

**Undergraduate and/or Graduate  
Course and Curriculum Changes — Non-Expedited Approval**

**Approved by the  
College of Agriculture Faculty**

**on**

**October 29, 2008 at 3:30 p.m. in Waters Hall Room 231**

**Units that may be directly impacted by these changes have been notified. These are:**

**College of Arts and Sciences  
College of Business Administration  
College of Human Ecology  
Department of Agricultural Economics  
Department of Agronomy  
Department of Architecture  
Division of Biology  
Department of Clinical Sciences  
Department of Finance  
Department of Grain Science and Industry  
Department of Management  
Department of Marketing  
School of Family Studies and Human Services  
School of Journalism and Mass Communications**

**Course and Curriculum Proposals — Non-Expedited Process**  
**College of Agriculture**  
**Fall 2008**

**Non-expedited Course Changes (599 and below)**

Horticulture, Forestry and Recreation Resources

ADD: RRES 200. Bowhunting Equipment and Skills. (1) I. This course covers the bowhunting equipment currently used for hunting. Bowhunting skills to include distance estimation, shot placement, etc. are also covered in this course. Class held off campus at Fancy Creek State Shooting Range over a weekend. Minimum 15 contact hours.

RATIONALE: Course needed as part of outdoor skills base required for Wildlife and Outdoor Enterprise Management major.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD: RRES 200. Firearms and Firearms Maintenance. (1) I. This course will cover the types and functions of firearms used in hunting/shooting sports to include rifles, shotguns and handguns. Basic firearms maintenance will also be covered in this course. Class held off campus at Fancy Creek State Shooting Range over a weekend. Minimum 15 contact hours.

RATIONALE: Course needed as part of outdoor skills base required for Wildlife and Outdoor Enterprise Management major.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD: RRES 200. Hunter Education Instructor. (1) I. This course will provide information and training necessary for qualification as a certified hunter education instructor. Some sessions will be held off campus at Fancy Creek State Shooting Range. Minimum 15 contact hours.

RATIONALE: Course needed as part of outdoor skills base required for Wildlife and Outdoor Enterprise Management major.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD:	RRES 200. Rifle and Handgun Range Design, Construction and Operations. (1) I. This course covers the design and construction of rifle/handgun shooting ranges based on national standards. The course will also cover operational issues including events planning and implementation. Class held off campus at Fancy Creek State Shooting Range over a weekend. Minimum 15 contact hours.
RATIONALE:	Course needed as part of outdoor skills base required for Wildlife and Outdoor Enterprise Management major.
IMPACT:	No impact on other departments.
EFFECTIVE DATE:	Fall 2009
ADD:	RRES 200. Sporting Clays Range Development and Operations. (1) II. This course will cover the history and present day rules of sporting clays, the development of sporting clays ranges and their ongoing operations and maintenance. Class held off campus at Flint Oak Hunting/Shooting Resort, Fall River, Kansas over a weekend. Minimum 15 contact hours.
RATIONALE:	Course needed as part of outdoor skills base required for Wildlife and Outdoor Enterprise Management major.
IMPACT:	No impact on other departments.
EFFECTIVE DATE:	Fall 2009
ADD:	RRES 200. Trap and Skeet Range Development and Operations. (1) II. This course will cover the development of "trap" and "skeet" shooting ranges. Operating principles will be covered to include staffing, event planning and implementation. Class held off campus at Flint Oak Hunting/Shooting Resort, Fall River, Kansas over a weekend. Minimum 15 contact hours.
RATIONALE:	Course needed as part of outdoor skills base required for Wildlife and Outdoor Enterprise Management major.
IMPACT:	No impact on other departments.
EFFECTIVE DATE:	Fall 2009
ADD:	RRES 200. Wildlife Habitat/Food Plot Installation and Maintenance. (2) II. This course covers existing wildlife habitat management techniques plus the renovation of deteriorated habitats and the creation of new habitat areas/food plots to support wildlife species. Class held off campus at selected Tuttle Creek Reservoir sites operated by KSU and Kansas Department of Wildlife and Parks. Minimum 30 contact hours.
RATIONALE:	Course needed as part of outdoor skills base required for Wildlife and Outdoor Enterprise Management major.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD: RRES 250. Introduction to Wildlife and Outdoor Enterprise Management. (1) I. This course covers the wildlife and outdoor enterprise management business and profession in North America and worldwide. One hour rec. a week.

RATIONALE: This course is needed as an overview of the wildlife and outdoor enterprise management profession. This course will also serve as our benchmark data point for student assessment for the above curriculum.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD: RRES 555. Principles and Practices of Big Game Hunting and Guiding. (3) I. Professional principles and practices associated with hunting North American Big Game to include: ethics, species habitat requirements, daily and seasonal activity of each species, methods of harvest, post harvest handling and clientele interactions. Two weekend field trips required. Two hours lec and three hours lab a week.

RATIONALE: This course covers primary outdoor skills required for specific business activities and practices in the big game guiding field.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD: RRES 560. Principles and Practices of Upland Gamebird, Turkey and Waterfowl Hunting. (3) I. Professional principles and practices associated with hunting upland game birds and waterfowl species in North America to include: ethics, laws, species habitat requirements, daily and seasonal activities of each species, methods of harvest, dog handling, post harvest handling and clientele interactions. Two weekend field trips required. Two hours lec and three hours lab a week.

RATIONALE: This course covers primary outdoor skills required for specific business activities and practices in the upland bird/waterfowl guiding field.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD: RRES 565. Principles and Practices of Freshwater Fishing and Guiding. (3) II. Professional principles and practices associated with freshwater fishing in North America to include: Ethics, laws, species habitat requirements, daily and seasonal activities of each game species, methods of harvest, post harvest handling and clientele interactions. Two weekend field trips required. Two hours lec and three hours lab a week.

RATIONALE: This course covers primary outdoor skills required for specific business activities and practices in the freshwater fishing and guiding field.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

  

ADD: RRES 570. Internship for Wildlife and Outdoor Enterprise Management. (10) I, S. Intensive, paid practical experience with an approved hunting and/or shooting sports and/or fishing business. This is a seven month continuous experience.

RATIONALE: This course provides essential (off-campus) professional experiential learning opportunities that allow the student to operationalize and expand their knowledge base.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

  

ADD: RRES 595. Wildlife and Outdoor Enterprise Management Senior Seminar. (1) II. This course will be used as a capstone course for the Wildlife and Outdoor Enterprise Management curriculum; to include case studies and field experience reviews. One hour rec. a week.

RATIONALE: This course will serve as the capstone course for the Wildlife and Outdoor Enterprise Management B.S. Degree Program. It will also serve as our exiting data source for student assessment for the above program.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

## **Non-expedited Course Changes (600 and above)**

### **Animal Sciences and Industry**

**ADD:** ASI 660. International Study Experience in Animal Science. (0-6) I, II, S. 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. Course will focus on appropriate oral and written documentation of the student learning objectives for course experience. The academic topics will vary with each international activity. Pr. instructor permission.

**RATIONALE:** The pre-travel portion of the course would cover preparatory topics and the post travel course would follow experiential learning dealing with numerous phases of the agricultural industry from livestock production, animal health and welfare, crop production, and horticulture. With a steady increase in study abroad tours over the past five years, a dedicated, named travel course is needed.

**IMPACT:** No impact on another department or unit.

**EFFECTIVE DATE:** Fall 2009

**ADD:** FDSCI 660. International Study Experience in Food Science. (0-6) I, II, S. 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. Course will focus on appropriate oral and written documentation of the student learning objectives for course experience. The academic topics will vary with each international activity. Pr. instructor permission.

**RATIONALE:** The pre-travel portion of the course would cover preparatory topics and the post travel course would follow experiential learning dealing with numerous phases of the food industry from raw material product, processing, quality, safety, marketing, social, political, and cultural aspects of food and the food industry. With a steady increase in study abroad tours over the past five years, a dedicated, named travel course is needed so that students still have the option to maximize the number of FDSCI 630 problems / independent study hours in their program of study.

**IMPACT:** No impact on another department or unit.

**EFFECTIVE DATE:** Fall 2009

Entomology

FROM: ENTOM 920. ~~Insect Behavior. (3) II. The study of the mechanisms, ecology and evolution of behavior in social and nonsocial insects.~~

TO: ENTOM 625. Integrative Behavioral Ecology. (3) II. This course is designed to provide an overview of the genetics, ecology, and evolution of insect behavior, emphasizing research done in insect systems. The topics covered in this course will include: (1) Conceptual and empirical framework for studying behavior, (2) the genetics of behavior, (3) “kinds” of behaviors, and (4) detailed examples of each “kind” of behavior. Three hours of lec a week. Rec. Pr.: BIOL 450.

RATIONALE: The change in title (i.e., from Insect Behavior to Integrative Behavioral Ecology) reflects the material being taught in the course, while the change from ENTOM 920 to ENTOM 825/625 will allow both undergraduates and graduate students to take this course.

IMPACT: No impact on other units, as this course is currently a graduate elective outside of the Department of Entomology.

EFFECTIVE DATE: Spring 2010

FROM: ENTOM 920. ~~Insect Behavior. (3) II. The study of the mechanisms, ecology and evolution of behavior in social and nonsocial insects.~~

TO: ENTOM 825. Integrative Behavioral Ecology. (3) II. This course is designed to provide an overview of the genetics, ecology, and evolution of insect behavior, emphasizing research done in insect systems. The topics covered in this course will include: (1) Conceptual and empirical framework for studying behavior, (2) the genetics of behavior, (3) “kinds” of behaviors, and (4) detailed examples of each “kind” of behavior. Three hours of lec a week. Rec. Pr.: BIOL 450.

RATIONALE: The change in title (i.e., from Insect Behavior to Integrative Behavioral Ecology) reflects the material being taught in the course, while the change from ENTOM 920 to ENTOM 825/625 will allow both undergraduates and graduate students to take this course.

