Minutes of the Graduate Council
December 4, 2012 - 3:30 p.m.
Pending Approval of February 5th, 2013 Meeting


1. Opening remarks
   - January 18th: Time Management and Productivity Workshop for Graduate Students, Presented by Kerry Ann Rockquemore, Ph.D., Executive Director of the National Center for Faculty Development & Diversity. 9:00-12:00p.m. Open to STEM graduate students in the Colleges of Arts & Sciences and Engineering. Space is limited and advanced registration is required. Register at http://scan.me/dr376g.

   - Graduate School Orientation is scheduled for Wednesday, January 16th beginning at 9:00 a.m. in Fiedler Auditorium, 1107 Fiedler Hall. A detailed schedule is attached. Please share with all graduate students who are new to your department or program in spring 2013. Check in will begin at 8:30am. Snacks and refreshments will be provided in the morning.

   - Marcelo Sabates, Interim Director for International Recruitment, presented information on goals for graduate student recruitment in relation to 2025 objectives.

   - Council on Graduate Schools Award for Graduate Student Excellence in Teaching
     - Tammy Sonnentag (PhD category), Doctoral Candidate in Psychology
     - Jared Pfeiffer (Master’s category), MFA

   - Research and the State Winners
     - Feraidon Atai, PhD in Civil Engineering, Utilization of High Lignin Residue Ash (HLRA) in Concrete Materials
       Major Professor: Kyle Riding

     - Kelly Foster, MS in Biomedical Sciences, Bovine Viral Diarrhea Virus Transmission from Persistently Infected Cattle to Non-Persistently Infected Cattle When Commingled: An Evaluation of Serum Neutralizing Antibody Titers
       Major Professor: Daniel Thomson

     - Michael Gibson, MS in Grain Science, Physical and Processing Differences between Baked and Extruded Pet Foods
       Major Professor: Sajid Alavi
- Michael Joseph, PhD in Grain Science, Development and Characterization of a Sorghum Based, Pre-Cooked Bean Like Product Using Extrusion
  *Major Professor:* Sajid Alavi

- Marcie Lechtenberg, PhD in Marriage and Family Therapy, Assessing the Adolescent Experience of Mindfulness
  *Major Professor:* Sandra M. Stith

- Tanner Miller, MS in Biomedical Sciences, Comparison of Gamithromycin, Tilmicosin and Tulathromycin: Metaphylactic Treatments in High Risk Calves for BRD
  *Major Professor:* Daniel Thomson

- Vahid Rahmani, PhD in Biological and Agricultural Engineering, Abrupt Rainfall Change Detection in Kansas
  *Major Professor:* Stacy Hutchinson

- Tera Rooney, MS in Biomedical Sciences, Implementation of industry-oriented animal welfare and quality assurance assessment tools in commercial cattle feeding operations
  *Major Professor:* Daniel Thomson

- Kabita Kharel, MS in Entomology, Sanitation increases effectiveness of aerosol insecticides in milling facilities
  *Co-Major Professor:* Frank H. Arthur and Kun Yan Zhu

*Two alternate presenters should one of the top 9 become unavailable for the CGRS:*
- Katie Burke, PhD in Environmental Design and Planning, Measuring Gully Erosion in Two Disturbed Kansas Landscapes
  *Major Professor:* Tim Keane

- Melissa Lynes, PhD in Agricultural Economics, Determining Farmers' Willingness to Grow Cellulosic Biofuel Feedstocks on Agricultural Land
  *Major Professors:* Jeffery Williams

2. **Minutes** of the November 6, 2012 meeting were approved as presented.

3. **Graduate School Actions and Announcements**
   The following appointments for non-graduate to teach graduate courses and membership were approved by the Dean of the Graduate School.

   **Non-Graduate Faculty to Teach Graduate Courses**

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION</th>
<th>DEPARTMENT/PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darren Kelly</td>
<td>Instructor</td>
<td>Special Education, Counseling &amp; SA</td>
</tr>
<tr>
<td>Shannon Burton</td>
<td>Instructor</td>
<td>Special Education, Counseling &amp; SA</td>
</tr>
<tr>
<td>Keith Harris</td>
<td>Assistant Professor</td>
<td>Agricultural Economics</td>
</tr>
<tr>
<td>Debra Skidmore</td>
<td>Instructor</td>
<td>Journalism &amp; Mass Communications</td>
</tr>
</tbody>
</table>
Membership Approvals

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION</th>
<th>DEPARTMENT/PROGRAM</th>
<th>DATE APPROVED BY GRAD SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punit Prakash</td>
<td>Assistant Professor</td>
<td>Electrical &amp; Computer Engineering</td>
<td>11/1/2012</td>
</tr>
</tbody>
</table>

4. Academic Affairs Committee
On behalf of the Academic Affairs committee, Evan Titgemeyer, chair, proposed approval of the following members for graduate faculty. The motion passed.

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION</th>
<th>DEPARTMENT/PROGRAM</th>
<th>GRADUATE FACULTY TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punit Prakash</td>
<td>Assistant Professor</td>
<td>Electrical &amp; Computer Engineering</td>
<td>Certification</td>
</tr>
<tr>
<td>John Morris</td>
<td>Assistant Professor</td>
<td>Accounting</td>
<td>Membership</td>
</tr>
<tr>
<td>R. Louis Baumhardt</td>
<td>Adjunct Faculty</td>
<td>Agronomy</td>
<td>Membership</td>
</tr>
<tr>
<td>Christopher Blevins</td>
<td>Clinical Asst. Professor</td>
<td>Clinical Sciences</td>
<td>Membership</td>
</tr>
<tr>
<td>Beverley Earles</td>
<td>Associate Director</td>
<td>Modern Languages</td>
<td>Associate</td>
</tr>
<tr>
<td>Kimberly Charland</td>
<td>Instructor</td>
<td>Accounting</td>
<td>Associate</td>
</tr>
<tr>
<td>Jo Lyle</td>
<td>Instructor</td>
<td>Accounting</td>
<td>Associate</td>
</tr>
<tr>
<td>Debra Skidmore</td>
<td>Instructor</td>
<td>Journalism &amp; Mass Communications</td>
<td>Non-Member</td>
</tr>
<tr>
<td>Janice McGregor</td>
<td>Adjunct. Asst. Professor</td>
<td>Modern Languages</td>
<td>Non-Member</td>
</tr>
</tbody>
</table>

Course and curriculum issues
On behalf of the Academic Affairs committee, Evan Titgemeyer, chair, proposed approval of the following course and curriculum items. The motion passed.
**Expedited Curriculum Changes**

Civil Engineering  
Transportation Engineering Graduate Certificate

<table>
<thead>
<tr>
<th>From:</th>
<th>To:</th>
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</table>
| **Certificate Requirements:**  
The Graduate Certificate in Transportation Engineering requires the completion of 12 credit hours of course work as described below.  
**Core Courses:**  
All students must complete two of the following Core Courses (6 credit hours):  
- CE 774 - Pavement Design **Credits:** (3)  
- CE 775 - Traffic Engineering **Credits:** (3)  
- CE 786 - Land Development for Civil Engineers and Planners **Credits:** (3)  
**Elective Courses:**  
In addition to the Core Courses, students must complete a minimum of 6 additional credit hours of electives from the remaining core course and the following approved list of courses.  
- CE 680 - Economics of Design and Construction **Credits:** (3)  
- CE 741 - Civil Engineering Materials II **Credits:** (3)  
- CE 771 - Travel Demand Modeling **Credits:** (3)  
- CE 777 - Portland Cement Concrete Pavements **Credits:** (3)  
- CE 816 - Selected Topics in Civil Engineering **Credits:** (Var.)  
- CE 872 - Transportation Safety **Credits:** (3)  
- CE 875 - Traffic Flow Theory |  
| **Certificate Requirements:**  
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**Core Courses:**  
All students must complete two of the following Core Courses (6 credit hours):  
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- CE 775 - Traffic Engineering **Credits:** (3)  
- CE 786 - Land Development for Civil Engineers and Planners **Credits:** (3)  
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In addition to the Core Courses, students must complete a minimum of 6 additional credit hours of electives from the remaining core course and the following approved list of courses.  
- CE 680 - Economics of Design and Construction **Credits:** (3)  
- CE 741 - Civil Engineering Materials II **Credits:** (3)  
- CE 771 - Travel Demand Modeling **Credits:** (3)  
- CE 777 - Portland Cement Concrete Pavements **Credits:** (3)  
- CE 816 - Selected Topics in Civil Engineering **Credits:** (Var.)  
- CE 872 - Transportation Safety **Credits:** (3)  
- CE 874 – Sustainable Transportation |
### Other Graduate Level Course Work

- Other Graduate level course work (maximum of 3 credit hours) in Engineering Management or Statistics as approved by the Program Director.

### Credits: (3)

### Other Requirements:

In addition to the course work requirements described above, students are further required to demonstrate advanced knowledge and competency in the area of transportation engineering by completing one of the following:

1. A research paper prepared as part of the requirements of one of the Core or Elective Courses described above. To satisfy this requirement, the research paper must have received a minimum letter grade of “B.”

2. Presentation of the results of a transportation engineering related study or project to the faculty of the Transportation Engineering Certificate Program. To satisfy this requirement, the study or project must have been completed under the supervision of the candidate for the Graduate Certificate in Transportation Engineering.

The required evidence of advanced knowledge and competency should be presented to the Program Coordinator prior to the beginning of the candidate’s final semester of course work.

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### Asset Management

- CE 875 - Traffic Flow Theory Credits: (3)
- Other Graduate level course work (maximum of 3 credit hours) in Engineering Management or Statistics as approved by the Program Director.

### Credits: (3)

### Other Requirements:

In addition to the course work requirements described above, students are further required to demonstrate advanced knowledge and competency in the area of transportation engineering by completing one of the following:

1. A research paper prepared as part of the requirements of one of the Core or Elective Courses described above. To satisfy this requirement, the research paper must have received a minimum letter grade of “B.”

2. Presentation of the results of a transportation engineering related study or project to the faculty of the Transportation Engineering Certificate Program. To satisfy this requirement, the study or project must have been completed under the supervision of the candidate for the Graduate Certificate in Transportation Engineering.

The required evidence of advanced knowledge and competency should be presented to the Program Coordinator prior to the beginning of the candidate’s final semester of course work.

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**Rationale:** CE 874 was developed by Dr. Hossain and was first taught under CE 816 Special Topics and then became its own permanent course (and is no longer offered under CE 816). This will add to the list of transportation electives students can select from.

**Impact** (i.e. if this impacts another unit): None
**Effective Date:** Spring 2013

**Political Science**

Graduate Certificate in Public Administration

<table>
<thead>
<tr>
<th>FROM:</th>
<th>TO:</th>
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<tbody>
<tr>
<td>The mission of the Graduate Certificate in Public Administration is to be a flexible professional certificate program for those who desire to pursue education in principles of public management to advance in their administrative careers in the public sector and not-for-profit sector. Certificate holders will be trained for entry level management positions with government agencies at the federal, state, or local level, and with regional or sub-state organizations. After obtaining the certificate, students may apply their certificate hours towards a Master of Public Administration at Kansas State University. Course work will be offered via various distance learning technologies so that students from all over will be able to obtain this certificate. Students with a Graduate Certificate in Public Administration will understand the general principles of public administration, including but not limited to public sector budgeting, personnel, public organization theory, and research methods. Students will also have the option of specializing in one of the following two areas in public management: administrative law or not-for-profit management. The overall educational goal is to provide professional training for a wide range of administrative venues, while providing students the flexibility to specialize in an area of interest. The Graduate Certificate in Public Administration is offered through the Political Science graduate program.</td>
<td>The mission of the Graduate Certificate in Public Administration is to be a flexible professional certificate program for those who desire to pursue education in principles of public management to advance in their administrative careers in the public sector and not-for-profit sector. Certificate holders will be trained for entry level management positions with government agencies at the federal, state, or local level, and with regional or sub-state organizations. After obtaining the certificate, students may apply their certificate hours towards a Master of Public Administration at Kansas State University. Course work will be offered via various distance learning technologies so that students from all over will be able to obtain this certificate. Students with a Graduate Certificate in Public Administration will understand the general principles of public administration, including but not limited to public sector budgeting, personnel, public organization theory, and research methods. Students will also have the option of specializing in one of the following two areas in public management: administrative law or not-for-profit management. The overall educational goal is to provide professional training for a wide range of administrative venues, while providing students the flexibility to specialize in an area of interest. The Graduate Certificate in Public Administration is offered through the Political Science graduate program.</td>
</tr>
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</table>
Program Requirements (15 credit hours):

Students are required to take 15 hours of course work, 12 of which are core courses and 3 of which are elective hours. The core courses include the following:

- POLSC 700 - Research Methods in Political Science Credits: (3)
- POLSC 708 - Public Personnel Administration Credits: (3)
- POLSC 735 - Public Organization Theory Credits: (3)
- POLSC 737 - Public Budgeting Credits: (3)

Elective Courses:

Choose one of the following:

- POLSC 607 - Administrative Law Credits: (3)
- POLSC 650 - Not-For-Profit Management Credits: (3)

Program Requirements (15 credit hours):

Students are required to take 15 hours of course work, 12 of which are core courses and 3 of which are elective hours.

