www.k-state.edu/kstate8">http://www.k-state.edu/kstate8</a> and in the university catalog.

Total credit hours required for Graduate School program of study = 35.

programs that are counted toward the degree must be passed with a grade of C or better.

\*\*\*Eighth semester: Two distinct study opportunities are offered during this semester, each requiring 14 credit hours. The study abroad and internship options have course requirements that substitute for the 9 professional elective credit requirements.

All students will complete either a Master's Report or a Master's Thesis.

+If a student elects the thesis option, PLAN 897
Proposal Writing will be taken during the eighth
semester for 2 credit hours. This course is completed by
advance arrangement. PLAN 897 students work
independently to develop their thesis proposal with
their major professor's supervision. PLAN 899 Research
in Planning will be taken in the ninth semester in place
of PLAN 897 and in the tenth semester in place of PLAN
705, PLAN 898 and the professional elective.

The K-State 8 General Education areas are covered by courses required in the Regional and Community Planning curriculum. Information about the K-State 8 is available at <a href="http://www.k-state.edu/kstate8">http://www.k-state.edu/kstate8</a> and in the university catalog.

Total credit hours required for Graduate School program of study = 35.

## Department of Landscape Architecture and Regional & Community Planning (Master of Regional & Community Planning Program-Post-Baccalaureate)

Effective Date: Spring 2017 Impact on Other Units: None

Rationale: Instructor of PLAN 650 is no longer with the department and many elements of the course are

covered in other required coursework. Transportation planning will be added to the

curriculum in its place as it is an integral facet of the planning profession.

FROM: (Current list of course for the curriculum,		TO: (Propos	sed list of courses for the curriculum,		
curriculum	description, and admission criteria.)		curriculum	curriculum description, and admission criteria.)	
First Semes	ter		First Semes	ster	
PLAN 315	Introduction to City Planning	3	PLAN 315	Introduction to City Planning	3
PLAN 316	Planning Principles Seminar	2	PLAN 316	Planning Principles Seminar	2
PLAN 801	Planning Methods I	3	PLAN 801	Planning Methods I	3
PLAN 803	<b>Community Research Methods</b>	3	PLAN 803	<b>Community Research Methods</b>	3
	Professional Elective	3		Professional Elective	3
		14			14
Second Sen	nester		Second Sen	nester	
PLAN 010	Planning Field Trip	0	PLAN 010	Planning Field Trip	0
LAR 500	Site Planning and Design	3	LAR 500	Site Planning and Design	3

PLAN 650	Housing & Development Programs	3	PLAN 667	Transportation Planning	<u>3</u> 3		
PLAN 655	Land Development Planning	3	PLAN 655	Land Development Planning			
<b>PLAN 897</b>	Proposal Writing	3	PLAN 897	Proposal Writing	3		
	Professional Electives*	6	<u> </u>	Professional Electives*	6		
		15-17			15- 17		
Third Seme	ster		Third Seme:	ster	1/		
PLAN 720	Infrastructure & Plan	3	PLAN 720	Infrastructure & Plan	3		
	Implementation			Implementation			
PLAN 730	Planning Administration	3	PLAN 730	Planning Administration	3		
<b>PLAN 753</b>	Planning Law	3	PLAN 753	Planning Law	3		
+PLAN	Proposal Writing	2	+PLAN	Proposal Writing	2		
897			897				
+PLAN	Research in Planning	3	+PLAN	Research in Planning	3		
899			899				
	Professional Elective	3	  -	Professional Elective	3		
		15			15		
Fourth Sem			Fourth Sem				
PLAN 815	Planning Theory, Ethics & Practice	3	PLAN 815	Planning Theory, Ethics & Practice	3		
<b>PLAN 836</b>	<b>Community Plan Preparation</b>	3	PLAN 836	<b>Community Plan Preparation</b>			
or <b>PLAN</b>	Master's Project		or <b>PLAN</b>	Master's Project	3		
705			705				
PLAN 898	Master's Report	2	PLAN 898	Master's Report	2		
	Professional Elective	3		Professional Elective	3		
+PLAN	Research in Planning	3	+PLAN 899	Research in Planning	3		
899		9-11	_		9-11		
Undergradu	uate Hours	20	Undergradu	iate Hours	20		
Graduate H	ours	35	Graduate H	ours	35		
Total MRCP	Degree Requirement	55	Total MRCP	Degree Requirement	55		
All students	s will complete either a Master's Repo	rt or a	All students	will complete either a Master's Repo	ort or a		
Master's Th	nesis.		Master's Th	esis.			
Writing will	t elects the thesis option, PLAN 897 P be taken during the second semester	for 2	+If a student elects the thesis option, PLAN 897 Proposal Writing will be taken during the second				
arrangemei	s. This course is completed by advance nt. PLAN 897 students work independents		semester for 2 credit hours. This course is completed by advance arrangement. PLAN 897 students work				
-	eir thesis proposal with their major	nning	independently to develop their thesis proposal with their major professor's supervision. PLAN 899 Research				
•	supervision. PLAN 899 Research in Plan in the third semester in place of PLA	_	-	•			
	ourth semester in place of PLAN 705,		in Planning will be taken in the third semester in place of PLAN 897 and in the fourth semester in place of				
	e professional elective.	. 🖵 🔻	PLAN 705, PLAN 898 and the professional elective.				
	nal Electives in the second semester m		*Professional Electives in the second semester must				
include 6 ui	ndergraduate credit hours of PLAN cou	urses.	include 6 ur	ndergraduate credit hours of PLAN co	urses.		
All required courses taught in the landscape architecture and regional & community planning programs that are counted toward the degree must be passed with a grade of C or better.			architecture programs th	courses taught in the landscape e and regional & community planning nat are counted toward the degree me a grade of C or better.			