IMPACT: No impact on other units, as this course is currently a graduate elective outside of the Department of Entomology.

EFFECTIVE DATE: Spring 2010

ADD: ENTOM 849. Biology of Disease Vectors of Human and Veterinary Importance. (3) I. This course focus will be vectors of medical and veterinary importance. Students will learn several underlying aspects involved in pathogen-vector-vertebrate host interactions, including those associated with cellular, molecular and innate immune response of insects to pathogens they transmit. Students will be introduced to current research programs and topics of interest in the field of medical

entomology. Three hours of lec a week. Rec. Pr.: BIOL 198, ENTOM 312, and BIOL 450.

**RATIONALE:** Vector biology has had a tremendous impact in the field of entomology. Recent advances achieved in the areas of mosquito, ticks and sand fly innate immunity, pathogen interaction, genetics and genomics has pushed the field of disease vector control to the realm of transgenic insects as a means to control the spread of parasitic diseases such as malaria and leishmaniasis. New research opportunities have arisen in the US and training of specialized work force has not followed suit. However, no official course focused on vector biology of medical and veterinary importance has ever been offered by the Department of Entomology. Thus, this new course will fulfill this highly needed specialized training.

**IMPACT:** No impact on other units. This course will likely attract students from the Division of Biology, the Department of Biochemistry and the College of Veterinary Medicine.

**EFFECTIVE DATE:** Fall 2009

#### Horticulture, Forestry and Recreation Resources

**ADD:** HORT 750. Orientation to Horticultural Therapy. (1) I, II. This course will introduce students to online delivery methods, graduate level research, writing and technology skills, create a community of practice, and introduce students to the profession of horticultural therapy.

**RATIONALE:** This course is part of a new Master of Horticultural Therapy (MHT) program that is being proposed. The MHT program will be offered via distance-education. Research on distance education learning indicates that an orientation course that introduces the program, the student cohort, strategies for success in online learning, and practicing the technological skills required as the students move through the program does help with student success.

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

**EFFECTIVE DATE:** Fall 2009



FROM: HORT 751. Human Issues in Horticultural Therapy. (3) I. 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.

TO: HORT 751. Human Issues in Horticultural Therapy. (3) I. 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.

RATIONALE: Course delivery method is being expanded to allow use in distance education Masters in Horticultural Therapy program.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD: HORT 752. Horticulture in Horticultural Therapy. (3) II. Application of horticulture principles and practices in therapeutic settings; considerations for greenhouse systems operations and management in therapeutic settings; landscape maintenance, fruit and vegetable gardening, and production horticulture as part of a therapeutic program; and plant propagation for production and therapy.

RATIONALE: This course is part of a new Master of Horticultural Therapy (MHT) program that is being proposed. This course will focus on how horticulture is used in therapeutic settings and for therapy with the intent being to move beyond an understanding of horticultural principles and practices to the specific applications, adaptations, and considerations when horticulture is used in treatment modalities. This course is designed to support specific student learning outcomes of the MHT program.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD: HORT 753. Clinical Skills in Horticultural Therapy. (6) S. This course begins summer semester, concludes fall semester, and requires two 5-day on-site experiences. 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.

RATIONALE: This course is part of a new Master of Horticultural Therapy (MHT) program that is being proposed. This course is being proposed to address a specific skill set required of a horticultural therapy practitioner. In this course students will directly see the application of horticultural therapy

in facilities typically served by horticultural therapy. This is a problem-based course, so students will move through all the clinical steps associated with a horticultural therapy program as they see and experience these various settings and populations. This course is a key course in support of the practitioner training intent of the MHT program.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

ADD: HORT 755. Practicum in Horticultural Therapy. (3) I, II. The practicum is a means of demonstrating the interconnections between 'theory' and 'practice'. By conducting a practicum project, students demonstrate the ability to apply concepts and ideas from their study of horticultural therapy to a specific population or setting.

RATIONALE: This course is part of a new Master of Horticultural Therapy (MHT) program that is being proposed. The intent of this course is to provide a venue for the students to apply all they learned in the MHT program in an approved setting where they live. Since the MHT program is a practitioner training program, it is critical that the students practice horticultural therapy and be provided with instructional feedback.

IMPACT: No impact on other departments.

EFFECTIVE DATE: Fall 2009

## Undergraduate Curriculum Changes

### Agricultural Economics

Agricultural Economics/B.S. Agribusiness

FROM:	TO:
Humanities electives: 3 hrs Select from History Music Art English (above 210) Philosophy Theater Dance, or Modern Language	Humanities electives: 3 hrs Select from History Music Art English (above 210) Philosophy Theater Dance Modern Language, or <b><u>ARCH 301</u></b>
Social Science electives: 3 hrs Select from Psychology Sociology Geography Political Science Anthropology History Women's Studies, or American Ethnic Studies	Social Science electives: 3 hrs Select from Psychology Sociology Geography Political Science Anthropology History Women's Studies, or American Ethnic Studies <b><u>FSHS 350</u></b>

**RATIONALE:** Appreciation of Architecture is an appropriate humanities course. It addresses art as expressed in structures. Also it is a 300 level UGE class. Family Relations and Gender Roles addresses social science aspects of the family and is a 300 level UGE class.

**IMPACT:** The Department of Architecture and the School of Family Studies and Human Services have been contacted and have approved.

**EFFECTIVE DATE:** Spring 2009

Agricultural Economics/Major Agricultural Economics

FROM:	TO:
Humanities electives: 3 hrs Select from History Music Art English (above 210) Philosophy Theater Dance, or Modern Language	Humanities electives: 3 hrs Select from History Music Art English (above 210) Philosophy Theater Dance Modern Language, or <b><u>ARCH 301</u></b>
Social Science electives: 3 hrs Select from Psychology Sociology Geography Political Science Anthropology History Women's Studies, or American Ethnic Studies	Social Science electives: 3 hrs Select from Psychology Sociology Geography Political Science Anthropology History Women's Studies, or American Ethnic Studies <b><u>FSHS 350</u></b>

**RATIONALE:** Appreciation of Architecture is an appropriate humanities course. It addresses art as expressed in structures. Also it is a 300 level UGE class. Family Relations and Gender Roles addresses social science aspects of the family and is a 300 level UGE class.

**IMPACT:** The Department of Architecture and the School of Family Studies and Human Services have been contacted and have approved.

**EFFECTIVE DATE:** Spring 2009

## Animal Sciences and Industry

### Communications Option

#### FROM:

##### Communications

MC	110	Mass Comm in Soc	3
<del>MC</del>	<del>305</del>	<del>Radio-TV &amp; Society</del>	<del>3</del>
MC	200	News & Featr Writing	3
MC	241	Editing & Design	3
MC	303	Adv News & Feat Wrt	3
MC	466	Law of Mass Comm	3

(Plus 6 credit hours of courses in Ag Communications, Speech, or Mass Communications)

#### TO:

##### Communications

MC	110	Mass Comm in Soc	3
<del>MC</del>	<del>120</del>	<del>Prin. of Advertising</del>	<del>3</del>

#### OR

<del>MC</del>	<del>180</del>	<del>Fund. of Public Relat</del>	<del>3</del>
MC	200	News & Featr Writing	3
MC	241	Editing & Design	3
MC	303	Adv News & Feat Wrt3	
MC	466	Law of Mass Comm	3

(Plus 6 credit hours – 1 course must be 400-level or above in Mass Communications, the other 3 credit hours may come from Ag Communications, Speech or Mass Communications)

#### RATIONALE:

MC 305, Radio-TV and Society is no longer taught at K-State, thus the need to find a replacement course. In replacing this course with either MC 120, Principles of Advertising, or MC 180, Fundamentals of Public Relations, and adding the restriction to the 6 hours of communications elective, students in this curriculum will have also met the requirements for a Journalism and Mass Communications Minor.

#### IMPACT:

The School of Journalism and Mass Communications has been contacted and has approved.

EFFECTIVE DATE: Fall 2009

## **Graduate Curriculum Changes**

### **Agricultural Economics**

M.S. Agribusiness Economics Thesis Option

FROM:

<b>Topic Area</b>	<b>Credit Hours</b>
<b>Agribusiness Economics</b>	<b><u>12 Total</u></b>
ECON 720      Microeconomic Theory	3
AGEC 890      Advanced Food and Agribusiness Management	3
AGEC 880      Agribusiness Industry Structures	3
FINAN 815      Managerial Finance I	3
<b>Quantitative Methods</b>	<b><u>9 Total</u></b>
STAT 706      Basic Elements of Statistical Theory	3
AGEC 712      Optimization Techniques in Agricultural Economics	3
ECON 830      Econometrics I	3
<b>Ag Economics, Finance, Marketing, Management</b> (select one course from:)	<b><u>3 Total</u></b>
<del>AGEC 800</del> or higher level course not used for other requirements	3
FINAN 820      Advanced International Finance Management	3
FINAN 860      Managerial Finance II	3
MKTG 810      Marketing Concepts and Research	3
MKTG 842      Advanced Marketing Research	3
MKTG 844      Advanced International Marketing	3
MKTG 860      Advanced International Business	3
MANGT 810      Operations Management and Analysis	3
MANGT 825      Advanced Business Law	3
MANGT 840      Advanced Entrepreneurship	3
<b>Thesis Research</b>	<b><u>6 Total</u></b>
AGEC 899 Agricultural Economics Master's Research	6
<b>Total Credit Hours</b>	<b>30</b>

The following courses developed for the Masters of Agribusiness are not allowed on a student's program of study: AGECE 700, AGECE 701, AGECE 713, AGECE 720, AGECE 730, AGECE 760, AGECE 761, and AGECE 770.