The core courses are listed below. POLSC 708, POLSC 735 and POLSC 737 are required. Students may choose either POLSC 700 or POLSC 710 as their fourth core course. Whichever of the two is not chosen may be taken as an elective.

- POLSC 708 - Public Personnel Administration Credits: (3)
- POLSC 735 - Public Organization Theory Credits: (3)
- POLSC 737 - Public Budgeting Credits: (3)
- POLSC 700 - Research Methods in Political Science Credits: (3)

OR

- POLSC 710 – Policy Analysis and Evaluation Credits: (3)

Elective Courses are listed below. Students should choose one. Note that courses designated by an asterisk (*) are offered only on campus:

- POLSC 607 - Administrative Law Credits: (3)
- POLSC 618 – Urban Politics Credits: (3)*
- POLSC 620 – State and Local
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLSC 628</td>
<td>Civic Engagement</td>
<td>(3)*</td>
</tr>
<tr>
<td>POLSC 650</td>
<td>Not-For-Profit Management</td>
<td>(3)</td>
</tr>
<tr>
<td>POLSC 711</td>
<td>Administrative Ethics</td>
<td>(3)*</td>
</tr>
<tr>
<td>POLSC 739</td>
<td>Intergovernmental Relations</td>
<td>(3)*</td>
</tr>
<tr>
<td>POLSC 785</td>
<td>Readings in Political Science</td>
<td>(3)</td>
</tr>
<tr>
<td>POLSC 799</td>
<td>Pro-Seminar: Executive Leadership Problems</td>
<td>(3)*</td>
</tr>
<tr>
<td>POLSC 812</td>
<td>Fundamentals of Security Studies</td>
<td>(3)</td>
</tr>
<tr>
<td>POLSC 700</td>
<td>Research Methods in Political Science</td>
<td>(3)</td>
</tr>
<tr>
<td>POLSC 710</td>
<td>Policy Analysis and Evaluation</td>
<td>(3)</td>
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</table>

**RATIONALE:** We have developed additional online core and elective courses. Also, we have added on-campus electives for students not pursuing the certificate at a distance.

**IMPACT:** None

**EFFECTIVE DATE:** Spring 2013
Expedited Course Changes

Agronomy

TO: AGRON 600. Crop Problems. (0–18). I, II, S. Studies may be chosen in: genetics, crop improvement, forages, ecology, weed control, plant physiology, or crop production. K-State 8: No.

RATIONALE: The change in variable credit from 1 – 18 hours to 0 – 18 hours allows students a no credit option.

IMPACT: None

EFFECTIVE DATE: Fall 2013


RATIONALE: The change in variable credit from 1 – 18 hours to 0 – 18 hours allows students to have a no credit option.

IMPACT: None

EFFECTIVE DATE: Fall 2013

FROM: AGRON 706. Remote Sensing of the Environment. (3) I. Remote sensing and its application to earth study, especially environmental problems and land use. Course employs both readings and the use of imagery. Two hours lec., two hours lab a week. Pr.: One course in physical science and one in biological science. Cross-listed as GEOG 705. K-State 8: No.

TO: AGRON 606. Remote Sensing of the Environment. (3) I. Remote sensing and its application to earth study, especially environmental problems and land use. Course employs both readings and the use of imagery. Two hours lec., two hours lab a week. Pr.: One course in physical science and one in biological science. Cross-listed as GEOG 605. K-State 8: No.

RATIONALE: The Department of Geography changed the course that was previously cross-listed as GEOG 705 to 605.

IMPACT: None
EFFECTIVE DATE: Fall 2013


TO: AGRON 945. Soil Mineralogy. (4) I. Theory and application of methods for analyzing minerals in soil environments, including X-ray, electron optical, thin section, and wet chemical techniques. Two hours rec. and six hours lab a week. Rec. Preq.: AGRON 605. K-State 8: No.

RATIONALE: The demand for this 900-level course is sufficient to teach every fall semester.

IMPACT: None

EFFECTIVE DATE: Fall 2013

Animal Sciences and Industry

FROM: ASI 602. Equine Breeding and Genetics. (2) Fall even years. Application of genetic and animal breeding principles to the horse. Emphasis on inheritance of color and diseases, as well as selection and mating programs. Two hours lecture a week. Rec. Pr: ASI 500 and ASI 510.

TO: ASI 602. Equine Breeding and Genetics. (2) Fall even years. Application of genetic and animal breeding principles to the horse. Emphasis on inheritance of color and diseases, as well as selection and mating programs. Two hours lecture a week. Pr: Junior Standing Rec. Pr: ASI 500 and ASI 510.

RATIONALE: This is a 600-level course and should only be available to junior and senior undergraduates and graduate students. The prerequisite of junior standing was inadvertently left off the original proposal.

IMPACT: No impact on other units

EFFECTIVE DATE: Fall 2013

Food Science and Industry


TO: FDSCI 690. Principles of HACCP. (2). Fall. A comprehensive study of the Hazard Analysis and Critical Control Point System and its application in the food industry. Two hours

RATIONALE: HACCP is a 600-level course and should only be available to junior and senior undergraduates and graduate students as it requires a basic understanding of food science and processing.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

Grain Science and Industry

FROM: GRSC 625 - Flour and Dough Testing
Credits: (3)
Physical and chemical methods used in evaluating wheat flour and doughs.

Note
Two one-hour lectures and one three-hours lab a week.

Requisites
Recommended prerequisite: GRSC 602.

When Offered Fall
UGE course No
K-State 8 Empirical and Quantitative Reasoning
Natural and Physical Sciences

TO: GRSC 625 - Flour and Dough Testing
Credits: (3)
Physical and chemical methods used in evaluating wheat flour and doughs.

Note
Two one-hour lectures and one three-hours lab a week.

Requisites
Recommended prerequisite: GRSC 602.

When Offered Spring
UGE course No
K-State 8 Empirical and Quantitative Reasoning
Natural and Physical Sciences

RATIONALE: GRSC 625 is being offered only in Spring semesters. Change is made to reflect the actual course offering.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013
FROM:  

**GRSC 636 - Baking Science I Laboratory**  
**Credits:** (2)  
Laboratory exercises in theory and production of yeast-leavened baked products.  
**Note**  
Six hours lab a week.  
**Requisites**  
Recommended prerequisite: GRSC 635 or concurrent enrollment.  
**When Offered**  
Fall  
**UGE course**  
No  
**K-State 8**  
None

TO:  

**GRSC 636 - Baking Science I Laboratory**  
**Credits:** (2)  
A laboratory course to accompany Baking Science I (GRSC 635). Laboratory exercises in theory and production of yeast-leavened baked products.  
**Note**  
Six hours lab a week.  
**Requisites**  
Recommended prerequisite: GRSC 635 or concurrent enrollment.  
**When Offered**  
Fall  
**UGE course**  
No  
**K-State 8**  
None

**RATIONALE:**  
The change involves some minor wordsmithing in course description.

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

**EFFECTIVE DATE:**  
Fall 2013

FROM:  

**GRSC 651 - Food and Feed Product Protection**  
**Credits:** (4)  
Sanitation in relation to processing, handling, and storage of human and animal foods. Emphasis on contaminants, control of causative agents, equipment and plant design, applicable laws and regulations.  
**Note**  
Three hours lecture and three hours lab a week.  
**Requisites**  
Prerequisite: Junior standing.  
Recommended prerequisite: Minimum 8 hours biological sciences.  
**When Offered**  
Spring  
**UGE course**  
No  
**K-State 8**  
Empirical and Quantitative Reasoning  
Global Issues and Perspectives

TO:  

**GRSC 651 - Food and Feed Product Protection**  
**Credits:** (4)  
Sanitation in relation to processing, handling, and storage of human and animal
foods. Emphasis on contaminants, control of causative agents, equipment and plant design, applicable laws and regulations.

**Note**
Three hours lecture and three hours lab a week.

**Requisites**
Prerequisite: Junior standing.
Recommended prerequisite: BIOL 198, BIOL 455.

**When Offered**
Spring

**UGE course**
No

**K-State 8**
Empirical and Quantitative Reasoning
Global Issues and Perspectives

**RATIONALE:**
BIOL courses are listed more specifically. Both BIOL 198 and 455 are required courses for BSM, FSM and MSM majors. This change will not increase total credit requirement.

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

**EFFECTIVE DATE:**
Fall 2013

**FROM:**
GRSC 656 - Pneumatic Conveying of Dry Solids
Credits: (2)
Pneumatic conveying offers an ideal choice for transportation of dry, powdered and granular materials. The course is designed to introduce students to a comprehensive knowledge of the design, operation and capabilities of pneumatic conveying systems. The student will study the components of pneumatic conveying systems, the requirements for designing efficient and reliable pneumatic conveying systems, and troubleshooting existing systems.

**Note**
One (1)-hour lecture and one (3)-hour lab per week.

**Requisites**
Recommended prerequisite: GRSC 210, GRSC 310, PHYS 113, PHYS 114, MATH 220.

**When Offered**
Fall

**UGE course**
No

**K-State 8**
None

**TO:**
GRSC 656 - Pneumatic Conveying of Dry Solids
Credits: (2)
The course is designed to introduce students to a comprehensive knowledge of the design, operation and capabilities of pneumatic conveying systems for transportation of dry, powdered and granular materials. The student will study the components of pneumatic conveying systems, the requirements for designing efficient and reliable pneumatic conveying systems, and troubleshooting existing systems.

**Note**
One hour lecture and three hour lab a week.
Requisites
Prerequisite: Junior standing, GRSC 210, GRSC 310, GRSC 500 and 501, PHYS 113 or 213, MATH 205 or 220, or consent of instructor.

When Offered: Fall
UGE course: No
K-State 8: Empirical and Quantitative Reasoning

RATIONALE: The change involves some minor wordsmithing in course description. Changing the “recommended prerequisite” to “prerequisite” will better prepare the students and allow students to take core courses in a more timely manner. Junior standing, GRSC 500 and 501 are added to prerequisites. GRSC 500 and 501 are critical to take prior to GRSC 656 to have a strong background in operational milling. The proposed change does not alter any program requirements or affect any other department. Adding “consent of instructor” will provide flexibility when needed (such as the case with transfer students).

IMPACT: No impact on other departments.

FROM: GRSC 670 - Bakery Layout
Credits: (1)
The layouts of facilities to produce baked goods are studied. Students prepare their own bakery layout. Current problems in a bakery production setting in the baking industry are discussed.
Note: One two-hour lab per week.
Requisites: Recommended prerequisite: MATH 100, PHYS 113, and GRSC 636.
When Offered: Spring
UGE course: No
K-State 8: None

TO: GRSC 670 - Bakery Layout
Credits: (1)
The layouts of facilities to produce baked goods are studied. Students prepare their own bakery layout. Current problems in a bakery production setting in the baking industry are discussed.
Note: One two-hour lab per week.
Requisites: Prerequisite: MATH 100, PHYS 113, GRSC 210, and GRSC 636.
When Offered: Spring
UGE course: No
K-State 8: None

RATIONALE: Changing the “recommended prerequisite” to “prerequisite” will better prepare the students and allow students to take core courses in a more timely manner.
GRSC 210 is added to prerequisites. GRSC 210 introduces CAD skills which are required in designing bakery layout. The proposed change does not alter any program requirements or affect any other department.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM: GRSC 680 - Milling Science II
Credits: (2)
Advanced study of the entire gradual reduction system of wheat flour milling and the many unit process systems that constitute the milling system. The theory and practice of mill control are studied in detail. Processing of other cereal grains and oil seeds are covered as well as general mill management.

Note
Two one-hour lecture a week.

Requisites
Prerequisite: GRSC 210 and 500, or consent of instructor.
Recommended prerequisite: STAT 325 and PHYS 113 and MATH 205.