Total credit hours required for Graduate School
program of study = 35

Total credit hours required for Graduate School program of study = 35

#### **Statistics**

Statistics (M.S.)

FROM:

TO:

Two master's degree options are available through the <u>Statistics</u> graduate program: the master's report options and the nonreport option.

- For the master's report options, the student must take 30 hours of coursework and write a report for 2 additional hours of credit.
- For the nonreport option, the student must take 35 hours of coursework and pass a comprehensive exam approved by the supervisory committee.

The master's report option is strongly recommended for all students, especially those for whom the master's degree will be the terminal degree.

#### **REQUIRED COURSES**

In either case, the coursework must include:

- STAT 713 Applied Linear Statistical
   Models Credits: (3)
- STAT 770 Theory of Statistics
   Credits: (3)
- STAT 771 Theory of Statistics
  II Credits: (3)
- STAT 860 Linear Models I Credits: (3)

#### Either:

- STAT 720 Design of Experiments Credits: (3)
- or

Two master's degree options are available through the <u>Statistics</u> graduate program: the master's report options and the nonreport option.

- For the master's report options, the student must take 30 hours of coursework and write a report for 2 additional hours of credit.
- For the nonreport option, the student must take <u>36 hours</u> of coursework and pass a comprehensive exam approved by the supervisory committee.

The master's report option is strongly recommended for all students, especially those for whom the master's degree will be the terminal degree.

#### **REQUIRED COURSES**

In either case, the coursework must include:

- STAT 713 Applied Linear Statistical Models Credits: (3)
- STAT 770 Theory of Statistics | Credits: (3)
- STAT 771 Theory of Statistics
  II Credits: (3)
- STAT 860 Linear Models I Credits: (3)

## Either:

- STAT 720 Design of Experiments Credits: (3)
- 0

 STAT 722 - Experimental Design for Product Development and Quality Improvement Credits: (3)

and at least one credit of

 STAT 945 - Problems in Statistical Consulting Credits: (1)  STAT 722 - Experimental Design for Product Development and Quality Improvement Credits: (3)

Note: Students planning to pursue the PhD in Statistics at K-State are required to take STAT 720.

RATIONALE: We are making STAT 945 optional rather than required to accommodate different student interests and future plans they might have. Also a clarification on the choice between STAT 720 and 722 is made for students continuing to a PhD. The number of credit hours for the nonreport option is also incorrect and is corrected below.

IMPACT: No impact on other programs. Since this course will be an elective, there is no change to the list of course for the curriculum due to this course below. There are two other changes made as described above under rationale.

EFFECTIVE DATE: Spring 2017