## Agricultural Economics

### M.S. Agribusiness Economics Thesis Option

TO:

Topic Area	Credit Hours
<b>Agribusiness Economics</b>	<u>12 Total</u>
ECON 720     Microeconomic Theory	3
AGEC 890     Advanced Food and Agribusiness Management	3
AGEC 880     Agribusiness Industry Structures	3
FINAN 815     Managerial Finance I	3
<b>Quantitative Methods</b>	<u>9 Total</u>
STAT 706     Basic Elements of Statistical Theory	3
AGEC 712     Optimization Techniques in Agricultural Economics	3
ECON 830     Econometrics I	3
<b>Ag Economics, Finance, Marketing, Management</b> (select one course from:)	<u>3 Total</u>
<u>AGEC 700</u> or higher level course not used for other requirements	3
FINAN 820     Advanced International Finance Management	3
FINAN 860     Managerial Finance II	3
MKTG 810     Marketing Concepts and Research	3
MKTG 842     Advanced Marketing Research	3
MKTG 844     Advanced International Marketing	3
MKTG 860     Advanced International Business	3
MANGT 810     Operations Management and Analysis	3
<u>MANGT 820     Behavioral Management Theory</u>	<u>3</u>
MANGT 825     Advanced Business Law	3
MANGT 840     Advanced Entrepreneurship	3
<b>Thesis Research</b>	<u>6 Total</u>
AGEC 899 Agricultural Economics Master's Research	6
<b>Total Credit Hours</b>	<b>30</b>

The following courses developed for the Masters of Agribusiness are not allowed on a student's program of study: AGECE 700, AGECE 701, AGECE 713, AGECE 720, AGECE 730, AGECE 760, AGECE 761, and AGECE 770.

RATIONALE: In the MS Agribusiness (thesis option) the proposed changes are: a) the addition of MANGT 820 to the list of approved electives and b) changing the level of permitted Ag Econ electives from “800 or above” to “700 or above.”

a) MANGT 820 (Behavioral Management Theory) provides “an in-depth analysis of the development of the behavioral bases of individual and group behavior in business, governmental, educational, and other organizations.” This type of course is typically a requirement in an MBA sequence and is appropriate for inclusion in the list of approved electives for the MS in Agribusiness. This change will provide consistency with the proposed MS Agribusiness (no thesis option) in which MANGT 820 is required.

b) Courses at the 700 level or above are typically allowed for graduate credit and the Department of Agricultural Economics currently has two courses at this level which are either required (AGEC 712 – Optimization Techniques) or permitted (AGEC 710 – Comparative Food and Agriculture Systems) in our on-campus MS Agribusiness or MS Agricultural Economics programs. A number of 700 level classes, developed for our distance Masters of Agribusiness program, remain excluded from the on-campus programs.

IMPACT: Department of Management. This proposal adds one elective, MANGT 820, to a list that already includes 9 business electives and several other AgEcon electives, from which the student chooses just one class. The impact on the Department of Management will be minimal. The Department (Dr. Niehoff) has been consulted and indicated no concerns.

EFFECTIVE DATE: Summer 2009



## **New Undergraduate Curriculum(s)**

### **Horticulture, Forestry and Recreation Resources**

#### **New Program Proposal Basic Program Information**

1. Proposing institution: Kansas State University
2. Title of proposed program: Wildlife and Outdoor Enterprise Management
3. Degree to be offered: Bachelor's of Science Degree in Wildlife and Outdoor Enterprise Management
4. Anticipated date of implementation: Fall 2009
5. Responsible department or unit: Department of Horticulture, Forestry and Recreation Resources in the College of Agriculture
6. CIP code: 03.9999/52.9999

## PROGRAM PROPOSAL NARRATIVE

### A. Program Need and Student Characteristics

#### 1. Centrality to the mission of Kansas State University

The proposed Bachelor's of Science Degree in Wildlife and Outdoor Enterprise Management will be a unique program offered by Kansas State University. The proposed multidisciplinary undergraduate program will provide "next generation" managers of hunting/shooting sports/fishing and outdoor adventure enterprises in Kansas, the Nation and internationally with enhanced knowledge and abilities to successfully operate their firms. The program will provide a wide array of exposure to science-based management of natural resources, theory and practice of business and hospitality management as well as outdoor related skills. The students graduating from this program, as requested by the outdoor industry, will be professionally trained and given the educational philosophy consistent with the pursuit of lifelong learning. This program will follow the mission statement of Kansas State University.

#### 2. Student demand for the program

The proposed Wildlife and Outdoor Enterprise Management Program is unique and was created at the request of the wildlife and outdoor enterprise industry. While the program has not been advertised, individuals from across the outdoor industry have contacted the department requesting information on when the program will start. Nation-wide, individuals who have helped design the program are discussing the proposed degree program prompting informational requests. **Preliminary enrollment in the program is targeted at 30 students per year.** With opportunities to advertise the program on national television (Outdoor Channel, ESPN Outdoors, Sportman's Channel, etc...) we could attract as many as 200 students per year, but believe that 30 students per cohort is appropriate at the **outset** of program implementation with **120 students in a four-year program cycle.**

#### 3. Demand for graduates of the program

There is a demonstrated demand for the proposed multidisciplinary degree program in Wildlife and Outdoor Enterprise Management. According to the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation,<sup>1</sup> 87.5 million Americans (16 years old and older) participated in wildlife related recreation (hunting/fishing) with a total expenditure of \$122.5 billion. In addition, Wildlife Watchers totaled over 71 million Americans with expenditures over 45.7 billion. In addition, over 19 million Americans participate in shooting sports annually.<sup>2</sup> The national trend is the commercialization of these activities through resorts, preserves, lodges and outfitting/guiding services. In late 2006, Kansas State University was contacted by the owner of the Flint Oak Hunting Resort at Fall River, Kansas. The owner, Ray Walton, had brought together a team of resort owner/operators to outline the need for university trained managers. After preliminary phone calls with the Department of Horticulture, Forestry and Recreation Resources, a series of meetings took place at the Flint Oak Resort to discuss the need for a degree program and how it could be implemented. In the spring of 2007 a survey was developed with input from a degree design team made up of 17 Kansas State University faculty representing 3 colleges, 5 departments and the U.S. Fish and Wildlife Service. In addition, Mike Hayden, Secretary of Kansas Wildlife and Parks served as an outside member to the committee. In the spring of 2007, a questionnaire was sent out to 1300 outdoor enterprise firms across the United States to help determine the need for a program and what it might entail. Eighty percent of the survey respondents indicated a need

for a bachelor's degree program for managers. Their input on degree content has been incorporated into the proposed degree program.

4. Location and comparative advantages of the program

The proposed Bachelor's of Science Degree Program in Wildlife and Outdoor Enterprise Management is unique in Kansas, nationally and internationally. The proposed program which cuts across an array of Kansas State University departmental programs and colleges is supported by the Horticulture, Forestry and Recreation Resources Department and The College of Agriculture as well as the Division of Biology in the College of Arts and Sciences, the College of Business Administration and The College of Human Ecology. Since this program is unique it will attract students from across the United States and internationally (primarily Europe and Southern Africa).

The proposed multidisciplinary program at Kansas State University will provide the first and only degree program that combines natural resources/wildlife management with business and hospitality management to provide trained professionals in this growing commercial sector of our economy.

5. Characteristics of students who will participate in the proposed program

Students who apply to the program will likely, initially, come from families who are operating large scale hunting/fishing resorts and businesses like Cabela's. As is the case for our natural resources management students, these students have a desire to work and like to work with people.

Admissions decisions will be based on a combination of factors, including Kansas State University's admission standards, references, experience and delineated career goals. The first four freshman classes are being targeted at 30 students per year. Adjustments to increase enrollments will reflect trends in placement.

B. Curriculum of the proposed program

Student learning outcomes have been identified for the proposed program. Upon successful completion of the Bachelor's of Science Degree Program in Wildlife and Outdoor Enterprise Management, students will:

1. Know the basic **scientific principles** which govern the management of our natural resources (soils, water, grasslands, forests and wildlife).
2. Know the range of **outdoor related skills** needed by wildlife enterprise operators and customers.
3. Have a sound understanding of business management and marketing.
4. Have a sound understanding of business finance and accounting.
5. Understand principles of hospitality management covering lodging and food and beverage services and regulations.
6. Possess a comprehensive general education that is the basis for their success in the above outlined learning outcomes.

7. Have an ingrained understanding of the need for and an appreciation of lifelong learning.

Assessment of the students entering this program will begin with a “level one” test of curriculum subject matter conducted in the RRES 250 course, Introduction to Wildlife and Outdoor Enterprise Management. As a capstone activity the students will take RRES 595, Wildlife and Outdoor Enterprise Management Senior Seminar. This course will cover comprehensive case studies as well as a follow-up exam on curriculum subject matter.

The following are the core courses to be included in the 130 hour Bachelor’s of Science Degree Program in Wildlife and Outdoor Enterprise Management.