When Offered Fall
UGE course No
K-State 8 None

TO: GRSC 680 - Milling Science II
Credits: (2)
Advanced study of the entire gradual reduction system of wheat flour milling and the many unit process systems that constitute the milling system. The theory and practice of mill control are studied in detail. Processing of other cereal grains and oil seeds are covered as well as general mill management.

Note
Two one-hour lecture a week.

Requisites
Prerequisite: GRSC 210 and 500 and 501, or consent of instructor.
Recommended prerequisite: STAT 325 and PHYS 113 and MATH 205.

When Offered Fall
UGE course No
K-State 8 None

RATIONALE: The change in prerequisite reflects the split in lecture and lab component of GRSC 500 (concurrently proposed as GRSC 500 and 501).

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013
FROM: GRSC 684 - Milling Processing Technology Management  
Credits: (3)  
A capstone course for milling science and management students. The objective is to familiarize students with the structure of the U.S. flour milling industry, the managerial and processing operations involved in the management of a flour mill, modeling simulation techniques for flour milling operations and investment projects and evaluation of new milling technologies.  
Note  
Two hours lecture and three hours of lab per week.  
Requisites  
Recommended prerequisite: GRSC 680.  
When Offered Spring  
UGE course No  
K-State 8 None

TO:  
GRSC 684 - Milling Processing Technology Management  
Credits: (3)  
A capstone course for milling science and management students. The objective is to familiarize students with the latest technology utilized in cereal milling systems; the investment/business principles utilized in evaluating new milling technologies; mill management/leadership development and the food/employee safety requirements in the industry.  
Note  
Three hours lecture a week.  
Requisites  
Prerequisite: GRSC 680 or consent of instructor.  
When Offered Fall  
UGE course No  
K-State 8 None

RATIONALE: The change involves some wordsmithing in course description. The catalog states under “note” that this course is “Two hours lecture and three hours of lab per week”. It should actually read “three hours of lecture”. This modification better represents how the course is actually taught. Changing the “recommended prerequisite” to “prerequisite” will better prepare the students and allow students to take core courses in a more timely manner. Adding “consent of instructor” will provide flexibility when needed.  
The proposed changes do not alter any program requirements or affect any other department.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013
FROM: GRSC 740 - Biomaterials Processing
Credits: (3)
This course is designed for students who are interested in plant biomaterials processing. This course will teach technologies of biobased materials processing including starch extraction (wet milling), plant oil extraction and refining, plant protein extraction and processing, cellulose processing, biofuel production, chemicals bioconversion, and drying technologies of biomaterials.

Note
Three hours lecture a week.

Requisites
Prerequisite: BAE 575 or GRSC 602.

When Offered
Fall, in even years

Cross-listed
BAE 740

UGE course
No

K-State 8
None

TO: GRSC 740 - Biomaterials Processing
Credits: (3)
This course is designed for students who are interested in plant biomaterials processing. This course will teach technologies of biobased materials processing including starch extraction (wet milling), plant oil extraction and refining, plant protein extraction and processing, cellulose processing, biofuel production, chemicals bioconversion, and drying technologies of biomaterials.

Note
Three hours lecture a week.

Requisites
Prerequisite: BAE 575 or GRSC 602.

When Offered
Fall, even numbered years

Cross-listed
BAE 740

UGE course
No

K-State 8
None

RATIONALE: The change involves minor wordsmithing in “when offered”.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM: GRSC 790 - Grain Science Problem
Credits: (Variable)

Note
Repeatable.

Requisites
Prerequisite: Consent of department head.

When Offered
Fall, Spring, Summer
TO:  

GRSC 790 - Grain Science Problem  
Graduate study in an area pertinent to grain processing and utilization.  
Credits: (Variable)  
Note  
For graduate students.  
Repeatable.  
Requisites  
Prerequisite: Consent of department head.  
When Offered 
  Fall, Spring, Summer  
UGE course 
No  
K-State 8 
None

RATIONALE:  
The change involves some minor wordsmithing in course description.

IMPACT:  
No impact on other departments.

EFFECTIVE DATE:  
Fall 2013

FROM:  

GRSC 815 - Fundamentals of Processing Grains for Food  
Unit processes in the receiving and storing of grains; grinding, sifting, mixing, conveying, cooling, drying, air qualities, air flow, compaction, extrusion, etc.  
This course is not open to undergraduate majors in the department.  
Credits: (3)  
Note:  
Two hours lec. and three hours lab a week.  
Requisites:  
Rec. Pr.: PHYS 114.  
When Offered:  
  Fall

TO:  

GRSC 815 - Fundamentals of Processing Grains for Food  
Unit processes in the receiving and storing of grains; grinding, sifting, mixing, separation, conveying, cooling, drying, etc. This course is not open to undergraduate majors in the department.  
Credits: (3)  
Note:  
Two hours lecture and three hours laboratory a week.  
Requisites:  
Rec. Pr.: PHYS 213 or equivalent.  
When Offered:  
  Fall, odd numbered years

RATIONALE:  
The change involves some wordsmithing in course description and note. Change in recommended prerequisite: PHYS 213 or equivalent is more relevant prerequisite than PHYS 114 for this course. 
This course will be offered only in alternating years. Almost all of GSI graduate
courses are being offered in odd or even numbered years.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM: GRSC 820 - Advanced Extrusion Processing
Advanced study of the engineering principles of extrusion forming and cooking with a detailed focus on scale-up. A variety of extrusion systems will be studied in lab with associated group projects.
Credits: (4)
Note: Three hrs. lec. and three hrs. lab a week.
Requisites: Rec. Pr.: GRSC 720 or previous extrusion experience.
When Offered: Fall, odd years

TO: GRSC 820 - Advanced Extrusion Processing
Advanced study of the engineering principles of extrusion forming and cooking with a detailed focus on scale-up. A variety of extrusion systems will be studied in lab with associated group projects.
Credits: (4)
Note: Three hrs. lecture and three hrs. laboratory a week.
Requisites: Rec. Pr.: GRSC 620 or previous extrusion experience.
When Offered: Fall, odd numbered years

RATIONALE: The change involves some minor wordsmithing.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM: GRSC 830 - Physical Properties of Cereal Polymers
Physical properties of cereal polymers include physical attributes, rheological, mechanical, thermal, electrical, and optical properties. Thermal analysis methods will be taught. Thermal analysis include glass transition, gelatinization, denaturation, and thermal softening and settings of cereal polymers. Rheological properties associated with these thermal transitions will be discussed. Applications of thermal analysis in cereal chemistry, processing, and product quality control will be discussed.
Credits: (3)
Note: Two hours lecture and discussion, and two hour lab.
Requisites:
Rec. Pr.: GRSC 602.
When Offered: Spring, even years

TO:

GRSC 830 - Physical Properties of Cereal Polymers
Physical properties of cereal polymers include physical attributes, rheological, mechanical, thermal, electrical, and optical properties. Thermal analysis methods will be taught. Thermal analyses include glass transition, gelatinization, denaturation, and thermal softening and settings of cereal polymers. Rheological properties associated with these thermal transitions will be discussed. Applications of thermal analysis in cereal chemistry, processing, and product quality control will be discussed.
Credits: (3)
Note: Two hours lecture and discussion, and two hour lab.
Requisites: Rec. Pr.: GRSC 602.
When Offered: Spring, even numbered years

RATIONALE: The change involves some minor wordsmithing in “course description” and “when offered”.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM:

GRSC 899 - Research in Grain Science
Research may be used as basis for the M.S. Thesis.
Credits: (Var.)
Requisites: Pr.: Consent of staff.
When Offered: Fall, Spring, Summer

TO:

GRSC 899 - Research in Grain Science
Basis for the M.S. Thesis.
Credits: (Var.)
Requisites: Pr.: Consent of staff.
When Offered: Fall, Spring, Summer

RATIONALE: The change involves some minor wordsmithing in course description.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM:

GRSC 900 - Graduate Seminar in Grain Science
Discussion of technical problems in the cereal industry.
GRSC 900 - Graduate Seminar in Grain Science
Coverage of skills and abilities needed for success in graduate school.
Credits: (1)
Note:
One hour lec. a week. Attendance required of all graduate students in grain science.
When Offered: Fall, Spring

TO: GRSC 901 - Starch Chemistry and Technology
Chemical and physical properties of cereal and legume starches. Isolation, structure, assay methods, and properties in solution. Methods of modifying starches for industrial use, including chemical, physical, and enzymic modification.
Credits: (3)
Requisites:
Rec. Pr.: BIOCH 521, GRSC 602.
When Offered: Spring, even numbered years

RATIONALE:
The change involves some minor wordsmithing in course description.

IMPACT:
No impact on other departments.

EFFECTIVE DATE:
Fall 2013
FROM: GRSC 902 - Carbohydrates in Food
Structure and properties of food carbohydrates, including sugars, oligosaccharides, and polysaccharides, and methods of their modification and analysis.
Credits: (3)
Requisites:
Rec. Pr.: CHEM 350 or BIOCH 521.
When Offered: Spring, odd years

TO: GRSC 902 - Carbohydrates in Food
Structure and properties of food carbohydrates, including sugars, oligosaccharides, and polysaccharides, and methods of their modification and analysis.
Credits: (3)
Requisites:
Rec. Pr.: CHEM 350 or BIOCH 521, PhD students, or consent of instructor.
When Offered: Spring, odd numbered years

RATIONALE: The change involves minor wordsmithing.
GRSC 902 is designed for PhD students. Change in recommended prerequisites reflects this.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM: GRSC 999 - Research in Grain Science
Research may be used as basis for Ph.D. Dissertation.
Credits: (Var.)
Requisites:
Pr.: Consent of staff.
When Offered: Fall, Spring, Summer

TO: GRSC 999 - Research in Grain Science
Basis for Ph.D. Dissertation.
Credits: (Var.)
Requisites:
Pr.: Consent of staff.
When Offered: Fall, Spring, Summer

RATIONALE: The change involves some minor wordsmithing in course description.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013
Horticulture, Forestry, and Recreation Resources

FROM:  
HORT 751. Human Issues in Horticultural Therapy. (3) I, odd years.  New developments and applications of gardening or horticultural activities for special populations will be emphasized. Procedures for management of horticultural therapy programs, designing therapeutic or rehabilitation activities, and evaluation methods will be discussed. Reading of selected research publications relating to horticultural therapy will be assigned. Pr. recommended: A course in research methods and a course in statistics.

TO:  
HORT 751. Human Issues in Horticultural Therapy. (3) I.   This course will explore human issues in horticulture generally, and human issues in horticultural therapy specifically. Consideration of selected topics and issues such as people-plant relationship theories, horticultural therapy as a specialized allied health field, health-care gardens and their use, societal impacts on horticultural therapy, and research issues. Provides students with a knowledge and understanding of the literature in horticultural therapy and develops an appreciation of the interrelationships involved in this multidisciplinary area. Pr. recommended: A course in research methods and a course in statistics.

RATIONALE: The changes reflect the current schedule for offering the class and a clearer description of the course content.

IMPACT: No impacts outside the department.

EFFECTIVE DATE: Fall 2013

FROM:  
HORT 753. Clinical Skills in Horticultural Therapy. (6) S.   Development of horticultural therapy skills and methodology is presented through real-life case studies. Includes instruction, practice, and evaluation of clinical skills with population groups typically served through horticultural therapy. Pr. recommended: A course in research methods and a course in statistics.

TO:  
HORT 753. Clinical Skills in Horticultural Therapy. (3) I.   Development of horticultural therapy skills and methodology is facilitated through real-life case studies. Includes instruction, practice, and evaluation of clinical skills with population groups typically served through horticultural therapy.

RATIONALE: The changes reflect the current schedule for offering the class and the termination of 2 required 5-day on-site sessions. Online modules have been developed to guide students in obtaining a variety of clinical experiences where they reside, thus the in-person sessions are no longer required. A 3-credit course better reflects the time commitment given the change in class structure.

IMPACT: No impacts outside the department.

EFFECTIVE DATE: Fall 2013
Political Science


RATIONALE: Entire university asked to revise K-State 8 content areas.

EFFECTIVE DATE: Fall 2013

FROM: POLSC 620 – State and Local Government. (3) II. The United States system of federalism with emphasis on a comparative analysis of the government and politics of the fifty states and their subdivisions. Pr.: POLSC 110 or 325. K-State 8: Human Diversity within the US; Social Sciences.

TO: POLSC 620 – State and Local Government. (3) II. The United States system of federalism with emphasis on a comparative analysis of the government and politics of the fifty states and their subdivisions. Pr.: POLSC 110 or POLSC 115. K-State 8: Historical Perspectives; Social Sciences.

