Attachment 1
Consent Agenda information

**Arts and Sciences (2-3-11):**

**Course Additions:**

**English**

**ADD:** ENGL 455 – Exploring Creativity. (3) I, II. A study of creative thinking. Pr.: ENGL 200 or ENGL 210.

**RATIONALE:** This course will serve English majors and the general undergraduate population of K-State. It investigates what is known about the creative process and experiments with ways of applying creativity in a broad range of disciplines. The Entrepreneurship minor plans to make this course part of its core curriculum.

**IMPACT:** None

**EFFECTIVE DATE:** Fall 2011

**Psychology**

**ADD:** PSYCH 590 – Interdisciplinary Topics in Psychology. (1-3) I, II, S. Topics selected in consultation with the instructor, covering interdisciplinary and innovative approaches to psychological topics. Pr.: Consent of instructor.

**RATIONALE:** We currently have a course (Psych 290) which is described in the course catalog as “Topics selected in consultation with the instructor. To be used for interdisciplinary and innovative approaches to psychological topics.” The topics and structure of courses that use this title are often more consistent with courses offered at the 500 level. We therefore would like to add Psych 590 to the course catalog to provide the opportunity to offer these courses at either the 200 or 500 levels. That is, we would keep Psych 290, but add Psych 590 with a similar course description.

**IMPACT:** None

**EFFECTIVE DATE:** Fall 2011

**Curriculum Changes:**

**Geography**

<table>
<thead>
<tr>
<th>FROM: Bachelor’s degree requirements for a major in geography: (22 credit hours)</th>
<th>TO: Bachelor’s degree requirements for a major in geography: (19 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• GEOG 100 – World Regional Geography Credits: (3)</td>
<td>• GEOG 100 – World Regional Geography Credits: (3)</td>
</tr>
<tr>
<td>• GEOG 200 – Human Geography Credits: (3)</td>
<td>• GEOG 200 – Human Geography Credits: (3)</td>
</tr>
<tr>
<td>• GEOG 221 – Environmental Geography I Credits: (3)</td>
<td>• GEOG 221 – Introductory Physical Geography Credits: (4)</td>
</tr>
</tbody>
</table>
• GEOG 302 – Cartography and Thematic Mapping **Credits:** (3)
• GEOG 321 – Environmental Geography II **Credits:** (3)
• GEOG 495 – Capstone Seminar in Geography **Credits:** (2)
• GEOG 508 – Geographic Information Systems I **Credits:** (2)

**One course in human-environment interaction:** (3 credit hours)

• GEOG 340 – Geography of Natural Resources **Credits:** (3)
• GEOG 360 – Sustainability Science **Credits:** (3)
• GEOG 460 – Human Dimensions of Global Change **Credits:** (3)
• GEOG 600 – Mountain Geography **Credits:** (3)
• GEOG 718 – Geography of Public Lands **Credits:** (3)
• GEOG 720 – Geography of Land Use **Credits:** (3)
• GEOG 725 – Geography of Water Resources **Credits:** (3)
• GEOG 760 – Human Impact on the Environment **Credits:** (3)
• GEOG 765 – Geography of Natural Hazards **Credits:** (3)
• GEOG 770 – Perception of the Environment **Credits:** (3)

**Geography electives:** (12 credit hours)

• Three credit hours must be at the 700 level

**Note**

GEOL 520 may be used as a geography elective

• GEOL 520 – Geomorphology **Credits:** (3)

**Total hours required for graduation (37 credit hours)**

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• GEOG 302 – Cartography and Thematic Mapping **Credits:** (3)
• GEOG 495 – Capstone Seminar in Geography **Credits:** (3)
• GEOG 508 – Geographic Information Systems I **Credits:** (4)

**One course from two of the following three groups (courses may not be used to meet other geography major requirements): (6 credit hours)**

**Earth system science**

• GEOG 445 – Biogeography **Credits:** (3)
• GEOG 535 – Fundamentals of Climatology **Credits:** (3)
• GEOG 725 – Geography of Water Resources **Credits:** (3)
• GEOG 740 – Fluvial Geomorphology ** Credits:** (3)
• GEOG 760 – Human Impact on the Environment **Credits:** (3)
• GEOL 520 – Geomorphology **Credits:** (3)

**Human-environment interaction**

• GEOG 340 – Geography of Natural Resources **Credits:** (3)
• GEOG 360 – Sustainability Science **Credits:** (3)
• GEOG 460 – Human Dimensions of Global Change **Credits:** (3)
• GEOG 718 – Geography of Public Lands **Credits:** (3)
• GEOG 720 – Geography of Land Use **Credits:** (3)
• GEOG 725 – Geography of Water Resources **Credits:** (3)
• GEOG 760 – Human Impact on the Environment **Credits:** (3)
• GEOG 765 – Geography of Natural Hazards **Credits:** (3)
• GEOG 770 – Perception of the Environment **Credits:** (3)