**Communications .....9 hours**

ENGL 100	Expository Writing I	3
ENGL 200	Expository Writing II	3
COMM 106	Public Speaking I	3

**General Agriculture..... 1 hour**

GENAG 101	Ag Orientation	1
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**Natural Sciences..... 16 hours**

BIOL 198	Principles of Biology	4
BIOL 201	Organismic Biology	5
GEOL 100	Earth in Action	3
CHM 110	General Chemistry	3
CHM 111	General Chemistry Lab	1

**Social Systems.....9 hours**

ECON 110	Principles of Macroeconomics	3
ECON 120	Principles of Microeconomics	3
SOCIO 211	Introduction to Sociology	3

**Mathematics & Statistics.....6 hours**

MATH 100	College Algebra	3
STAT 350	Business and Economic Statistics I	3

**Business.....12 hours**

ACCTG 231	Accounting for Business Operations	3
FINAN 450	Principles of Finance	3
MANGT 420	Management Concepts	3
MKTG 400	Marketing	3

**Hospitality.....9 hours**

HMD 220	Environmental Issues in Hospitality	2
HMD 230	Issues in Tourism	2
HMD 340	Contemporary Issues in Controlled Beverages	2
HMD 341	Principles of Food Production Management	3

<b>Wildlife and Outdoor Enterprise Management Core.....</b>		<b>56 hours</b>
AGRON 305	Soils	4
AGRON 501	Range Management	3
ASI 645	Poultry Management	3
BIOL 433	Wildlife Conservation	3
BIOL 684	Wildlife Management and Techniques	4
BIOL 696	Fisheries Management and Techniques	4
FOR 285	Forest Resource Management	3
FOR 375	Intro to Natural Resource Management	3
RRES 200	Firearms and Firearms Maintenance	1
RRES 200	Sporting Clays Range Development and Operations	1
RRES 200	Trap and Skeet Range Development and Operations	1
RRES 200	Rifle and Handgun Range Design, Construction and Operations	1
RRES 200	Bowhunting Equipment and Skills	1
RRES 200	Hunter Education Instructor	1
RRES 200	Wildlife Habitat/Food Plot Installation and Maintenance	2
RRES 250	Introduction to Wildlife and Outdoor Enterprise Management	1
RRES 555	Principles and Practices of Big Game Hunting and Guiding	3
RRES 560	Principles and Practices of Upland Gamebird, Turkey and Waterfowl Hunting and Guiding	3
RRES 565	Principles and Practices of Freshwater Fishing and Guiding	3
RRES 570	Internship for Wildlife and Outdoor Enterprise Management	10
RRES 595	Wildlife & Outdoor Enterprise Management Senior Seminar	1
<b>Free Electives</b>		<b>12 hours</b>
<b>Total Credit Hours Required for Graduation</b>		<b>130</b>

C. Program Faculty (Vitae/Resumes attached to proposal)

1. Quality of Faculty

The faculty from the Department of Horticulture, Forestry and Recreation Resources who will teach in the proposed program are professionals with academic specializations and backgrounds appropriate for and supportive of the proposed Bachelor's of Science Degree in Wildlife and Outdoor Enterprise Management. The instructional core will be taught by faculty from a total of nine departments located in four different colleges at Kansas State University. This team of instructors will deliver a high quality program consistent with the mission of Kansas State

University. All academic advising will be handled within the Department of Horticulture, Forestry and Recreation Resources at Kansas State University.

The following faculty in the Department of Horticulture, Forestry and Recreation Resources, located in the College of Agriculture, will teach in the proposed program:

Dr. Thomas D. Warner, Professor (32 years of university teaching experience)

Dr. Ted T. Cable, Professor (24 years of university teaching experience)

Dr. Keith D. Lynch, Associate Professor (28 years of university teaching experience)

Dr. Warner will serve as Program Director and will teach 3-3 hour core courses and 2-1 hour core courses per year along with supervision of the program's internship course. Dr. Cable will teach 1-3 hour core course, assist in the internship program (10 hours) and advise students and Dr. Keith Lynch will teach 1-3 hour core course and advise students.

#### D. Academic Support

##### 1. Academic Support Services

Advisors will be assigned for students as they are admitted to the program. Advisors will be accessible to students and will assist students with their academic planning. On-line information technology at Kansas State University will help track each student's progress and plan each semester course load.

The Program Director will work with the K-State Library as books and reference materials are identified and in many cases donated to the University. Materials will also be made available in the Horticulture, Forestry, and Recreation Resources Department's Park Management and Conservation Reading Room. All audio visual equipment needed to support the program will be funded through the K-State Student Technology Fee Fund.

Academic computing is made available through a dedicated computer room for recreation resources division students within the HFRR Department. New equipment and software is funded through the K-State Student Technology Fee Fund. Computers in the dedicated lab are upgraded on a three year rotation.

##### 2. New Academic Support Necessary

Library acquisitions – Any new acquisitions needed will be donated through the program and transferred to the main K-State Library.

Enhanced Academic Support - Institutional academic support (advising, etc.) will be covered through teams and support mechanisms that are in place at K-State.

##### 3. New Supporting Staff

Staff needed to support the program are in place at K-State.

## E. Facilities and Equipment

1. Department of Horticulture, Forestry and Recreation Resources at Kansas State University is located in the Throckmorton Plant Sciences Center. There is sufficient class/lab space, computer room and reading room within the above building to operate this program.
2. The program will need two over-the-road vehicles: a **36-passenger school-type bus** and a **heavy duty pick-up**. The bus will be used to transport students to off-campus training sites (Fancy Creek Shooting Range north of Manhattan, The Flint Oak Hunting Resort at Fall River, Kansas and Tuttle Creek and Milford Reservoirs). The bus will also be used for field trips to state located and regional wildlife and outdoor enterprise businesses. The heavy duty pick-up truck will be used to transport donated field/farm equipment for labs on habitat/food plot restoration, development and maintenance. **The cost of the above vehicles will be covered through corporate sponsorships.**
3. No new technologies will be required beyond the computer equipment currently maintained by the department.

## F. Program Review, Assessment and Accreditation

1. The program will be reviewed on an ongoing basis by Kansas State University's Assessment Office following Regents and national accrediting body guidelines.
2. Since the Wildlife and Outdoor Enterprise Management Curriculum is unique to the Kansas Regents System, the Nation, and internationally. No program accrediting body exists.

<sup>1</sup>U.S. Department of Interior, Fishing and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau, 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

<sup>2</sup>National Shooting Sports Foundation

**Wildlife and Outdoor Enterprise Management Program**  
**Assessment of Student Learning**  
Kansas State University

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**A. College, Department, and Date**

College: Agriculture  
Department: Horticulture, Forestry and Recreation Resources  
Date: September 19, 2008

**B. Contact Person(s) for the Assessment Plan**

Dr. Tom Warner – Professor – Horticulture, Forestry and Recreation Resources

**C. Degree Program**

Bachelor's of Science Degree in Wildlife and Outdoor Management Enterprise Management

**D. Assessment of Student Learning Three-Year Plan**

**1. Student Learning Outcomes**

**a. List (or attach a list) all of the student learning outcomes for the program**

Graduates of the Wildlife and Outdoor Enterprise program will be able to:

- 1) Demonstrate an understanding of the scientific principles that govern the management of our natural resources.
- 2) Use the technical skills needed by wildlife enterprise operators.
- 3) Operate an outdoor enterprise using the principles of business management and marketing.
- 4) Demonstrate a sound understanding of business finance and accounting.
- 5) Incorporate knowledge of hospitality management covering lodging, food, and beverage services and regulations into a business enterprise.
- 6) Apply critical thinking and problem solving skills to the wildlife enterprise field.

**b. Identify outcomes that will be assessed in the first three years of the plan.**

SLOs 1, 2, and 6 will be assessed in the first three years of the plan.

**Relationship to K-State Learning Outcomes**

Program SLOs	University-wide SLOs (Undergraduate Programs)					Program SLO is conceptually different from university SLOs
	Knowledge	Critical Thinking	Communication	Diversity	Academic/ Professional Integrity	
1	X					No
2	X	X				No
6	X	X	X			No



**2. How will the learning outcomes be assessed? What groups will be included in the assessment?**

SLO	MEASURES		WHO IS ASSESSED?
	DIRECT	INDIRECT	
Knowledge of scientific natural resource management	Selected exam questions in RRES 250 with follow up questions in RRES 555, 560, and 565	Self-report of students' perceptions of what they've learned in each of the listed classes	Degree seeking students in RRES 250, 555, 560 and 565
Technical skills to operate wildlife business	Completion of problems in RRES 200 courses including Firearms & Firearms Maintenance, Range Design & Operation classes and Bowhunting Skills	Observation of students as they develop the skills required in the RRES 200 series of courses.	Degree seeking students in RRES 200 courses including Firearms & Firearms Maintenance, Range Design & Operation classes and Bowhunting Skills
Critical thinking and problem solving skills	Selected exam questions in RRES 555, 560 and 565	Participation in class discussions relative to case studies in the listed classes	Degree seeking students in RRES 555, 560 and 565

**3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?**

SLO	TIMETABLE FOR ASSESSMENT OF SLO			CREATION OF BASELINE
	2009-2010	2010-2011	2011-2012	
Knowledge of scientific natural resource management	RRES 250		RRES 555, 560	Baseline completed after Fall, 2012
Mastery of technical skills to operate wildlife business	RRES 200 courses including Firearms & Firearms Maintenance, Bowhunting Skills	RRES 200 courses including Rifle & Handgun Range Development and Operations	RRES 200 courses including Sporting Clays and Trap & Skeet Range Development and Operations	Baseline completed after Fall, 2012
Critical thinking and problem solving skills			RRES 555, 560	Baseline completed after Fall, 2012

**4. What is the unit's process for using assessment results to improve student learning?**

Teaching faculty in the unit will meet with selected faculty teaching critical core courses outside the department annually to review the assessment data following the establishment of the baseline in Fall 2012. Additions or deletions of material from courses or changes in the curriculum itself will be made if warranted following these meetings.