RATIONALE: Entire university asked to revise K-State 8 content areas.

EFFECTIVE DATE: Fall 2013

Department of Accounting

Change From:

ACCTG 642 – Accounting Research
Credits: (3)
Use of the sources of authoritative guidance in resolving complex, professionally oriented problems in auditing, financial reporting, and tax reporting. Analysis and presentation of case material is covered.

Note
Students may be enrolled concurrent in ACCTG 442. For accounting majors only.
Requisites
Prerequisite: ACCTG 342, 433, and 442.

When Offered
Fall, Spring, Summer

UGE course
No

K-State 8
Empirical and Quantitative Reasoning
Social Sciences

Change to:

ACCTG 642 – Accounting Research and Communication
Credits: (3)
Use of the sources of authoritative guidance in resolving complex, professionally oriented problems that include auditing, financial reporting, and tax reporting. Students analyze numerous unstructured cases and present their conclusion with written reports and oral presentations.

Note
Students may be enrolled concurrent in ACCTG 442. For accounting majors only.

Requisites
Prerequisite: ACCTG 342, 433, and 442.

When Offered
Fall, Spring, Summer

UGE course
No

K-State 8
Empirical and Quantitative Reasoning
Social Sciences

Rationale: The only change is the name of the course, as communication is a major component of this course and needs to be labeled as such.

Impact on Other Units: None

Effective Date: Spring 2013
MANGT 665 – Business Intelligence, Data Mining and Database Marketing
Credits: (3)
In-depth study of a broad range of topics and techniques in business intelligence (BI), data mining, and database marketing (DM). Emphasis on fundamentals of relational database management, data warehousing as a business practice, customer relationship management (CRM), customer segmentation, various data mining techniques, data visualization, business performance management, use of scorecard/dashboard, and advanced BI and data mining software tools.

Requisites
Prerequisite: Mangt 366 or equivalent.

When Offered
Spring

UGE course
No

K-State 8
None

Change to:

MANGT 665 – Business Analytics and Data Mining
Credits: (3)
In-depth study of a broad range of topics and techniques in business intelligence (BI), data mining, and database marketing (DM). Emphasis on fundamentals of relational database management, data warehousing as a business practice, customer relationship management (CRM), customer segmentation, various data mining techniques, data visualization, business performance management, use of scorecard/dashboard, and advanced BI and data mining software tools.

Requisites
Prerequisite: Mangt 366 or equivalent.

When Offered
Spring

UGE course
No

K-State 8
None
**Rationale:** The only change is the title of the course, as Business Analytics is an umbrella term including Business Intelligence and Database Marketing.

**Impact on Other Units:** None

**Effective Date:** Spring 2013

### Non-Expedited Curriculum Changes

**Geographic Information Science Graduate Certificate**

<table>
<thead>
<tr>
<th>FROM:</th>
<th>TO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The course requirements for the Graduate Certificate in GIScience are shown below. A maximum of 6 transfer credit hours may be used to meet program requirements. Students must earn a minimum GPA of 3.33 in the Geospatial Core to qualify for the Graduate Certificate in GIScience. The graduate faculty for the program will periodically review the certificate requirements and have the authority to pass modifications to the approved list of courses.</td>
<td>The course requirements for the Graduate Certificate in GIScience are shown below. A minimum of 15 graduate credit hours is required to earn the certificate. A maximum of two geospatial core courses may be waived and replaced with approved electives in cases where students have completed prior coursework for undergraduate credit. A minimum of 12 hours at the 600-level or higher is required. Students must earn a minimum GPA of 3.33 in the geospatial core to earn the certificate.</td>
</tr>
</tbody>
</table>

**Prerequisites:**

- Competence in cartography, thematic mapping, or geodesy (e.g., GEOG 302)
- Competence in basic statistics (e.g., STAT 320, STAT 330, STAT 350)
- Competence in object-oriented computer programming (e.g., Visual Basic for Applications)

**Geospatial Core (9 credit hours):**

- GEOG 508 Geographic Information Systems I (4)
- GEOG 605 Remote Sensing of the Environment (3)
- GEOG 608 Geographic Information Systems II (3)

**Elective courses – Select two (minimum of 6 credit hours):**

- GEOG 508 Geographic Information Systems I (4)
- GEOG 605/AGRON 706 Remote Sensing of the Environment (3)
- GEOG 608 Geographic Information Systems II (3)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRON 655</td>
<td>Site-Specific Agriculture (3)</td>
</tr>
<tr>
<td>CE 585</td>
<td>Civil Engineering Project (1-3)</td>
</tr>
<tr>
<td>CIS 501</td>
<td>Software Architecture and Design (3)</td>
</tr>
<tr>
<td>CIS 560</td>
<td>Database System Concepts (3)</td>
</tr>
<tr>
<td>CIS 635</td>
<td>Introduction to Computer-based Knowledge Systems (3)</td>
</tr>
<tr>
<td>CIS 636</td>
<td>Introduction to Computer Graphics (3)</td>
</tr>
<tr>
<td>DAS/DEN/GENAG 582</td>
<td>Natural Resources/Environmental Science Project (NRES) (3)</td>
</tr>
<tr>
<td>GEOL 560</td>
<td>Field Methods (3)</td>
</tr>
<tr>
<td>GEOG 602</td>
<td>Computer Mapping and Geographic Visualization (3)</td>
</tr>
<tr>
<td>GEOG 610</td>
<td>Geography Internship (1-3)</td>
</tr>
<tr>
<td>GEOG 700</td>
<td>Quantitative Analysis in Geography (3)</td>
</tr>
<tr>
<td>GEOG 711</td>
<td>Topics in Remote Sensing (3)</td>
</tr>
<tr>
<td>GEOG 795</td>
<td>Topics in Geographic Information Science (1-3)</td>
</tr>
<tr>
<td>GEOG 808</td>
<td>Geocomputation (3)</td>
</tr>
<tr>
<td>GEOG 880</td>
<td>Spatial Data Analysis and Modeling (3)</td>
</tr>
<tr>
<td>GEOG 895</td>
<td>Topics in Spatial Analysis (1-3)</td>
</tr>
<tr>
<td>LAR 758</td>
<td>Land Resource Information Systems (4)</td>
</tr>
<tr>
<td></td>
<td><strong>Elective courses – Select two (minimum of 6 credit hours):</strong></td>
</tr>
<tr>
<td>AGRON 655</td>
<td>Site-Specific Agriculture (3)</td>
</tr>
<tr>
<td>BAE 869</td>
<td>Advanced Watershed Modeling (3)</td>
</tr>
<tr>
<td>CE 585</td>
<td>Civil Engineering Project (1-3)</td>
</tr>
<tr>
<td>CE 752</td>
<td>Advanced Hydrology (3)</td>
</tr>
<tr>
<td>CE 786</td>
<td>Land Development for Civil Engineers and Planners (3)</td>
</tr>
<tr>
<td>CIS 501</td>
<td>Software Architecture and Design (3)</td>
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<td>Computer Mapping and Geographic Visualization (3)</td>
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<td>GEOG 610</td>
<td>Geography Internship (1-3)</td>
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<tr>
<td>GEOG 700</td>
<td>Quantitative Analysis in Geography (3)</td>
</tr>
<tr>
<td>GEOG 711</td>
<td>Topics in Remote Sensing (3)</td>
</tr>
<tr>
<td>GEOG 712</td>
<td>Internet GIS and Distributed GIServices (3)</td>
</tr>
<tr>
<td>GEOG 795</td>
<td>Topics in Geographic Information Science (1-3)</td>
</tr>
<tr>
<td>GEOG 808</td>
<td>Geocomputation (3)</td>
</tr>
<tr>
<td>GEOG 880</td>
<td>Spatial Data Analysis and Modeling (3)</td>
</tr>
<tr>
<td>GEOG 890</td>
<td>Advanced Spatial Analysis Techniques (3)</td>
</tr>
<tr>
<td>GEOG 895</td>
<td>Topics in Spatial Analysis (1-3)</td>
</tr>
<tr>
<td>LAR 704</td>
<td>Environmental Landscape Planning and Design (5)</td>
</tr>
<tr>
<td>PLAN 801</td>
<td>Planning Methods I (3)</td>
</tr>
<tr>
<td>PLAN 836</td>
<td>Community Plan Preparation (3)</td>
</tr>
<tr>
<td>STAT 703</td>
<td>Statistical Methods for Natural Scientists (3)</td>
</tr>
<tr>
<td>STAT 704</td>
<td>Analysis of Variance (2)</td>
</tr>
<tr>
<td>STAT 705</td>
<td>Regression and Correlation Analysis (2)</td>
</tr>
</tbody>
</table>

**RATIONALE:** This is a routine update of the Geographic Information Science Graduate Certificate to reflect recent changes in course names/numbers and cross-listings, as well as to expand the list of pre-approved elective courses. Due to previously approved credit hour change to one of the geospatial core courses (GEOG 508), the total credit hour
requirement can now range between 15 to 16 hours, with a minimum of 15 required to earn the certificate.

**IMPACT:** BAE, CE, LAR, PLAN, STAT

**EFFECTIVE DATE:** Spring 2013

## Chemical Engineering
### Air Quality Graduate Certificate

<table>
<thead>
<tr>
<th>From:</th>
<th>To:</th>
</tr>
</thead>
</table>

### Certification requirements

The course requirements for the certificate program in air quality are as follows:

1. For the Ph.D. degree, 15 credit hours are required including two credits of Air Quality Seminar, at least one course which includes safety and health/toxicology, at least one course which includes air quality measurement and characterization, and at least one course which includes air quality management and control. To fulfill the interdisciplinary objectives of the program, the course list should include courses from at least three academic departments.

2. For the M.S. degree, 12 credit hours are required including one credit of Air Quality Seminar and courses from at least two of the three areas required for the Ph.D. The course list should include courses from at least three different departments.

It is expected that special topics courses in air quality will be approved for the certificate program by the air quality graduate education.
committee upon request following the procedure described below.

<table>
<thead>
<tr>
<th>Courses in Safety and Health/Toxicology</th>
</tr>
</thead>
<tbody>
<tr>
<td>• DMP 650 - Fundamentals of Public Health and Food Safety <strong>Credits:</strong> (3)</td>
</tr>
<tr>
<td>• DMP 801 - Toxicology <strong>Credits:</strong> (2)</td>
</tr>
<tr>
<td>• DMP 805 - Toxins in the Biological System <strong>Credits:</strong> (2)</td>
</tr>
<tr>
<td>• DMP 806 - Environmental Toxicology <strong>Credits:</strong> (2)</td>
</tr>
<tr>
<td>• DMP 807 - Current Topics in Toxicology <strong>Credits:</strong> (2)</td>
</tr>
<tr>
<td>• FDSCI 915 - Food Toxicology <strong>Credits:</strong> (2)</td>
</tr>
<tr>
<td>• IMSE 610 - Occupational Safety Engineering <strong>Credits:</strong> (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses in Measurement and Characterization</th>
</tr>
</thead>
<tbody>
<tr>
<td>• AGRON 901 - Environmental Instrumentation <strong>Credits:</strong> (1)</td>
</tr>
<tr>
<td>• ASI 864 - Analytical Techniques-Immunoassays <strong>Credits:</strong> (1)</td>
</tr>
<tr>
<td>• BAE 811 - Particle Technology <strong>Credits:</strong> (3)</td>
</tr>
<tr>
<td>• CHM 566 - Instrumental Methods of Analysis <strong>Credits:</strong> (3)</td>
</tr>
<tr>
<td>• FDSCI 713 - Rapid Methods and Automation in Microbiology <strong>Credits:</strong> (2)</td>
</tr>
<tr>
<td>• GEOG 608 - Geographic Information Systems II <strong>Credits:</strong> (3)</td>
</tr>
<tr>
<td>• GEOG 711 - Topics in Remote Sensing <strong>Credits:</strong> (3)</td>
</tr>
</tbody>
</table>

<table>
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<td>• DMP 650 - Fundamentals of Public Health and Food Safety <strong>Credits:</strong> (3)</td>
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</tr>
<tr>
<td>• DMP 807 - Current Topics in Toxicology <strong>Credits:</strong> (2)</td>
</tr>
<tr>
<td>• FDSCI 915 - Food Toxicology <strong>Credits:</strong> (2)</td>
</tr>
<tr>
<td>• IMSE 610 - Occupational Safety Engineering <strong>Credits:</strong> (3)</td>
</tr>
<tr>
<td>• GENAG 711 – Occupational and Agricultural Health <strong>Credits:</strong> (3)</td>
</tr>
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</tr>
<tr>
<td>• GEOG 711 - Topics in Remote Sensing <strong>Credits:</strong> (3)</td>
</tr>
</tbody>
</table>
BAE 651 - Air Pollution Engineering  
**Credits:** (3)