**Human/regional geography**

• GEOG 300 – Geography of Tourism **Credits:** (3)
• GEOG 310 – Geography of Kansas **Credits:** (3)
• GEOG 332 – Introduction to China **Credits:** (3)
• GEOG 450 – Geography of Economics **Credits:** (3)
• GEOG 500 – Geography of the United States **Credits:** (3)
• GEOG 505 – South Asian Civilizations **Credits:** (3)
• GEOG 510 – Geography of the American West **Credits:** (3)
• GEOG 620 – Geography of Mexico, Central America & the Caribbean **Credits:** (3)
• GEOG 622 – Geography of South America **Credits:** (3)
• GEOG 640 – Geography of Europe **Credits:** (3)
• GEOG 650 – Geography of Former Soviet Lands **Credits:** (3)
• GEOG 660 – Geography of East Asia/China **Credits:** (3)
• GEOG 690 – Historical Geography of the United States **Credits:** (3)
• GEOG 750 – Urban Geography **Credits:** (3)
• GEOG 780 – Cultural Geography **Credits:** (3)

**Geography electives:** (12 credit hours)

• Three credit hours must be at the 700 level

**Note**
GEOL 520 may be used as a geography elective

- GEOL 520 – Geomorphology Credits: (3)

Total hours required for graduation (37 credit hours)

RATIONALE: The department is incorporating the content of GEOG 321 into the present GEOG 221 class, and dropping the 321 number. This change will allow faculty to increase the course offerings in physical geography at the 300-500 level. In order that all majors have a minimum of two classes in physical geography, majors will be required to take one course in a new category of “Earth Systems Science”.

IMPACT: None

EFFECTIVE DATE: Fall 2011

College of Engineering (Approved 11-4-10, revised pre-reqs 2-7-11)

Biological and Agricultural Engineering

ADD: BAE 642. Fundamentals of Conversion of Biorenewable Resources. (3) An introduction to the conversion of biorenewable resources into biobased products and biofuels. Colisted with CHE 642.

Note: Three hours of recitation a week.

Requisites: Pre-requisites: MATH 220 and CHM 230

When Offered: Upon sufficient demand

Rationale: This is a course that will support a multi-institutional graduate certificate in biobased products and bioenergy that is being developed by Kansas State University, Oklahoma State University, the University of Arkansas, and South Dakota State University in collaboration with the Institute of Academic Alliances. It will provide a basic introduction to the conversion of biorenewable resources into products and fuels and form the basis for additional coursework in this subject area. It will be required of all students pursuing the multi-institutional graduate certificate in biobased products and biofuels.

This particular course has been developed by Dr. Danielle Julie Carrier of the Department of biological and Agricultural Engineering, University of Arkansas. It will be taught at the University of Arkansas and offered via distance education to the other participating institutions. As such, it will not involve KSU faculty or departmental resources.

Impact: The course will impact the Departments of Chemical Engineering and Grain Science and Industry. Faculty from these departments have been involved throughout the development of the proposed certicate program and in the selection and development of any new courses. The course is being colisted with the Department of Chemical Engineering.
Effective Date:  Fall 2011

ADD:   BAE 643.  Life Cycle Assessment.  (3) Examination of the process and methodologies associated with life cycle analysis. Application of the methods developed in the course to a project to gain experience in defining and quantifying uncertainty associated with human perturbation, management and utilization of biofuels and other complex processes. Colisted with CHE 643.

Note:   Three hours recitation per week.

Requisites:   Pre-requisites: MATH 220 and CHM 230

When Offered:  Upon sufficient demand

Rationale:   This is a course that will support a multi-institutional graduate certificate in biobased products and bioenergy that is being developed by Kansas State University, Oklahoma State University, the University of Arkansas, and South Dakota State University in collaboration with the Institute of Academic Alliances. It will equip students to be able to design and conduct high level life cycle impact assessment of products. This will be increasingly important as we move to utilize biorenewable resources. The course will also provide a valuable background for employing tools such as SimaPro, among others. This particular course has been developed by Drs. Greg Thoma (Department of Chemical Engineering) and Marty D. Matlock (Department of Biological and Agricultural Engineering) of the University of Arkansas. It will be taught at the University of Arkansas and offered via distance education to the other participating institutions. As such, it will not involve KSU faculty or departmental resources.

Impact:   The course does not impact existing courses in other departments at KSU. A course entitled "Sustainability Science" (GEOG 360) exists; the Department of Geography has been contacted to ensure there is no conflict. The course is being colisted with the Department of Chemical Engineering since the course at the University of Arkansas has been developed as a collaboration.