## Attachments

Attachment 1 – Summary of Proposed Academic Program

Attachment 2 – Curriculum Outline for Proposed Academic Program

Attachment 3 – Fiscal Summary for Proposed Academic Program

**New Degree Request – Kansas State University**

<b><u>Criteria</u></b>	<b><u>Program Summary</u></b>
1. Program Identification	Wildlife and Outdoor Enterprise Management CIP 03.9999/52.9999
2. Academic Unit	Department of Horticulture, Forestry and Recreation Resources, Kansas State University
3. Program Description	The proposed Bachelor's of Science Degree in Wildlife and Outdoor Enterprise Management will be a unique program offered by Kansas State University. The proposed multidisciplinary undergraduate program will provide "next generation" managers for hunting/shooting sports/fishing and outdoor adventure enterprises in Kansas, the Nation and internationally with enhanced knowledge and abilities to successfully operate their firms. The program will provide a wide array of exposure to science-based management of natural resources, theory and practice of business and hospitality management as well as outdoor related skills.
4. Demand/Need For the Program	There is a demonstrated demand for the proposed multidisciplinary degree program in Wildlife and Outdoor Enterprise Management. According to the <u>2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation</u> , 87.5 million Americans (16 years old and older) participated in wildlife related recreation (hunting/fishing) with a total expenditure of \$122.5 billion. Wildlife Watchers totaled over 71 million Americans with expenditures over 45.7 billion. In addition, over 19 million Americans participate in shooting sports annually. The national trend is the commercialization of these activities through resorts, preserves, lodges and outfitting/guiding services. In the spring of 2007 a survey was developed with input from a degree design team made up of 17 Kansas State University faculty representing 3 colleges, 5 departments and the U.S. Fish and Wildlife Service. The questionnaire was sent out to 1300 outdoor enterprise firms across the United States to help determine the need for this program and what the program might entail. Eighty percent of the survey respondents indicated a need for a bachelor's degree program for managers. While the program has not been advertised, individuals from across the outdoor industry have contacted the department requesting information on when the program will start. <b>Preliminary enrollment in the program is targeted at 30 students per year with 120 students in a four-year program cycle.</b>

5. Comparative/ Locational Advantage	The proposed Bachelor's of Science Degree Program in Wildlife and Outdoor Enterprise Management is unique in Kansas, nationally and internationally. The proposed program which cuts across an array of Kansas State University departmental programs and colleges will attract students from across the United States and internationally (primarily Europe and Southern Africa). The proposed multidisciplinary program at Kansas State University will provide the first and only degree program that combines <u>natural resources/wildlife management with business and hospitality management</u> to provide trained professionals in this growing commercial sector of our economy.
6. Curriculum	<p>The Bachelor's of Science in Wildlife and Outdoor Enterprise Management will be a 130 hour degree offered by Kansas State University. The program core is made up of 29 courses totaling 77 hours. Student learning outcomes include:</p> <ol style="list-style-type: none"> <li>1. Know the basic <b>scientific principles</b> which govern the management of our natural resources (soils, water, grasslands, forests and wildlife).</li> <li>2. Know the range of <b>outdoor related skills</b> needed by wildlife enterprise operators and customers.</li> <li>3. Have a sound understanding of business management and marketing.</li> <li>4. Have a sound understanding of business finance and accounting.</li> <li>5. Understand principles of hospitality management covering lodging and food and beverage services and regulations.</li> <li>6. Possess a comprehensive general education that is the basis for their success in the above outlined learning outcomes.</li> <li>7. Have an ingrained understanding of the need for and an appreciation of lifelong learning.</li> </ol>
7. Faculty Profile	<p>The faculty from the Department of Horticulture, Forestry and Recreation Resources who will teach in the proposed program are professionals with academic specializations and backgrounds appropriate for and supportive of the proposed Bachelor's of Science Degree in Wildlife and Outdoor Enterprise Management. <u>The instructional core will be taught by faculty from a total of nine departments located in four different colleges at Kansas State University.</u> This team of instructors will deliver a high quality program consistent with the mission of Kansas State University. All academic advising will be handled within the Department of Horticulture, Forestry and Recreation Resources at Kansas State University.</p> <p>The following faculty in the Department of Horticulture, Forestry and Recreation Resources, located in the College of Agriculture, will teach in the proposed program:</p> <p>Dr. Thomas D. Warner, Professor (32 years of university teaching experience)</p> <p>Dr. Ted T. Cable, Professor (24 years of university teaching experience)</p>

	Dr. Keith D. Lynch, Associate Professor (28 years of university teaching experience)
8. Student Profile	Students who apply to the program initially will come from families who are operating large scale hunting/fishing resorts and outdoor adventure enterprises from across the United States. As is the case for our natural resources management students, these students have a desire to work with our natural resources and with people. Admissions decisions will be based on a combination of factors, including Kansas State University's admission standards, references, experience and delineated career goals. The first four freshman classes are being targeted at 30 students per year. Adjustments to increase enrollments will reflect trends in placement.
9. Academic Support	Advisors will be assigned for students as they are admitted to the program. Advisors will be accessible to students and will assist students with their academic planning. On-line information technology at Kansas State University will help track each student's progress and plan each semester course load. The Program Director will work with the K-State Library as books and reference materials are identified and in many cases donated to the University. Materials will also be made available in the Horticulture, Forestry, and Recreation Resources Department's Park Management and Conservation Reading Room. All audio visual equipment needed to support the program will be funded through the K-State Student Technology Fee Fund.
10. Facilities and Equipment	The Department of Horticulture, Forestry and Recreation Resources at Kansas State University is located in the Throckmorton Plant Sciences Center. There is sufficient class/lab space, computer room and reading room within the above building to operate this program.
11. Program Review, Assessment, Accreditation	Since the Wildlife and Outdoor Enterprise Management Curriculum is unique to the Kansas Regents System, the Nation and internationally. No program accrediting body exists. The program will be reviewed on an ongoing basis by Kansas State University's Assessment Office following Regents and national accrediting body guidelines.
12. Costs, Financing	The proposed Bachelor's of Science Degree Program in Wildlife and Outdoor Enterprise Management requires 130 semester credit hours. Faculty who are presently employed by Kansas State University will be providing instruction and advising in this program. Estimated annual "OOE" costs to operate the program (\$7,500) will be covered through external gifts and grants from outdoor enterprise businesses.

**CURRICULUM OUTLINE  
NEW DEGREE PROPOSALS  
Kansas Board of Regents**

**1. Identify the new degree:**

Bachelor's of Science Degree in Wildlife and Outdoor Enterprise Management

**2. Provide courses required for each student in the major:**

<b>Core Courses</b>	<b>Course Name &amp; Number</b>	<b>Credit Hours</b>
	<b>Communications.....</b>	<b>9 hours</b>
	ENGL 100 Expository Writing I	3
	ENGL 200 Expository Writing II	3
	COMM 106 Public Speaking I	3
	<b>General Agriculture .....</b>	<b>1 hour</b>
	GENAG 101 Ag Orientation	1
	<b>Natural Sciences .....</b>	<b>16 hours</b>
	BIOL 198 Principles of Biology	4
	BIOL 201 Organismic Biology	5
	GEOL 100 Earth in Action	3
	CHM 110 General Chemistry	3
	CHM 111 General Chemistry Lab	1
	<b>Social Systems.....</b>	<b>9 hours</b>
	ECON 110 Principles of Macroeconomics	3
	ECON 120 Principles of Microeconomics	3
	SOCIO 211 Introduction to Sociology	3
	<b>Mathematics &amp; Statistics .....</b>	<b>6 hours</b>
	MATH 100 College Algebra	3
	STAT 350 Business and Economic Statistics I	3
	<b>Business .....</b>	<b>12 hours</b>
	ACCTG 231 Accounting for Business Operations	3
	FINAN 450 Principles of Finance	3
	MANGT 420 Management Concepts	3
	MKTG 400 Marketing	3
	<b>Hospitality .....</b>	<b>9 hours</b>
	HMD 220 Environmental Issues in Hospitality	2
	HMD 230 Issues in Tourism	2
	HMD 340 Contemporary Issues in Controlled Beverages	2
	HMD 341 Principles of Food Production Management	3

<b>Wildlife and Outdoor Enterprise Management Core .....</b>		<b>56 hours</b>
AGRON 305	Soils	4
AGRON 501	Range Management	3
ASI 645	Poultry Management	3
BIOL 433	Wildlife Conservation	3
BIOL 684	Wildlife Management & Techniques	4
BIOL 696	Fisheries Management & Techniques	4
FOR 285	Forest Resource Management	3
FOR 375	Intro to Natural Resource Management	3
RRES 200	Firearms and Firearms Maintenance	1
RRES 200	Sporting Clays Range Development and Operations	1
RRES 200	Trap and Skeet Range Development and Operations	1
RRES 200	Rifle and Handgun Range Design, Construction and Operations	1
RRES 200	Bowhunting Equipment and Skills	1
RRES 200	Hunter Education Instructor	1
RRES 200	Wildlife Habitat/Food Plot Installation and Maintenance	2
RRES 250	Introduction to Wildlife and Outdoor Enterprise Management	1
RRES 555	Principles and Practices of Big Game Hunting and Guiding	3
RRES 560	Principles and Practices of Upland Gamebird, Turkey and Waterfowl Hunting and Guiding	3
RRES 565	Principles and Practices of Freshwater Fishing and Guiding	3
RRES 570	Internship for Wildlife and Outdoor Enterprise Management	10
RRES 595	Wildlife & Outdoor Enterprise Management Senior Seminar	1
<b>Free Electives</b>		<b>12 hours</b>
<b>Total Credit Hours Required for Graduation</b>		<b>130</b>

**IMPLEMENTATION YEAR FY 2010**

## Fiscal Summary for Proposed Academic Programs

Institution: Kansas State UniversityProposed Program: Wildlife and Outdoor Enterprise Management

Part I. Anticipated Enrollment	Implementation Year		Year 2		Year 3	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
A. Full-time, Part-time Headcount:	30		60		90	
B. Total SCH taken by all students in program	975		1950		2925	
Part II. Program Cost Projection						
A. In <u>implementation</u> year one, list all identifiable General Use costs to the academic unit(s) and how they will be funded. In subsequent years, please include only the additional amount budgeted.						
	Implementation Year		Year 2		Year 3	
<u>Base Budget</u> Existing Base Salaries	\$131,500		\$133,750		\$136,100	
OOE*	7,500		9,000		10,000	
Total	\$139,000		\$142,750		\$146,100	

Indicate source and amount of funds if other than internal reallocation:

\*The College of Agriculture will provide \$5,000 annually with remaining funds to come from external grants from outdoor related businesses



## **NEW Certificate Program**

### **UNDERGRADUATE BEEF CATTLE FEEDLOT MANAGEMENT CERTIFICATE PROGRAM**

This proposed certificate program will require the completion of a minimum of 21 semester credit hours of defined beef cattle feedlot nutrition, business and animal care courses. The certificate program requires more courses, and hence more specialization, than a minor regardless of the declared major of the student. The courses will provide practical application of scientific knowledge to feedlot health and management issues. It is likely that students may choose to complete the Certificate Program concurrent with the pursuit of a degree in any of the eight colleges at Kansas State. All students must be formally admitted to K-State in order to participate in the program.