FDSCI 791 - Advanced Application of HACCP Principles  
**Credits:** (3)

ME 622 - Indoor Environmental Engineering  
**Credits:** (3)

ME 721 - Thermal Systems Design  
**Credits:** (3)

ME 722 - Human Thermal Engineering  
**Credits:** (3)

**Supporting Courses**

AGRON 746 - Physical Properties of Soils  
**Credits:** (3)

AGRON 900 - Micrometeorology  
**Credits:** (3)

ASI 720 - Anaerobic Bacteriology  
**Credits:** (2)

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

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

BIOL 805 - Advanced Mycology  
**Credits:** (3)

CE 967 - Physicochemical Processes  
**Credits:** (3)

CHE 682 - Surface Phenomena  
**Credits:** (3)

CHE 750 - Air Quality Seminar  
**Credits:** (1)

CHE 862 - Advanced Transport Phenomena I  
**Credits:** (3)

CHE 910 - Selected Topics in Transport Phenomena  
**Credits:** (3)

CHM 856 - Chemical Kinetics  
**Credits:** (3)

CHM 937 - Applications of Surface

**Courses in Management and Control**

BAE 651 - Air Pollution Engineering  
**Credits:** (3)

FDSCI 791 - Advanced Application of HACCP Principles  
**Credits:** (3)

ME 622 - Indoor Environmental Engineering  
**Credits:** (3)

ME 721 - Thermal Systems Design  
**Credits:** (3)

ME 722 - Human Thermal Engineering  
**Credits:** (3)

**Supporting Courses**

AGRON 746 - Physical Properties of Soils  
**Credits:** (3)

AGRON 900 - Micrometeorology  
**Credits:** (3)

ASI 720 - Anaerobic Bacteriology  
**Credits:** (2)

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

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

BIOL 805 - Advanced Mycology  
**Credits:** (3)

CE 967 - Physicochemical Processes  
**Credits:** (3)

CHE 682 - Surface Phenomena  
**Credits:** (3)

CHE 750 - Air Quality Seminar  
**Credits:** (1)

CHE 862 - Advanced Transport Phenomena I  
**Credits:** (3)

CHE 910 - Selected Topics in Transport Phenomena  
**Credits:** (3)

CHM 856 - Chemical Kinetics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENTOM 620</td>
<td>Insecticides: Properties and Laws</td>
<td>(3)</td>
</tr>
<tr>
<td>FDSCI 695</td>
<td>Quality Assurance of Food Products</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOG 735</td>
<td>Topics in Climatology</td>
<td>(3)</td>
</tr>
<tr>
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<td>Human Impact on the Environment</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOG 890</td>
<td>Advanced Spatial Analysis Techniques</td>
<td>(3)</td>
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<tr>
<td>GEOL 712</td>
<td>Advanced Geochemistry</td>
<td>(3)</td>
</tr>
<tr>
<td>ME 720</td>
<td>Intermediate Fluid Mechanics</td>
<td>(3)</td>
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<tr>
<td>ME 831</td>
<td>Boundary Layer Theory</td>
<td>(3)</td>
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<tr>
<td>PHYS 651</td>
<td>Introduction to Optics</td>
<td>(4)</td>
</tr>
<tr>
<td>PHYS 652</td>
<td>Applied Optics and Optical Measurement</td>
<td>(3)</td>
</tr>
<tr>
<td>CHM 937</td>
<td>Applications of Surface Science to Chemistry</td>
<td>(3)</td>
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<td>(3)</td>
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</tbody>
</table>

**Rationale:** This is a good course to add to the list.

**Impact (i.e. if this impacts another unit):** College of Agriculture has approved adding this course.

**Effective Date:** Fall 2013
Horticulture, Forestry and Recreational Resources
Horticultural Therapy Graduate Certificate

<table>
<thead>
<tr>
<th>FROM:</th>
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<tr>
<td>HORT 751 Human Issues in Horticultural Therapy (3)</td>
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<td>HORT 752 Horticulture in Horticultural Therapy (3)</td>
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<td>HORT 753 Clinical Skills in Horticultural Therapy (6)</td>
<td>HORT 753 Clinical Skills in Horticultural Therapy (3)</td>
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<tr>
<td>HORT 755 Practicum in Horticultural Therapy (3)</td>
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</tr>
<tr>
<td>Total Credits (45)</td>
<td>Total Credits (12)</td>
</tr>
</tbody>
</table>

RATIONALE: The reduction in total credits is due to a change in the credit amount for HORT 753 from 6 credits to 3 credits that is also proposed in the expedited document. As a 6 credit course, students were expected to attend 2 5-day on-site sessions in early summer and again in early fall, with online work following each on-site session. Online modules have been developed to guide students in obtaining a variety of clinical experiences where they reside, thus the in-person sessions are no longer required. A 3-credit course better reflects the time commitment given the change in class structure. This program has been offered for 5 semesters. The proposed changes reflect experience from delivering the program for 5 semesters, student feedback, instructor feedback, and perspective student queries.

IMPACT: No impacts outside the department.

EFFECTIVE DATE: Fall 2013
Non-Expedited New Courses

ADD: DMP 713. Veterinary Bacteriology & Mycology - Laboratory. (1) I. This lab is designed to assist the 2nd year veterinary student with the basic knowledge and skills for isolation and identification of bacterial and fungal agents of veterinary significance, from clinical and non-clinical samples and is designed to provide adequate knowledge and necessary training for veterinarians in practice. 3 hours of lab each week is required and 2nd year standing in the veterinary curriculum. This lab is required to be taken with DMP 712 Vet Bact. & Mycology - Lecture (3) I. Pr.: DMP 705 and BIOL 455

RATIONALE: By dividing the 4 credit DMP 712, Veterinary Bacteriology and Mycology, into 2 separate courses: DMP 712, 3 credits; Veterinary Bacteriology and Mycology – Lecture/Recitation and DMP 713, 1 credit; Veterinary Bacteriology and Mycology - Laboratory, graduate students (including those outside the College of Veterinary Medicine) could take only the lecture portion of the course. Veterinary students will need to continue to enroll in both lecture/recitation (DMP 712) and lab (DMP 713) for a total of 4 credits.

Impact (i.e. if this impacts another college/unit): None

EFFECTIVE DATE: Fall 2013

ADD: DMP 810. Cancer Pathogenesis. (2) I. This course, consisting of 2-hour lecture per week, will present an overview of the cancer development process at the cellular and molecular level, including regulatory networks involved in growth control and tissue organization and an introduction to animal, cell, and molecular techniques for studying progression, treatment, prevention of cancer. Pr. BIOL541 and BIOCH521

RATIONALE: To gain an appreciation of the complexity of the cancer development process at the cellular and molecular level; to provide students with an understanding of regulatory networks involved in growth control and tissue organization; to develop fundamental concepts of cancer etiology and epidemiology; to understand the cellular and molecular basis of current strategies for cancer prevention and treatment.

EFFECTIVE DATE: Fall 2013

Impact (i.e. if this impacts another college/unit): Department Heads for Biology and Biochemistry have approved of this new course listing with no objections given.
Agricultural Education and Communications

ADD: AGCOM 890. Knowledge Management in Agriculture and Natural Resources. Lec. (3) II. Knowledge Management is a discipline that takes a comprehensive, systematic approach to the information assets of an organization by identifying, capturing, collecting, organizing, indexing, storing, integrating, retrieving and sharing them. This strategy turns an agricultural and natural organization's intellectual assets into greater productivity and increased competitiveness. It encourages collaboration for the sharing of expertise and knowledge of the best practices. This course examines knowledge management as it is emerging and being applied in agriculture and natural resources.

RATIONALE: Agriculture faces a major transition as it leaves the industrial era and enters the knowledge era. In the U. S., while it took 50 to 150 years to move from the agricultural to the industrial era, agriculture did not die — we just introduced an industrial approach to agriculture so less than 2% of our population now farms instead of 65%. Through this same time period, the scope of agriculture broadened from its original food and fiber focus to where it now includes natural resources, environment, nutrition and health, rural interests and other related sectors, most recently, energy. As society continues to unfold in this information age, agriculture will again transform itself. The key behavior in the success of this transformation will be the ability to create and use information that serves to facilitate decisions made by individuals and organizations and advances both the agriculture sector and society as a whole. As such, this course will examine the importance of knowledge management within the agriculture enterprise and the tools/strategies that will help guide success. One goal of the course is to help students develop the critical thinking skills necessary to address the potential of knowledge management within agriculture and natural resources. This course is part of the Ag*IDEA consortium.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

ADD: AGED 834. International Agriculture and Extension Education. Lec. (3) II, S. This course focuses on a broad range of topic areas in the field of extension education as it impacts agriculture and rural community development. The primary purpose is to further students’ understanding about extension systems’ influence on agricultural development and the interface of agriculture with rural communities throughout the world. Emphasis will be placed upon research, theory, history and conceptual models of extension for establishing a strong philosophical foundation.

RATIONALE: As a global agricultural leader, many developing nations look to the United States and our model of agricultural extension as essential elements to replicate for their own agricultural development. In this global context and with expanding opportunities and student interests for international agricultural development, this course is designed to engage students in an interdisciplinary examination of the complex problems of agricultural development and the interface between institutions of higher learning and rural communities. The context at the local level will be examined and contrasted in both
developing nations and developed nations. Specifically, the course is designed to acquaint students with the interaction among available resources, existing technology and science, farmers, culture and context, and the role educational channels play in the adoption of innovations (technology and science) to produce more quantity or high quality food and fiber and create a sustainable economy. This course is part of the Ag*IDEA consortium.

No impact on other departments.

IMPACT:
EFFECTIVE DATE:
Fall 2013

Agronomy
ADD: **AGRON 722. Plant and Soil Chemometrics.** (3) II, even years. Introduction to the field of remote sensing chemometrics for characterizing the chemical and physical properties of organic and inorganic materials using a spectroradiometer. Three hours Lec/Rec. per week. Rec. Preq. AGRON 606/GEOG 605. K-State 8: No.

RATIONALE: This course will introduce students to the emerging field of plant/soil chemometrics.

IMPACT: GRSC 712, Vibrational Spectroscopic Analysis and Chemometrics, concerns the application of chemometrics in the food industry in a laboratory setting. AGRON 722 concerns the application of chemometrics for plant and soil analysis, often in a field setting. The Department of Grain Science and Industry has no objection to the new course.

EFFECTIVE DATE: Spring 2014

Animal Sciences and Industry
ADD: **ASI 635. Gamebird Production and Management.** (3). Fall. Principles and practices of upland game bird production including incubation and hatching, flight pen construction, nutritional management, predation control, disease management and meat processing. Rec. Pr: ASI 106. 2 hours lecture per week and 2 hours lab per week. K-State 8: No.

RATIONALE: This course is required by the Wildlife and Outdoor Enterprise Management Program.

IMPACT: This course was specifically developed for the Horticulture, Forestry and Recreational Resources Department, upon their request. The course has been reviewed and approved by HFRR.

EFFECTIVE DATE: Fall 2013
ADD: **ASI 662. Special Topics in Animal Science.** (0-6). Fall and Spring. Seminars of special interest will be offered upon sufficient demand in selected areas relating to animal science. K-State 8: No.

RATIONALE: Currently all special topics courses taught by guest lecturers or current faculty are being taught under ASI 661, Special Problems in Animal Science. ASI 661 is primarily for students who are working on hands-on projects with faculty. Adding a topics/seminar course would differentiate actual classes being taught from independent study projects.

IMPACT: No impact on other colleges/departments

EFFECTIVE DATE: Fall 2013

Entomology

ADD: **ENTOM 845. Insect Chemical Ecology.** The overall objective of this course is to familiarize the student with the interactions among organisms, including insects and other arthropods, which are mediated by naturally produced chemicals. Rec. Pr.: CHEM 350 General Organic Chemistry or its equivalent, or the consent of the instructor.

RATIONALE: A course on this topic has never been offered at K-State, but the subject material is very relevant to modern research and applications in insect science and pest management. Insect chemical ecology is the study of ecological interactions among insect, other organisms and their general environments that are mediated by naturally occurring chemicals.