Effective Date:   Fall 2011

ADD:   BAE 663. Environmental and Ecological Risk Assessment. (3) Examination of processes and methodologies associated with human environmental and ecological risk assessments. Application of the methods learned to a project to gain experience in defining and quantifying uncertainty associated with human perturbation, management and restoration of environmental and ecological processes. Colisted with CHE 663.

Note:   Three hours recitation per week.

Requisites:   Pre-requisites: MATH 221 and Biology 455

When Offered:  Upon sufficient demand

Rationale:   This is a course that will support a multi-institutional graduate certificate in biobased products and bioenergy that is being developed by Kansas State University, Oklahoma State University, the University of Arkansas, and South Dakota State University in collaboration with the Institute of Academic Alliances. Life cycle assessment and its
application to new technologies involve assessment of environmental and ecological risks. Practitioners need the ability to understand risk assessment procedures in this context.

This particular course has been developed by Drs. Greg Thoma (Department of Chemical Engineering) and Marty D. Matlock (Department of Biological and Agricultural Engineering) of the University of Arkansas. It will be taught at the University of Arkansas and offered via distance education to the other participating institutions. As such, it will not involve KSU faculty or departmental resources.

Impact: The course does not impact existing courses in other departments at KSU. The course is being colisted with the Department of Chemical Engineering since the course at the University of Arkansas has been developed as a collaboration.

Effective Date: Fall 2011

**Chemical Engineering**

**ADD:** CHE 642. Fundamentals of Conversion of Biorenewable Resources. (3) An introduction to the conversion of biorenewable resources into biobased products and biofuels. Colisted with BAE 642.

**Note:** Three hours of recitation a week.

**Requisites:** Pre-requisites: MATH 220 and CHM 230

**When Offered:** Upon sufficient demand

**Rationale:** This is a course that will support a multi-institutional graduate certificate in biobased products and bioenergy that is being developed by Kansas State University, Oklahoma State University, the University of Arkansas, and South Dakota State University in collaboration with the Institute of Academic Alliances. It will provide a basic introduction to the conversion of biorenewable resources into products and fuels and form the basis for additional coursework in this subject area. It will be required of all students pursuing the multi-institutional graduate certificate in biobased products and biofuels.

This particular course has been developed by Dr. Danielle Julie Carrier of the Department of Biological and Agricultural Engineering, University of Arkansas. It will be taught at the University of Arkansas and offered via distance education to the other participating institutions. As such, it will not involve KSU faculty or departmental resources.

**Impact:** The course will impact the Departments of Biological and Agricultural Engineering and Grain Science and Industry. Faculty from these departments have been involved throughout the development of the proposed certificate program and in the selection and development of any new courses. The course is being colisted with the Department of Biological and Agricultural Engineering.

**Effective Date:** Fall 2011
CHE 643. Life Cycle Assessment. (3) Examination of the process and methodologies associated with life cycle analysis. Application of the methods developed in the course to a project to gain experience in defining and quantifying uncertainty associated with human perturbation, management and utilization of biofuels and other complex processes. Colisted with BAE 643.

Note: Three hours recitation per week.

Requisites: Pre-requisites: MATH 220 and CHM 230

When Offered: Upon sufficient demand

Rationale: This is a course that will support a multi-institutional graduate certificate in biobased products and bioenergy that is being developed by Kansas State University, Oklahoma State University, the University of Arkansas, and South Dakota State University in collaboration with the Institute of Academic Alliances. It will equip students to be able to design and conduct high level life cycle impact assessment of products. This will be increasing important as we move to utilize biorenewable resources. The course will also provide a valuable background for employing tools such as SimaPro, among others. This particular course has been developed by Drs. Greg Thoma (Department of Chemical Engineering) and Marty D. Matlock (Department of Biological and Agricultural Engineering) of the University of Arkansas. It will be taught at the University of Arkansas and offered via distance education to the other participating institutions. As such, it will not involve KSU faculty or departmental resources.

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Effective Date: Fall 2011

ADD: CHE 663. Environmental and Ecological Risk Assessment. (3) Examination of processes and methodologies associated with human environmental and ecological risk assessments. Application of the methods learned to a project to gain experience in defining and quantifying uncertainty associated with human perturbation, management and restoration of environmental and ecological processes. Colisted with BAE 663.

Note: Three hours recitation per week.

Requisites: Pre-requisites: MATH 221 and BIOL 455

When Offered: Upon sufficient demand

Rationale: This is a course that will support a multi-institutional graduate certificate in biobased products and bioenergy that is being developed by Kansas State University, Oklahoma State University, the University of Arkansas, and South Dakota State University in collaboration with the Institute of Academic Alliances. Life cycle assessment and its application to new technologies involve assessment of environmental and ecological
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