**RATIONALE:** The financial well-being of Kansas citizens is critically dependent upon the profitability and growth of the beef cattle industry. Many departments and colleges within Kansas State University have outstanding individual programs that support Kansas Beef Producers. Certificate programs are excellent for multidisciplinary training for a specific area. Undergraduate degree plans are not specific to beef cattle feedlot management. Therefore, they do not receive documented recognition for tracking in a specific area. In addition, students in the CS 610 course will be required to earn Beef Quality Assurance (BQA) certification as part of the National Cattleman's Beef Association's implementation plan for adopting BQA principles to proactively address quality and safety issues in beef operations.

**IMPACT:** Agricultural Economics, Grain Science and Industry, Department of Clinical Sciences, Management

**EFFECTIVE DATE:** Fall 2009

**COURSES:** Students must complete 21 hours from the following courses:

#### **Core Courses (12 Credit Hours) (\*\*Some courses have pre-requisite requirements)**

ASI 620	Livestock Production Management	2	
ASI 680	Ruminant Nutrition	1	
ASI 684	Nutrition of Feedlot Cattle	1	
AGEC 420	Commodity Futures	3	
CS 610	Feedlot Health Systems	2	BQA Certification required to complete course
ASI 315	Livestock and Meat Evaluation	3	

#### **Electives (Minimum 9 Credit Hours)**

ASI 682	Formulation of Livestock & Poultry Diets	1
ASI 534	Intro to Pharmacology of Farm Animals	2
ASI 650	ID and Data Management Food Animals	2
ASI 661	Animal Welfare/Handling*	1
ASI 655	Behavior of Domestic Animals	3
ASI 595	Contemporary Issues	3
MANGT 420	Management Concepts	3
GRSC 510	Feed Tech I	4

#### **\*\*Required Pre-requisite Courses**

ASI 515	Beef Science	3
ASI320	Principles of Feeding	3

AGEC 120	Ag Economics & Agribusiness	3
ASI 102/105	Principles Animal Science/ASI Lab	3/1
BIOL 198	Principles of Biology	4
CHEM 110/111	General Chemistry & Lab	4
ASI 318	Fundamentals of Nutrition	3

\*ASI 661 Animal Welfare/Handling is taught each spring as a 1 week intensive course by Dr. Temple Grandin.

**Students are expected to meet all prerequisites for the courses listed or have consent of the instructor. Prerequisite courses other than the courses listed above do not count toward the total hours for the Certificate Program.**

**To receive the certificate students must have a cumulative GPA of 2.0 in the 21 required hours.**

**Course(s) from junior colleges and/or technical school programs will not be applied toward the certificate unless the course(s) are equivalent to a Kansas State University course.**

#### **BEEF CATTLE FACILITIES:**

Numerous beef production teaching and research facilities in and around the main K-State campus support teaching and research of the beef cattle production issues and include the following units.

**Beef Cattle Research Center:** Numerous members of the department use the facilities to conduct research in a number of areas such as energy requirements, vitamin needs, protein levels, mineral utilization, management techniques and other concerns associated with beef production. Facilities are available to do research from individual animals to groups as large as 50.

**Beef Stocker Unit:** The 1300 acres of native pasture west of Manhattan has been used to conduct research on the best management practices for beef production utilizing the native grass. The area is currently used to test and measure different methods for development of stocker cattle.

**Cow/Calf Unit:** The Unit is home to approximately 250 mature Herford x Angus cows and is located on several sites near the campus. Both fixed and portable facilities enable management of cattle and calves at all stages of production. Cattle graze native Flint Hills range throughout the year and a variety of crop residues are available on a seasonal basis. The unit provides a venue for hands-on experience for undergraduate students and animal resources for graduate students resulting in research-based advanced degrees. Ongoing investigations include fundamental as well as applied research in the nutrition and management of grazing beef cattle.

**Feedmill:** One of the things a researcher needs to control with utmost confidence is the ration being fed to research animals. In an effort to have a good handle on the processing of the grains and additives used in caring for our animals, the ASI Department maintains a feed mill. Grains are meticulously prepared at the mill in the fashion requested for any particular project and delivered by departmental personnel to the site the researcher requests.

**Kansas Artificial Breeding Service Unit:** The unit provides artificial insemination collection, storage, and shipment services as well as a variety of breeding supplies to its customers.

**K-State Meat Processing Laboratory:** This meat processing facility exposes students to harvesting livestock, processing carcasses into consumer ready meat products, and creating value-added products.

**Pre-Harvest Safety Microbiology Laboratory:** This unit provides an on-site laboratory to research the effect of a variety of pre-harvest treatments on the microbiological flora of beef cattle – and how this may impact food safety issues of the final beef products.

**Purebred Beef Teaching Unit:** The unit provides a site to maintain a purebred beef herd. Some of the offspring of the purebred beef herd have been fitted, shown and sold. There are rooms for students to live and work at the barn. In addition, other students provide hourly labor in caring for the cattle.

**Ruminant Nutrition Laboratory:** The laboratory includes a complex of two large labs, nine smaller labs, and an animal room. The animal room is equipped with six animal crates for metabolism work with steers and seven tie-stall facilities for cattle. This area also has a feed room and a sample grinding facility.

**Weber Hall's multi-purpose indoor arena:** The 3500 seat arena was designed to serve research, teaching and extension through use as a feeding laboratory for nutrition studies, a class laboratory for animal evaluation, a site for student activities such as The Little American Royal and a Collegiate Rodeo, a place for National Breed Associations to hold meetings and a place where state breed associations could hold shows and sales.

**KSU Beef Production Medicine (BPM):** Veterinary students across the U.S. have enrolled in senior rotations offered by this group. Recently this group's Veterinary Antimicrobial Decision Support System initiative has attracted funding from 7 veterinary and producer organizations as well as the FDA Center for Veterinary Medicine. This system, combined with the four board-certified veterinary clinical pharmacologists at KSU and PharmCATS (a pharmaceutical analytical laboratory) have established KSU as a world leader in veterinary therapeutics education and research.

**KSU Veterinary Medical Teaching Hospital (VMTH):** This group is composed of specialists in Internal Medicine and is the only College of Veterinary Medicine in the U.S. to have a Board Certified Surgeon exclusively working on cattle. VMTH faculty provide unique research support through animal model development and surgical implantation of research cannulas and other ports.

**KSU Veterinary Diagnostic Laboratory (VDL):** In addition to routine diagnostics, the VDL focuses on zoonotic and emerging/re-emerging animal disease surveillance technology. The VDL participates in the Laboratory Response Network and the National Animal Health Laboratory Network. Recently, the VDL along with the National Agricultural Biosecurity Center received funding that will establish KSU as a national training center using robotics for high throughput animal disease surveillance. This national center will provide extensive training for diagnosticians, scientists and students throughout the world.

#### **ADMINISTRATION OF THE BEEF CATTLE FEEDLOT MANAGEMENT CERTIFICATE PROGRAM:**

The Teaching Coordinator of the Animal Sciences and Industry department or his/her designate will administer/coordinate the Ranch Management certificate program. The Animal Sciences and Industry Teaching Advisory Council may review the Feedlot Management Certificate Program periodically, and will have the right to approve modifications to the course list.

Students working toward an undergraduate degree should enroll for the program in the Animal Sciences and Industry student records office, 134 Weber. The student's progress will be monitored by the department and a certificate will be sent to the student once the 21 required hours have been completed.

#### **FACULTY AND STAFF:**

Effective instruction is a constant goal of the Department of Animal Sciences and Industry and the College of Agriculture. The quality of instruction in the classrooms and laboratories is among the best that the university has to offer. Faculty and staff within the beef program are no exception.

##### Current Beef Cattle Production (and Related Fields) Instructors:

Dr. Michael Apley  
Dr. Dale Blasi  
Dr. Jennifer Bormann  
Mr. Ryan Breiner  
Dr. Johann (Hans) Coetzee  
Dr. Duane Davis  
Dr. Kevin Dhuyvetter  
Dr. Jim Drouillard  
Dr. David Grieger  
Dr. Ron Hale  
Dr. Karl Harborth  
Dr. Larry Hollis  
Dr. Terry Houser

Dr. Melvin Hunt  
Dr. Sandy Johnson  
Dr. Shelie Laflin  
Dr. Bob Larson  
Dr. J. Ernest Minton  
Dr. Dan Moser  
Dr. David Nichols  
Dr. Ken Odde  
Dr. K.C. Olson  
Mr. Ronald Pope  
Dr. Jack Riley  
Dr. Timothy Rozell  
Dr. Mike Sanderson  
Dr. Scott Schaake  
Dr. Jeffrey Stevenson

Dr. Dan Thomson  
Dr. John Unruh  
Dr. Brad White  
Related Fields  
Dr. Joseph Arata  
Dr. Keith Behnke  
Dr. Robert Burton Jr.  
Dr. James Mintert  
Dr. Clenton Owensby  
Dr. John Slocombe  
Dr. Ludek Zurek

**Undergraduate Beef Cattle Feedlot Management Certificate Program**  
**Assessment of Student Learning Plan**  
Kansas State University

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**A. College, Department, and Date**

College: Agriculture  
Department: Animal Sciences and Industry  
Program: Undergraduate Beef Cattle Feedlot Management Certificate Program  
Date: September 5, 2008

**B. Contact Person(s) for the Assessment Plans**

David Nichols, Professor, Teaching Coordinator for Animal Sciences and Industry  
Mishelle Hay, Academic Administrative Assistant

**C. Degree Program**

Undergraduate Certificate

**D. Assessment of Student Learning Three-Year Plan**

**1. Student Learning Outcome(s): Students will demonstrate:**

- a. Application of critical thinking and problem-solving skills to beef cattle production issues.
- b. Application of scientific principles to beef cattle production and management.
- c. Development of technical skills that will increase their competency in the beef cattle production industry.