IMPACT: No negative impacts. No objections were identified from Department Heads in the Division of Biology, and the Departments of Biochemistry, Chemistry, Agronomy, Horticulture, Plant Pathology.

EFFECTIVE DATE: Fall 2014

ADD: **FDSCI 601. Food Microbiology Lab.** (2). Fall. Laboratory procedures involving isolation, identification, enumeration, and characterization of bacteria, yeasts, molds and other microbes associated with foods and food processing. Two two-hour labs a week. Pr: FDSCI 600 or concurrent enrollment.

RATIONALE: Food Microbiology is currently offered both on-campus and by distance, but under two different course numbers to reflect the difference of a 2 credit hour laboratory for on-campus students. The campus-based offering, FDSCI 607, is a 4-credit course comprised of both a lecture and a laboratory section (2-credits of lecture and 2-credits of lab). The distance offering, FDSCI 600, is a 2-credit course comprised of lecture containing the same content and material that is taught in the lecture portion of FDSCI 607. This proposal will separate FDSCI 607 into lecture (FDSCI 600) and laboratory (FDSCI 601) courses, thereby
changing Food Microbiology from a single 4-credit hour course into two 2-credit hour courses. The benefits of this proposed change include enhanced options and greater flexibility for students, ability to more effectively manage enrollment capacity, more appropriate application of pre-requisites, greater ability to accommodate increasing demand driven by programmatic growth, and harmonization of course numbers for campus- and distance-based course offerings.

IMPACT:  No impact on other departments.

EFFECTIVE DATE:  Fall 2013

ADD:  FDSCI 710. Kosher and Halal Food Regulations. (2). This course is an introduction to the origin and application of Jewish and Muslim dietary laws and their application in commercial food production and processing with some coverage of home practices. Hebrew, Yiddish, and Arabic words and phrases will be presented and explained as they relate to kosher and halal food production, processing, and consumption. Religious festivals and customs, and the associated food products, will also be presented. Current food-related topics and issues in both the Jewish and Islam communities will be discussed. Food scientists should be aware of what constitutes a kosher or halal product and the importance of regulations dealing with the production and processing of these products. This is a web-based lecture course intended for off-campus distance education students. Lecture material is supplemented with web-based demonstrations. Pr: Junior Standing.

RATIONALE:  In many communities, forty percent of all packaged goods in a supermarket store may be Kosher or Halal products. Food scientists should be aware of what constitutes a Kosher or Halal product and the importance of regulations dealing with the production and processing of these products. This distance course has been previously taught as a FDSCI 630 Problems course.

IMPACT:  No impact on other departments.

EFFECTIVE DATE:  Fall 2013

ADD:  GRSC 646 - Pet Food Processing Laboratory

Credits:  (1)

A laboratory course to accompany Pet Food Processing (GRSC 645). The laboratory course is intended to reinforce the theory and concepts with actual experience producing a variety of pet foods. Students will gain first-hand knowledge of ingredient selection and handling and produce foods by a variety of processes, including extrusion, baking, canning, and injection molding.

Note

Three hours lab a week.

Requisites

Recommended prerequisite: GRSC 645 or concurrent enrollment.

When Offered  Fall
UGE course  No
K-State 8  None

RATIONALE: A new laboratory course to complement GRSC 645 lectures. This course has the same content as the lab component of the former GRSC 645. This split will provide flexibility in department’s teaching assignments.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

ADD:  GRSC 689 - Feed Technology II Laboratory
Credits: (1)
A laboratory course to accompany Feed Technology II (GRSC 688). Laboratory exercises and advanced studies on engineering principles applicable to flour and feed plant operations, equipment selection, and processing systems.
Note
Three hours lecture a week.
Requisites
GRSC 688 or concurrent enrollment.
FSM majors have to take GRSC 688 and GRSC 689 concurrently.
When Offered  Spring
UGE course  No
K-State 8  None

RATIONALE: A new laboratory course to complement GRSC 688 lectures. This course has the same content as the lab component of the former GRSC 690. This split will provide flexibility in department’s teaching assignments and course offerings.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

ADD:  GRSC 786 - Particle Technology for Solids Handling and Processing
Credits: (3)
This course is designed to provide students an overview of particle technology with an emphasis on practical applications in milling and grain based operations. Conveying, storage, size reduction and separation are the important unit operations of grain processing (food, feed, chemical, pharmaceutical)
industries that involve particle sizes ranging from a fraction of a micron to a few millimeters. The particle characteristics as they relate to processing operations such as milling, sieving, mixing, pelleting, etc. will be covered in this course. Subjects include size and shape characterization, size distribution and measurement, characteristic dimensions, density, and their theories governing the behavior of the particles under different conditions.

**Note**
Three hours lecture a week.

**Requisites**
Prerequisite: Graduate student status, MATH 220, STAT 325, PHYS 213 or consent of instructor.

**When Offered**
Spring.

**UGE course**
No

**K-State 8**
None

**RATIONALE:**
Solids handling and processing that include food, feed, chemical and pharmaceutical particulate materials require the knowledge about properties of powder. This course will facilitate student learning towards in-depth understanding of properties of solids that influence their processing behaviour.

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

**EFFECTIVE DATE:**
Fall 2013

**MPH 708 - Veterinary Epidemiology**
Introduction to the principles and methods of veterinary epidemiology: emphasizing how diseases affect populations (and associated implications for individuals), and application to disease diagnosis, treatment, prevention, and control.

**Credits:** (2)

**When Offered:** Spring

**Cross-Listed:** DMP 708

**MPH 754 - Introduction to Epidemiology**
The purpose of this course is to introduce students to the basic principles and methods of epidemiology in order to recognize and understand how disease affects populations (and the associated implications for individuals). This course will prepare students to use epidemiologic methods to solve current and future challenges to diagnose, treat, prevent, and control disease during their professional training and throughout their career.

**Credits:** (3)

**When Offered:** Fall

**Cross-Listed:** DMP 754
MPH 806 - Environmental Toxicology
An advanced toxicology course concerned with the occurrence, biological effect, detection, and control of foreign chemicals in the environment.

Credits: (2)
Requisites: Pr.: Consent of staff.
When Offered: Spring
Cross-Listed: DMP 806

MPH 854 - Intermediate Epidemiology
Epidemiologic principles of disease with a focus on measures of disease occurrence, association and impact, determinants of disease diagnostic test evaluation, study design and critical literature evaluation.

Credits: (3)
Requisites: Pr.: DMP 708 or DMP 754 or equivalent AND STAT 701 or STAT 703 or DMP 830 or equivalent.
When Offered: Spring
Cross-Listed: DMP 854

MPH 720 - Administration of Health Care Organizations
Comprehensive review of current health care institutions and their response to the economic, social/ethical, political/legal, technological, and ecological environments.

Credits: (3)
Note: Three hours lecture
When Offered: Spring
Cross-Listed: HMD 720

MPH 818 - Social and Behavioral Bases of Public Health
The role of behavioral, social, psychological, economic, environmental, and social structural factors in both the occurrence of health problems in groups and populations, and in the development of the risk factors that contribute to these problems. Principles of health behavior change and the application of these principles to a variety of health issues as well as an emphasis on how social structural factors impact health are examined to better understand health behavior and health inequities in contemporary society.

Credits: (3)
Requisites: Pr.: Graduate status in public health or kinesiology program.
When Offered: Fall
Cross-Listed: KIN 818
**MPH 701 - Fundamental Methods of Biostatistics**
A course emphasizing concepts and practice of statistical data analysis for the health sciences. Basic techniques of descriptive and inferential statistical methods applied to health related surveys and designed experiments. Populations and samples, parameters and statistics; sampling distributions for hypothesis testing and confidence intervals for means and proportions involving one sample, paired samples and multiple independent samples; odds ratios, risk ratios, simple linear regression. Use of statistical software to facilitate the collection, manipulation, analysis and interpretation of health related data.

- **Credits:** (3)
- **When Offered:** Fall, Spring, Summer
- **Cross-Listed:** STAT 701

**MPH 840 - Public Health Field Experience**
Supervised field experience in an international, state, local, or district health agency or other appropriate health agency.

- **Credits:** (3-6)
- **Note:** May be taken more than once, but only 6 hours may be applied toward the MPH degree/program of study.
- **Requisites:** Pr.: Consent of instructor. FDSCI 840, DMP 840, HN 840, and KIN 840.
- **When Offered:** Fall, Spring, Summer
- **Cross-Listed:** FDSCI 840, DMP 840, HN 840, KIN 840

**Rationale:** In the process of accrediting our interdisciplinary Master of Public Health program, the accrediting agency for public health programs (the Council on Education for Public Health) voiced concerns over the fact that there are no MPH-specific courses in our curriculum. This summer (2012), our MPH Faculty Advisory Committee (FAC) voted to obtain a unique alpha listing for our 7 core classes and 4 field experience courses, cross-listing the MPH section with the current department’s listing. This suggestion from the FAC was then unanimously approved last week (10-04-2012) by the MPH Executive Committee (consisting of the eight department heads and five deans of the colleges involved in the MPH Program). The Registrar’s office (represented by Mike Crow) helped in the discussion, to ensure this could be done from the university’s perspective.

**Impact (i.e. if this impacts another college/unit):** College of Veterinary Medicine – Diagnostic Medicine and Pathobiology (DMP); College of Agriculture – Animal Sciences and Industry (Food Science Institute); College of Arts and Sciences – Kinesiology (KIN) and Statistics (STAT); College of Human Ecology – Human Nutrition (HN) and Hospitality Management and Dietetics (HMD)

**Effective:** Fall 2013
# Non-Expedited Course Changes

## Public Health

<table>
<thead>
<tr>
<th>Current Listing to Remain the same</th>
<th>Cross-Listing Designation to be added</th>
<th>Course Title</th>
<th>Course Credit Hours</th>
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<td>DMP 708</td>
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<td>Veterinary Epidemiology</td>
<td>2</td>
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<tr>
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**Rationale:** In the process of accrediting our interdisciplinary Master of Public Health program, the accrediting agency for public health programs (the Council on Education for Public Health) voiced concerns over the fact that there are no MPH-specific courses in our curriculum. This summer (2012), our MPH Faculty Advisory Committee (FAC) voted to obtain a unique alpha listing for our 7 core classes and 4 field experience courses, cross-listing the MPH section with the current department’s listing. This suggestion from the FAC was then unanimously approved last week (10-04-2012) by the MPH Executive Committee (consisting of the eight department heads and five deans of the colleges involved in the MPH Program). The Registrar’s office (represented by Mike Crow) helped in the discussion, to ensure this could be done from the university’s perspective.

**Impact (i.e. if this impacts another college/unit):** College of Veterinary Medicine – Diagnostic Medicine and Pathobiology (DMP); College of Agriculture – Animal Sciences and Industry (Food Science Institute); College of Arts and Sciences – Kinesiology (KIN) and Statistics (STAT); College of Human Ecology – Human Nutrition (HN) and Hospitality Management and Dietetics (HMD)

**Effective:** Fall 2013
CHANGE:  DMP 712. Veterinary Bacteriology & Mycology.  (4) I. Morphology, biology and classification of pathogenic bacteria and fungi and their relation to the causes of disease. Three hours of lecture and three hours of laboratory each week. Pr: DMP 705 and BIOL 455

TO:  DMP 712. Veterinary Bacteriology & Mycology - Lecture.  (3) I. Morphology, biology and classification of pathogenic bacteria and fungi and their relation to the causes of disease. Three hours of lecture each week. Pr: BIOL 455

RATIONALE:  By dividing the 4 credit DMP 712, Veterinary Bacteriology and Mycology, into 2 separate courses: DMP 712, 3 credits, Veterinary Bacteriology and Mycology – Lecture and DMP 713, 1 credit, Veterinary Bacteriology and Mycology – Laboratory, graduate students (including those outside the College of Veterinary Medicine) could take only the lecture portion of the course. Veterinary students will need to enroll in both Lecture (DMP 712) and Lab. (DMP 713) for 4 credits.

Impact (i.e. if this impacts another college/unit): None

EFFECTIVE DATE:  Fall 2013

CHANGE:  DMP 718. Veterinary Parasitology.  (4) I. Study of the helminth, arthropod, and protozoan parasites of companion and food animals. Emphases are on diagnosis, clinical signs, lesions, treatment, control epidemiology, and public health aspects of parasitic disease. Pr: AP 710 and DMP 708

TO:  DMP 718. Veterinary Parasitology.  (4) I. Study of the helminth, arthropod, and protozoan parasites of companion and food animals. Emphases are on diagnosis, clinical signs, lesions, treatment, control epidemiology, and public health aspects of parasitic disease. Pr: AP 710, 737, 747 and DMP 705 & 708. Must be 2nd yr student in the Veterinary Curriculum.