Special rationale for selecting these learning outcomes (optional):

**Relationship to K-State Student Learning Outcomes** (insert the program SLOs and check all that apply):

Program SLOs	University-wide SLOs -- Undergraduate Programs					Program SLO is conceptually different from university SLOs
	Knowledge	Critical Thinking	Communication	Diversity	Academic / Professional Integrity	
A	X	X				No
B	X	X				No
C	X	X	X			No

**2. How will the learning outcomes be assessed? What groups will be included in the assessment?**

SLO	MEASURES		WHO IS ASSESSED?
	DIRECT	INDIRECT	
Critical thinking and problem-solving skills	Selected exam questions and written projects from ASI 680, 684, and DCS 610		Certificate students in ASI 680, 684, and DCS 610
		Program completion surveys	Graduating Certificate Program students
Application of scientific principles to beef cattle production and management	Selected exam questions and written projects from ASI 315, 680, 684, and DCS 610		Certificate students in ASI 315 and DCS 610
		Program completion surveys	Graduating Certificate Program students
Develop technical skills to increase competency in the industry	ASI 620, Lab practicals in ASI 315; Select assessments from DCS 610		Certificate students in ASI 315, and DCS 610

**3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?**

SLO	TIMETABLE FOR ASSESSMENT OF SLO			CREATION OF BASELINE
	2008-2009	2009-2010	2010-2011	
Critical thinking and problem-solving skills	ASI 680 and 684	DCS 610	ASI 680 and 684	Baseline created after fall 2010
Application of scientific principles to beef cattle production and management	ASI 680 and 684	ASI 315 and DCS 610	ASI 680 and 684	Baseline created after fall 2010
Develop technical skills to increase competency in the industry	ASI 620	ASI 315 and DCS 610	ASI 620	Baseline created after fall 2010

#### 4. What is the unit's process for using assessment results to improve student learning?

Beef teaching faculty and staff in the department of Animal Sciences and Industry and the Department of Clinical Sciences (Veterinary Medicine) will meet and review the results of the assessment. Adjustments to courses and program requirements will be developed and presented to the entire faculty and the College of Agriculture once baseline data is developed. Changes in course offerings, content, and curriculum will be used for student performance improvement.

**Student Learning Outcomes  
Animal Sciences and Industry  
Beef Cattle Feedlot Management Certificate Program  
College of Agriculture**

Certificate Program Graduates from the Kansas State University will have demonstrated:

**KSU Undergraduate  
Student Learning  
Outcomes**

1. The ability to apply critical thinking and problem-solving skills to industry issues in beef cattle feedlot management.

Knowledge,  
Critical Thinking

2. The application of scientific principles to beef cattle feedlot management.

Knowledge,  
Critical Thinking

3. The ability to learn and develop technical skills that will increase their competency in the beef cattle feedlot industry.

Knowledge,  
Critical Thinking,  
Professional Development,  
Ownership of Learning

## NEW Certificate Program

### UNDERGRADUATE BEEF CATTLE RANCH MANAGEMENT CERTIFICATE PROGRAM

This proposed certificate program will require the completion of a minimum of 23 semester credit hours of defined beef cattle production and management courses. The certificate program requires more courses, and hence more specialization, than a minor regardless of the declared major of the student. The courses will provide practical application of scientific knowledge to beef cattle production and ranch management issues. It is likely that students may choose to complete the Certificate Program concurrent with the pursuit of a degree in any of the eight colleges at Kansas State. All students must be formally admitted to K-State in order to participate in the program.

**RATIONALE:** The financial well-being of Kansas citizens is critically dependent upon the profitability and growth of the beef cattle industry. Many departments and colleges within Kansas State University have outstanding individual programs that support Kansas Beef Producers. Certificate programs are excellent for multidisciplinary training for a specific area. Undergraduate degree plans are not specific to beef cattle production or management. Therefore, they do not receive documented recognition for tracking in a specific area. In addition, students in the CS 611 course will be required to earn Beef Quality Assurance (BQA) certification as part of the National Cattleman's Beef Association's implementation plan for adopting BQA principles to proactively address quality and safety issues in beef operations.

**IMPACT:** Agricultural Economics, Agronomy

**EFFECTIVE DATE:** Fall 2009

**COURSES:** Students must complete 23 hours from the following courses:

#### **Core Courses (19 Credit Hours) (\*\*Some courses have pre-requisite requirements)**

ASI 620	Livestock Production Management	2	
ASI 680	Ruminant Nutrition	1	
ASI 683	Grazing Livestock Nutrition	1	
AGRON 501	Range Management	3	Pick One Course
AGRON 550	Forage Management	3	
CS 611	Cow/Calf Health Systems	2	BQA Certification required to complete course
AGEC 308	Farm and Ranch Management	3	Pick One Course
AGEC 318	Food & Agribusiness Management	3	
ASI 400	Farm Animal Reproduction	4	
ASI 510	Animal Breeding Principles	3	

#### **Electives – (Minimum 4 Credit Hours)**

ASI 534	Introd to Pharmacology of Farm Animals	2
ASI 650	ID and Data Management Food Animals	2
ASI 512	Bovine Reproductive Technologies	2
ASI 661	Problems/Artificial Insemination	1
ASI 402	Calving	1

#### **\*\*Required Pre-requisite Courses**

ASI 515	Beef Science	3
ASI320	Principles of Feeding	3
AGEC 120	Ag Economics & Agribusiness	3
MATH 100	College Algebra	3

ASI 500	Genetics	3
BIOL 198	Principles of Biology	4
CHEM 110/111	General Chemistry & Lab	4
ASI 318	Fundamentals of Nutrition	3

**Students are expected to meet all prerequisites for the courses listed or have consent of the instructor. Prerequisite courses other than the courses listed above do not count toward the total hours for the Certificate Program.**

**To receive the certificate students must have a cumulative GPA of 2.0 in the 23 required hours.**

**Course(s) from junior colleges and/or technical school programs will not be applied toward the certificate unless the course(s) are equivalent to a Kansas State University course.**

#### **BEEF CATTLE FACILITIES:**

Numerous beef production teaching and research facilities in and around the main K-State campus support teaching and research of the beef cattle production issues and include the following units.

**Beef Cattle Research Center:** Numerous members of the department use the facilities to conduct research in a number of areas such as energy requirements, vitamin needs, protein levels, mineral utilization, management techniques and other concerns associated with beef production. Facilities are available to do research from individual animals to groups as large as 50.

**Beef Stocker Unit:** The 1300 acres of native pasture west of Manhattan has been used to conduct research on the best management practices for beef production utilizing the native grass. The area is currently used to test and measure different methods for development of stocker cattle.

**Cow/Calf Unit:** The Unit is home to approximately 250 mature Herford x Angus cows and is located on several sites near the campus. Both fixed and portable facilities enable management of cattle and calves at all stages of production. Cattle graze native Flint Hills range throughout the year and a variety of crop residues are available on a seasonal basis. The unit provides a venue for hands-on experience for undergraduate students and animal resources for graduate students resulting in research-based advanced degrees. Ongoing investigations include fundamental as well as applied research in the nutrition and management of grazing beef cattle.

**Feedmill:** One of the things a researcher needs to control with utmost confidence is the ration being fed to research animals. In an effort to have a good handle on the processing of the grains and additives used in caring for our animals, the ASI Department maintains a feed mill. Grains are meticulously prepared at the mill in the fashion requested for any particular project and delivered by departmental personnel to the site the researcher requests.

**Kansas Artificial Breeding Service Unit:** The unit provides artificial insemination collection, storage, and shipment services as well as a variety of breeding supplies to its customers.

**K-State Meat Processing Laboratory:** This meat processing facility exposes students to harvesting livestock, processing carcasses into consumer ready meat products, and creating value-added products.

**Pre-Harvest Safety Microbiology Laboratory:** This unit provides an on-site laboratory to research the effect of a variety of pre-harvest treatments on the microbiological flora of beef cattle – and how this may impact food safety issues of the final beef products.



**Purebred Beef Teaching Unit:** The unit provides a site to maintain a purebred beef herd. Some of the offspring of the purebred beef herd have been fitted, shown and sold. There are rooms for students to live and work at the barn. In addition, other students provide hourly labor in caring for the cattle.

**Ruminant Nutrition Laboratory:** The laboratory includes a complex of two large labs, nine smaller labs, and an animal room. The animal room is equipped with six animal crates for metabolism work with steers and seven tie-stall facilities for cattle. This area also has a feed room and a sample grinding facility.

**Weber Hall's multi-purpose indoor arena:** The 3500 seat arena was designed to serve research, teaching and extension through use as a feeding laboratory for nutrition studies, a class laboratory for animal evaluation, a site for student activities such as The Little American Royal and a Collegiate Rodeo, a place for National Breed Associations to hold meetings and a place where state breed associations could hold shows and sales.

**KSU Beef Production Medicine (BPM):** Veterinary students across the U.S. have enrolled in senior rotations offered by this group. Recently this group's Veterinary Antimicrobial Decision Support System initiative has attracted funding from 7 veterinary and producer organizations as well as the FDA Center for Veterinary Medicine. This system, combined with the four board-certified veterinary clinical pharmacologists at KSU and PharmCATS (a pharmaceutical analytical laboratory) have established KSU as a world leader in veterinary therapeutics education and research.

**KSU Veterinary Medical Teaching Hospital (VMTH):** This group is composed of specialists in Internal Medicine and is the only College of Veterinary Medicine in the U.S. to have a Board Certified Surgeon exclusively working on cattle. VMTH faculty provide unique research support through animal model development and surgical implantation of research cannulas and other ports.