RATIONALE:  We have determined that students taking DMP 718 must have a working knowledge and understanding of veterinary anatomy, immunology, epidemiology and physiology to be able to succeed in this course.

Impact (i.e. if this impacts another college/unit): None
Biochemistry

FROM:  **BIOCH 590 — Physical Studies of Biomacromolecules.** (3) II. An overview of concepts and techniques of physical science used in studying the structure and function of biomacromolecules such as proteins and DNA. Applications include classical equilibrium thermodynamics and spectroscopic methods including mass spectrometry, circular dichroism (CD), and nuclear magnetic resonance (NMR). Pr.: CHM 500, MATH 221, and PHYS 114.  
**K-State 8 - Empirical and Quantitative Reasoning; Natural and Physical Sciences**

TO:  **BIOCH 775 — Molecular Biophysics.** (3) II. Survey of the biophysical methods most frequently encountered in biochemistry and related disciplines. It summarized concepts and techniques of physical science used in studying the structure and function of biomacromolecules such as proteins and DNA. Applications include classical equilibrium thermodynamics and analytical methods like mass spectrometry and circular dichroism (CD), fluorescence, EPR and nuclear magnetic resonance (NMR) spectroscopy. The class emphasizes the underlying principles and techniques used in determining the molecular weight and shape of biopolymers, biochemical mechanisms of action, and observation of conformational changes in macromolecules. Pr.: CHM 350/351, MATH 221, and PHYS 114, BIOCH 755, 756, 765.  
**K-State 8 - Empirical and Quantitative Reasoning; Natural and Physical Sciences**

RATIONALE: The new class (Molecular Biophysics; see attach description – 3 credits) replaces, with significant changes BIOCH 590 (Physical Studies of Biomacromolecules – 3 credits). This proposed name change does not affect its content. We desire the new name for consistency with the anticipated change in our departmental title to “Biochemistry and Molecular Biophysics.” The proposed BIOCH 775 will become one of the centerpiece courses in our BS degree program. The proposed course number (775) is consistent with the series BIOCH 755/765/775, which are required (in this order) in the BS curriculum.

IMPACT: None

EFFECTIVE DATE: Fall 2013
**Sociology, Anthropology, and Social Work**

**FROM:** SOCIO 744 – Social Gerontology: An Introduction to the Sociology of Aging. (3) II. Analysis of the phenomenon of human aging in its individual, social, and cultural aspects with special attention to the problems of aging populations in Western societies. Pr.: SOCIO 211

**TO:** SOCIO 544 - Social Gerontology: An Introduction to the Sociology of Aging. (3) II. Analysis of the phenomenon of human aging in its individual, social, and cultural aspects with special attention to the problems of aging populations in Western societies. Pr.: SOCIO 211

**RATIONALE:** Over the past years an increasing demand emerged for an upper level undergraduate course on social gerontology or the sociology of aging. An undergraduate version of SOCIO 744 was taught before as a 500 level topic class. At the same time, demand has not been present for the graduate version of this class. Therefore, we ask to change the number of the course from 744 to 544. Although technically undergraduates can take 700 level classes, in practice most of them would not do so. Socio 744 is currently scheduled for Spring 2013, an an expedited process is requested so that this change could take place by next semester. The number is the only element we ask to be changed; everything else in the catalog would remain unchanged.

**IMPACT:** None

**EFFECTIVE DATE:** Spring 2013

**Food Science and Industry**

**FROM:** FDSCI 600. Microbiology of Food. (2). Fall, Spring and Summer. This course deals with the isolation, identification, enumeration, and characterization of bacteria, yeasts, molds and other microbes associated with foods and food processing. Effects of physical and chemical agents on micro-organisms will be studied. Microbiological problems in food spoilage, food preservation, food fermentation, and food-borne diseases will be discussed. This course cannot substitute for FDSCI 607. This is a Web-based lecture course intended for off-campus distance education students. Rec. Pr. BIOL 455. K-State 8: Empirical and Quantitative Reasoning and Natural and Physical Sciences.

**TO:** FDSCI 600. Food Microbiology. (2). Fall. This course deals with the isolation, identification, enumeration, and characterization of bacteria, yeasts, molds and other microbes associated with foods and food processing. Effects of physical and chemical agents on micro-organisms
will be studied. Microbiological problems in food spoilage, food preservation, food fermentation, and food-borne diseases will be discussed. Pr. BIOL 455. K-State 8: Empirical and Quantitative Reasoning and Natural and Physical Sciences.

RATIONALE: Food Microbiology is currently offered both on-campus and by distance, but under two different course numbers to reflect the difference of a 2 credit hour laboratory for on-campus students. The campus-based offering, FDSCI 607, is a 4-credit course comprised of both a lecture and a laboratory section (2-credits of lecture and 2-credits of lab). The distance offering, FDSCI 600, is a 2-credit course comprised of lecture containing the same content and material that is taught in the lecture portion of FDSCI 607. This proposal will separate FDSCI 607 into lecture (FDSCI 600) and laboratory (FDSCI 601) courses, thereby changing Food Microbiology from a single 4-credit hour course into two 2-credit hour courses. The benefits of this proposed change include enhanced options and greater flexibility for students, ability to more effectively manage enrollment capacity, more appropriate application of pre-requisites, greater ability to accommodate increasing demand driven by programmatic growth, and harmonization of course numbers for campus- and distance-based course offerings.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

Grain Science and Industry

FROM: GRSC 602 - Cereal Science
Credits: (3)
The characteristics of cereals, legumes, their components and their processing to foods.
Note
Three hours lecture a week.
Requisites
Recommended prerequisite: BIOCH 265.
When Offered
Fall, Spring
UGE course
No
K-State 8
Empirical and Quantitative Reasoning
Natural and Physical Sciences

TO: GRSC 602 - Cereal Science
Credits: (3)
The characteristics of cereals, legumes, their components and their processing to foods.
Note
Three hours lecture a week.

**Requisites**
Recommended prerequisite: BIOCH 265 or CHM 350 and 351.

**When Offered**
Fall, Spring

**UGE course**
No

**K-State 8**
Empirical and Quantitative Reasoning
Natural and Physical Sciences

**RATIONALE:**
BSM, FSM and MSM curricula require BIOCH 265 or CHM 350 and 351. CHM 350 and 351 are added to the recommended prerequisites to reflect this.

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

**EFFECTIVE DATE:**
Fall 2013

**FROM:**

**GRSC 635 - Baking Science I**

**Credits:** (2)
Introduction to chemical and physical properties of flour and other principal ingredients used in production of yeast-leavened bakery foods. Study of major processing methods for making yeasted doughs such as breads, sweet goods, frozen dough, and partially baked goods. Examination of ingredient specifications role of quality control, keeping properties of bread products, and nutritional attributes of various types of breads.

**Note**
Two hours lecture a week.

**Requisites**
Recommended prerequisite: BIOCH 265.

**When Offered**
Fall

**UGE course**
No

**K-State 8**
None

**TO:**

**GRSC 635 - Baking Science I**

**Credits:** (2)
Introduction to chemical and physical properties of flour and other principal ingredients used in production of yeast-leavened bakery foods. Study of major processing methods for making yeasted doughs such as breads, sweet goods, frozen dough, and partially baked goods. Examination of ingredient specifications role of quality control, keeping properties of bread products, and nutritional attributes of various types of breads.

**Note**
Two hours lecture a week.

**Requisites**
Recommended prerequisite: BIOCH 265 or CHM 350 and 351.

**When Offered**
Fall
UGE course: No
K-State 8: None

RATIONALE: BSM, FSM and MSM curricula require BIOCH 265 or CHM 350 and 351. CHM 350 and 351 are added to the recommended prerequisites to reflect this.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM: GRSC 645 - Pet Food Processing
Credits: (4)
The course is designed to provide students with an understanding of pet foods, including food products meant for dogs, cats, pet rodents, pet snakes, ornamental fish, exotic and captive wild animals, and the various processing technologies that are deployed for their production. Extrusion, baking, canning, and injection molding technologies will be covered. Other important aspects of pet food production, such as ingredient handling and compounding, quality control, HACCP and sanitation, and packaging will also be discussed. A concurrent laboratory section will allow students to produce pet foods, visit pet food production facilities, and personally explore selected topics in depth.

Note
Three one-hour lectures and one three-hour lab session per week.

Requisites
Recommended prerequisite: CHM 230, PHYS 114, ASI 318 or HN 132, Junior standing.

When Offered: Fall

UGE course: No
K-State 8: None

TO: GRSC 645 - Pet Food Processing
Credits: (3)
The course is designed to provide students with an understanding of pet foods, including food products meant for dogs, cats, pet rodents, pet snakes, ornamental fish, exotic and captive wild animals, and the various processing technologies that are deployed for their production. Extrusion, baking, canning, and injection molding technologies will be covered. Other important aspects of pet food production, such as ingredient handling and compounding, quality control, HACCP and sanitation, and packaging will also be discussed. A concurrent laboratory section will allow students to produce pet foods, visit pet food production facilities, and personally explore selected topics in depth.

Note
Three one-hour lectures per week.

Requisites
Recommended prerequisite: CHM 230, PHYS 114, ASI 318 or HN 132, Junior
RATIONALE: The lecture and lab components of this course are divided into two separate courses (GRSC 645 and 646). Thus the credit hour will change from 4 to 3. This split will provide flexibility in department’s teaching assignments.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM: 
**GRSC 661 - Qualities of Feed Ingredients**
**Credits:** (3)
The course provides an integrated biological, chemical, and physical basis for evaluating the inherent nutritional quality of food and feed ingredients and the scientific literature techniques for obtaining new information.

*Note*
Three hours lecture a week.

**Requisites**
Recommended prerequisite: BIOCH 265.

When Offered 
Spring
UGE course 
No
K-State 8 
None

TO: 
**GRSC 661 - Qualities of Feed Ingredients**
**Credits:** (3)
The course provides an integrated overview of the physical, biological, and chemical characteristics of common feed ingredients. Quality control and evaluation of ingredients and complete feed is emphasized to ensure the productions of safe feed/safe food.

*Note*
Three hours lecture a week.

**Requisites**
Recommended prerequisite: **GRSC 510 and 511, BIOCH 265 or CHM 350 and 351**.

When Offered 
Spring
UGE course 
No
K-State 8 
None

RATIONALE: The change involves some minor wordsmithing in course description. BSM, FSM and MSM curricula require BIOCH 265 or CHM 350 and 351. CHM 350 and 351 are added to the recommended prerequisites to reflect this. Also GRSC 510 and 511 are added to recommended prerequisites, which are critical to take prior to GRSC 661 to have a strong background in feed
technology.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM: GRSC 690 - Feed Technology II
Credits: (4)
Advanced study of engineering principles applicable to flour and feed plant operations, materials handling, equipment selection, and processing systems.

Note
Three hours of lecture per week and three hours of laboratory per week. Separate laboratory sessions are conducted for flour and feed students.

Requisites
Recommended prerequisite: GRSC 510 or 500, PHYS 114 or 214, and a course in statistics and computer applications.

When Offered Spring
UGE course No
K-State 8 None

TO: GRSC 688 - Feed Technology II
Credits: (3)
Advanced study of engineering principles applicable to flour and feed plant operations, equipment selection, and processing systems.

Note
Three hours lecture a week.

Requisites
Recommended prerequisite: GRSC 510 and GRSC 511 or GRSC 500, PHYS 114 or 214, and STAT 325.

When Offered Spring
UGE course No
K-State 8 None

RATIONALE: The lecture and lab components of this course are divided into two separate courses (GRSC 688 and 689). Thus the credit hour will change from 4 to 3. This split will provide flexibility in department’s teaching assignments. The proposed change also involves a minor wordsmithing in course description. With this split, the ideal new course numbering would be GRSC 690 and 691. Since 691 is the course number for another exiting GRSC course we needed to assign a new pair of numbers, i.e. 688 and 689. STAT 325 is a core requirement for GSI majors. It is added to recommended prerequisites to be more specific and replace “a course in statistics”.

IMPACT: No impact on other departments.
EFFECTIVE DATE: Fall 2013

FROM: GRSC 691 - Faculty-Led Study Abroad
Credits: 1-3
Seminar and travel course designed to prepare students before the experience and for students to analyze, critique, and report their experiences of an international experience associated with study tours or short courses.

Requisites
Prerequisite: Consent of instructor for undergraduates, consent of major professor for graduate students

When Offered: Fall, Spring, Summer
UGE course: No
K-State 8: None

TO: GRSC 691 - Faculty-Led Study Abroad
Credits: 1-3
Seminar and travel course designed to prepare students before the experience and for students to analyze, critique, and report their experiences of an international experience associated with study tours or short courses.

Requisites
Prerequisite: Consent of instructor for undergraduates, consent of major professor for graduate students.

When Offered: Fall, Spring, Summer
UGE course: No
K-State 8: None

RATIONALE:
―Global Issues and Perfectives‖ tag is added to the course. New tagging rules for an experience (e.g. study abroad, internships or service learning) require at least 60 hours where the student is actively engaged in material related to that tag. GRSC 691 course content and activities justify this requirement.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2013

FROM: GRSC 712 - Vibrational Spectroscopic Analysis and Chemometrics
Credits: (1-2)
Infrared and particularly modern near-infrared spectroscopic " Passive " analysis of foods, natural products, and synthetic substances is accomplished with direct sampling and the use of multivariate statistics. This course is intended to enable the student to understand the principles and successfully apply this technology to practical analytical problems with emphasis upon food. Method development will be taught using specific analytes in selected products. Theoretical background, working of modern instrumentation and associated software is presented in support of achieving practical competence.

Requisites
Recommended prerequisite: BIOCH 265 or CHM 274.

When Offered: Spring
GRSC 712 - Vibrational Spectroscopic Analysis and Chemometrics

Credits: (1-2)
Infrared and particularly modern near-infrared spectroscopic analysis of foods, natural products, and synthetic substances is accomplished with direct sampling and the use of multivariate statistics. This course is intended to enable the student to understand the principles and successfully apply this technology to practical analytical problems with emphasis upon food. Method development will be taught using specific analytes in selected products. Theoretical background, working of modern instrumentation and associated software is presented in support of achieving practical competence.

Requisites
Recommended prerequisite: BIOCH 265 or CHM 350 and 351 or CHM 371.

When Offered
Spring

UGE course
No
K-State 8
None

RATIONALE:
BSM, FSM and MSM curricula require BIOCH 265 or CHM 350 and 351. CHM 350 and 351 are added to the recommended prerequisites to reflect this. CHM 271 does not exist any more; it is replaced with CHM 371.

IMPACT:
No impact on other departments.

EFFECTIVE DATE:
Fall 2013

FROM:
GRSC 713 - Contemporary Chromatographic Analysis of Food
Credits: (1)
High performance liquid chromatography (HPLC) is the primary focus of this course. This will be supported by including treatment of topics in contemporary gas chromatography and supercritical fluid chromatography and extraction. Optimizing chromatographic conditions through knowledge of the column chemistry will be covered in addition to detector options, instrumentation, and sample preparation.

Requisites
Recommended prerequisite: BIOCH 265 or CHM 271.

When Offered
Spring

UGE course
No
K-State 8
None

TO:
GRSC 713 - Contemporary Chromatographic Analysis of Food
Credits: (1)
High performance liquid chromatography (HPLC) is the primary focus of this course. This will be supported by including treatment of topics in contemporary gas chromatography and supercritical fluid chromatography and extraction. Optimizing chromatographic conditions through knowledge of the column chemistry will be covered in addition to detector options, instrumentation, and sample preparation.
chemistry will be covered in addition to detector options, instrumentation, and sample preparation.

Requisites
Recommended prerequisite: BIOCH 265 or CHM 350 and 351 or CHM 371.

When Offered
Spring

UGE course
No

K-State 8
None

RATIONALITY:
BSM, FSM and MSM curricula require BIOCH 265 or CHM 350 and 351. CHM 350 and 351 are added to the recommended prerequisites to reflect this. CHM 271 does not exist any more; it is replaced with CHM 371.

IMPACT:
No impact on other departments.

EFFECTIVE DATE:
Fall 2013

FROM: GRSC 745 - Fundamentals of Bioprocessing
Credits: (3)
This course is designed for students who desire a clear understanding of bioprocessing principles as applied to the emerging bio-based industry. This course covers the fundamentals of mass and energy balances, fluid dynamics, heat and mass transfer, as applied to bioprocessing. The microbial growth, kinetics and fermenter operation will be covered in detail. Fundamentals of downstream operation as applicable to bioprocessing will be covered in this course. Industrial bioprocessing case studies that involve the integration of the course contents will be discussed.

Note
Three hours lecture per week.

Requisites
Recommended prerequisite: MATH 205 or 220, PHYS 113 or 115, and BIOCH 265 or CHM 210.

When Offered
Spring

UGE course
No

K-State 8
None

TO: GRSC 745 - Fundamentals of Bioprocessing
Credits: (3)
This course is designed for students who desire a clear understanding of bioprocessing principles as applied to the emerging bio-based industry. This course covers the fundamentals of mass and energy balances, fluid dynamics, heat and mass transfer, as applied to bioprocessing. The microbial growth, kinetics and fermenter operation will be covered in detail. Fundamentals of downstream operation as applicable to bioprocessing will be covered in this course. Industrial bioprocessing case studies that involve the integration of the course contents will be discussed.

Note
Three hours lecture per week.

**Requisites**
Recommended prerequisite: MATH 205 or 220, PHYS 113 or 115, and BIOCH 265 or CHM 350 and 351 or CHM 210.

**When Offered** Spring

**UGE course** No

**K-State 8** None

**RATIONALE:**
BSM, FSM and MSM curricula require BIOCH 265 or CHM 350 and 351. CHM 350 and 351 are added to the recommended prerequisites to reflect this.

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

**EFFECTIVE DATE:** Fall 2013

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**Horticulture, Forestry, and Recreation Resources**

**FROM:**
**HORT 690. Sustainable Agriculture.** (2) I (odd years). Historical perspectives of the sustainable agriculture movement in the U.S. and world-wide will be examined and critiqued. Components of sustainable agriculture such as agroecosystem theory, permaculture, energy use efficiency, and organic standards will be compared and evaluated. Students will demonstrate their understanding and application of the material by conducting research on a topic within sustainable agriculture and presenting the topic to the rest of the class. Required pre-rec: Junior standing.

**TO:**
**HORT 790. Sustainable Agriculture.** (2) I (odd years). Historical perspectives of the sustainable agriculture movement in the U.S. and world-wide will be examined and critiqued. Components of sustainable agriculture such as agroecosystem theory, permaculture, energy use efficiency, and organic standards will be compared and evaluated. Students will demonstrate their understanding and application of the material by conducting research on a topic within sustainable agriculture and presenting the topic to the rest of the class. Required pre-rec: Junior standing.

**RATIONALE:**
The course serves as a requirement for the M.S. specialization in Urban Food Systems thus most of the students taking this course are graduate students. Changing the course numbering to a 700-level course better reflects its graduate level delivery.

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

**EFFECTIVE DATE:** Fall 2013
FROM: HORT 691. Urban Agriculture. (3) I. Students will become familiar with and understand different types of urban agriculture projects, how they came about, management issues, and the socio-economic and policy context that allows or encourages them to exist. Required Pre-rec: Junior standing.

TO: HORT 791. Urban Agriculture. (3) I. Students will become familiar with a wide variety of urban agriculture types, methods of implementation, and the skill sets necessary to supervise such projects. The course will include background readings, case studies, guest speakers, student-facilitated class discussion, and lectures. Required Pre-rec: Junior standing.

RATIONALE: The course serves as a requirement for the M.S. specialization in Urban Food Systems thus most of the students taking this course are graduate students. Changing the course numbering to a 700-level course better reflects its graduate level delivery.

IMPACT: No impact on other units.

EFFECTIVE DATE: Fall 2013.

FROM: HORT 692. Urban Food Production Practicum. (2) I, II, S. Students will complete a 400-hour practicum in an approved urban agriculture setting to gain exposure to a broad range of tasks facing the urban farmer. This includes planning, production and marketing of crops in high tunnels and open field. Recommended pre-req: HORT 520 and HORT 560.

TO: HORT 792. Urban Food Production Practicum. (2) I, II, S. Students will complete a practicum in an approved urban agriculture setting to gain exposure to a broad range of tasks facing the urban farmer. This includes planning, production and marketing of crops in high tunnels and open field. Recommended pre-req: HORT 520 and HORT 560.

RATIONALE: The course serves as a requirement for the M.S. specialization in Urban Food Systems thus most of the students taking this course are graduate students. Changing the course numbering to a 700-level course better reflects its graduate level delivery.

IMPACT: No impact on other units.

EFFECTIVE DATE: Fall 2013.
Non-Expedited Course Drops

DROP: FDSCI 607. Food Microbiology. (4). Fall. This course deals with the identification, enumeration and characterization of bacteria, yeast and mold associated with foods and food processing. Effects of physical and chemical agents on microorganisms will be studied. Microbiological problems in food spoilage, food preservation, food fermentation, and food-borne diseases will be discussed. Two hours lecture and two two-hour labs a week.

RATIONALE: Food Microbiology is currently offered both on-campus and by distance, but under two different course numbers to reflect the difference of a 2 credit hour laboratory for on-campus students. The campus-based offering, FDSCI 607, is a 4-credit course comprised of both a lecture and a laboratory section (2-credits of lecture and 2-credits of lab). The distance offering, FDSCI 600, is a 2-credit course comprised of lecture containing the same content and material that is taught in the lecture portion of FDSCI 607. This proposal will separate FDSCI 607 into lecture (FDSCI 600) and laboratory (FDSCI 601) courses, thereby changing Food Microbiology from a single 4-credit hour course into two 2-credit hour courses. The benefits of this proposed change include enhanced options and greater flexibility for students, ability to more effectively manage enrollment capacity, more appropriate application of pre-requisites, greater ability to accommodate increasing demand driven by programmatic growth, and harmonization of course numbers for campus- and distance-based course offerings.

IMPACT: The Department of Grain Science and Industry has been contacted and has no objections.

EFFECTIVE DATE: Fall 2013

5. Graduate Student Affairs Committee
-Steve Eckels, chair, will be establishing a task force in January to look at annual reviews of student performance. Members of the Student Affairs committee interested in serving on the task force should contact Steve Eckels.

6. Graduate School Committee on Planning
-David Yetter presented the following motion for second reading on behalf of the Committee on Planning.
   a. Graduate Handbook: Chapter 5. Section D.3 Adjunct Professors

   CURRENT:
   Individuals may become adjunct members of the faculty by a process defined in the Faculty Handbook.

   PROPOSED:
   Individuals may become adjunct members of the faculty by a process defined in the University Handbook.
7. **Graduate School Committee on Assessment and Review**  
-No action items to report.

8. **Graduate Student Council Information** – Tammy Sonnentag, President  
-December 5: Webinar - "Work on Your Career" by Eric Kramer. 7:00-8:00p.m. Now is as good a time as any to evaluate where you are at in your career and where you want to go! To participate in the live webinar - visit the webinar series website at: http://www.expertwebinarseries.com/k-state  
-The Graduate Student Council held successful fundraisers at Orange Leaf and LOCAL last month.

9. **University Research and Scholarship**  
-No action items to report.

10. **Graduate Fellowship Announcements**  
- American Association of University Women Career Development Grants  
  http://www.aauw.org/learn/fellows_directory/index.cfm  
  Deadline: December 15, 2012  
    Deadline: December 14, 2012  
  - Community Action Grants  
    http://www.aauw.org/learn/fellows_directory/index.cfm  
    Deadline: January 15, 2013  
  - Jack Kent Cooke Dissertation Fellowship http://www.jkcf.org/scholarships/  
    Deadline: February 4, 2013

11. **Graduate School Calendar of Events:** December - January

**December**

12/1 Graduate Student Council travel grant application deadline for travel period 3  
(Jan 1 – Mar 31) **Due 5:00 p.m. CST**

12/3 Graduate Student Council Meeting (12:00 – 1:00 pm – Waters 137)

12/4 Graduate Council Meeting (3:30 pm – 5:00 pm - Union 212)

12/7 Graduate School Commencement (1:00 pm – Bramlage Coliseum)
January

1/10  Deadline to submit graduate faculty nominations and course and curriculum changes for February Graduate Council Meeting

1/16  Graduate Student Orientation (Fiedler Hall)

1/14-15 International student orientation for new students (location TBD)

1/22  Spring semester begins

- For a current list of Graduate School events, please see our website at: http://www.k-state.edu/grad/2012-2013%20calendar.pdf

cc: Academic Deans and Directors Departments (please post)