**KSU Veterinary Diagnostic Laboratory (VDL):** In addition to routine diagnostics, the VDL focuses on zoonotic and emerging/re-emerging animal disease surveillance technology. The VDL participates in the Laboratory Response Network and the National Animal Health Laboratory Network. Recently, the VDL along with the National Agricultural Biosecurity Center received funding that will establish KSU as a national training center using robotics for high throughput animal disease surveillance. This national center will provide extensive training for diagnosticians, scientists and students throughout the world.

#### **ADMINISTRATION OF THE BEEF CATTLE PRODUCTION CERTIFICATE PROGRAM:**

The Teaching Coordinator of the Animal Sciences and Industry department or his/her designate will administer/coordinate the Ranch Management Certificate program. The Animal Sciences and Industry Teaching Advisory Council may review the Ranch Management Certificate Program periodically, and will have the right to approve modifications to the course list.

Students working toward an undergraduate degree should enroll for the program in the Animal Sciences and Industry student records office, 134 Weber. The student's progress will be monitored by the department and a certificate will be sent to the student once the 23 required hours have been completed.

**FACULTY AND STAFF:**

Effective instruction is a constant goal of the Department of Animal Sciences and Industry and the College of Agriculture. The quality of instruction in the classrooms and laboratories is among the best that the university has to offer. Faculty and staff within the beef program are no exception.

Current Beef Cattle Production  
(and Related Fields) Instructors:

Dr. Michael Apley  
Dr. Dale Blasi  
Dr. Jennifer Bormann  
Mr. Ryan Breiner  
Dr. Johann (Hans) Coetzee  
Dr. Duane Davis  
Dr. Kevin Dhuyvetter  
Dr. Jim Drouillard  
Dr. David Grieger  
Dr. Ron Hale  
Dr. Karl Harborth  
Dr. Larry Hollis  
Dr. Terry Houser

Dr. Melvin Hunt  
Dr. Sandy Johnson  
Dr. Shelie Laflin  
Dr. Bob Larson  
Dr. J. Ernest Minton  
Dr. Dan Moser  
Dr. David Nichols  
Dr. Ken Odde  
Dr. K.C. Olson  
Mr. Ronald Pope  
Dr. Jack Riley  
Dr. Timothy Rozell  
Dr. Mike Sanderson

Dr. Scott Schaake  
Dr. Jeffrey Stevenson  
Dr. Dan Thomson  
Dr. John Unruh  
Dr. Brad White

Related Fields

Dr. Joseph Arata  
Dr. Keith Behnke  
Dr. Robert Burton Jr.  
Dr. James Mintert  
Dr. Clenton Owensby  
Dr. John Slocombe  
Dr. Ludek Zurek

**Undergraduate Beef Cattle Ranch Management Certificate Program**  
**Assessment of Student Learning Plan**  
Kansas State University

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**A. College, Department, and Date**

College: Agriculture  
Department: Animal Sciences and Industry  
Program: Undergraduate Beef Cattle Ranch Management Certificate Program  
Date: September 5, 2008

**B. Contact Person(s) for the Assessment Plans**

David Nichols, Professor, Teaching Coordinator for Animal Sciences and Industry  
Mishelle Hay, Academic Administrative Assistant

**C. Degree Program**

Undergraduate Certificate

**D. Assessment of Student Learning Three-Year Plan**

**1. Student Learning Outcome(s): Students will demonstrate:**

- a. Application of critical thinking and problem-solving skills to beef cattle production issues.
- b. Application of scientific principles to beef cattle production and management.
- c. Development of technical skills that will increase their competency in the beef cattle production industry.

Special rationale for selecting these learning outcomes (optional):

**Relationship to K-State Student Learning Outcomes** (insert the program SLOs and check all that apply):

Program SLOs	University-wide SLOs -- Undergraduate Programs					Program SLO is conceptually different from university SLOs
	Knowledge	Critical Thinking	Communication	Diversity	Academic / Professional Integrity	
A	X	X				No
B	X	X				No
C	X	X	X			No

**2. How will the learning outcomes be assessed? What groups will be included in the assessment?**

SLO	MEASURES		WHO IS ASSESSED?
	DIRECT	INDIRECT	
Critical thinking and problem-solving skills	Selected exam questions and written projects from ASI 680, 683, and 510		Certificate students in ASI 680, 683, and 510
		Program completion surveys	Graduating Certificate Program students
Application of scientific principles to beef cattle production and management	Selected exam questions and written projects from ASI 510 and DCS 611		Certificate students in ASI 510 and DCS 611
		Program completion surveys	Graduating Certificate Program students
Develop technical skills to increase competency in the industry	Lab practicals in ASI 661 Artificial Insemination, ASI 402; Select assessments from ASI 510, and DCS 611		Certificate students in ASI 661 Artificial Insemination, 402, 510, and DCS 611

**3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?**

SLO	TIMETABLE FOR ASSESSMENT OF SLO			CREATION OF BASELINE
	2008-2009	2009-2010	2010-2011	
Critical thinking and problem-solving skills	ASI 680, 683	ASI 510	ASI 680 and 683	Baseline created after fall 2010
Application of scientific principles to beef cattle production and management	DCS 611	ASI 510	DCS 611	Baseline created after fall 2010
Develop technical skills to increase competency in the industry	ASI 661 Artificial Insemination, ASI 402, and DCS 611	ASI 510	ASI 661 Artificial Insemination, ASI 402, and DCS 611	Baseline created after fall 2010

#### 4. What is the unit's process for using assessment results to improve student learning?

Beef teaching faculty and staff in the department of Animal Sciences and Industry and the Department of Clinical Sciences (Veterinary Medicine) will meet and review the results of the assessment. Adjustments to courses and program requirements will be developed and presented to the entire faculty and the College of Agriculture once baseline data is developed. Changes in course offerings, content, and curriculum will be used for student performance improvement.

**Student Learning Outcomes  
Animal Sciences and Industry  
Beef Cattle Ranch Management Certificate Program  
College of Agriculture**

Certificate Program Graduates from the Kansas State University will have demonstrated:

1. The ability to apply critical thinking and problem-solving skills to industry issues in beef production and management.

**KSU Undergraduate  
Student Learning  
Outcomes**

Knowledge,  
Critical Thinking

2. Application of scientific principles to beef cattle production and management.

Knowledge,  
Critical Thinking

3. The ability to learn and develop technical skills that will increase their competency in the beef cattle production and management industry.

Knowledge,  
Critical Thinking,  
Professional Development,  
Ownership of Learning

## **New Graduate Curriculum(s)**

### **Agricultural Economics**

M.S. Agribusiness Economics No-Thesis Option\*

#### **Agribusiness Economics 9**

ECON 720 Microeconomic Theory	3
AGEC 890 Advanced Food and Agribusiness Management	3
AGEC 880 Agribusiness Industry Structures	3

#### **Quantitative Methods 9**

STAT 706 Basic Elements of Statistical Theory	3
AGEC 712 Optimization Techniques in Agricultural Economics	3
ECON 830 Econometrics I	3

#### **Business Core 9**

FINAN 815 Managerial Finance I	3
MKTG 810 Marketing Concepts and Research	3
MANGT 820 Behavioral Management Theory	3

#### **Ag Economics, Finance, Marketing, Management (select three from): 9**

AGEC 700 or higher level course not used for other requirements	3
FINAN 820 Advanced International Financial Management	3
FINAN 860 Managerial Finance II	3
MKTG 842 Advanced Marketing Research	3
MKTG 844 Advanced International Marketing	3
MKTG 860 Advanced International Business	3
MANGT 810 Operations Management and Analysis	3
MANGT 825 Advanced Business Law	3
MANGT 840 Advanced Entrepreneurship	3

#### **Total Credit Hours 36**

**\* The student is required to demonstrate evidence of scholarly effort by completing a creative component consisting of a written paper and an oral defense. The written paper will be on a topic provided by the student's advisory committee relating to the student's field of study. The report shall demonstrate a student's understanding of the economic concepts critical to the problem. A critique of literature related to the topic should be included in the written report. The student should provide a qualitative analysis (graphical) of the problem. The qualitative analysis may propose testable hypotheses. Finally, the student should present a quantitative framework for further analysis. Quantitative analysis is not necessarily required, though it is encouraged.**

The following courses developed for the Masters of Agribusiness are not allowed on a student's program of study: AGECE 700, AGECE 701, AGECE 713, AGECE 720, AGECE 730, AGECE 760, AGECE 761, and AGECE 770.

RATIONALE: The proposal is to add a non-thesis option to the existing MS in Agribusiness.

At the M.S. level we currently offer: a) M.S. in Agricultural Economics - 30 hours (24 class + 6 thesis), b) M.S. in Agribusiness - 30 hours (24 class + 6 thesis), and c) M.S. in Agricultural Economics: No-Thesis Option - 36 hours (all class). Thus, while we have a no-thesis option in the M.S. in Agricultural Economics, we do not currently have a corresponding no-thesis option in the M.S. in Agribusiness.

The Department believes that a no-thesis option will have some appeal for students interested in Agribusiness as it would provide the opportunity to include more business electives. Students expressly seeking a no-thesis option might likewise be more inclined to opt for the Agribusiness than the Ag-Econ degree. Some students have asked about this option and faculty members have identified a number of current or recent students who could or would have benefitted from it.

The only difference between our existing MS Agribusiness thesis option and the proposed non-thesis option would be the elimination of the thesis and the requirement/opportunity to take more business or agecon electives. The proposed MS Agribusiness no-thesis option will include a total of 36 credit hours – similar to the existing MS AgEcon no-thesis option.

IMPACT: Possible increased enrollment in some Finance, Management, and Marketing classes. Those Departments were contacted about the initial draft of this proposal and did not indicate any concerns. This proposal now differs slightly from that initial draft in that MANGT 820 has been added as a required class, and MKTG 810 is designated as a required rather than an optional elective. The final draft has been resent to those Departments, and, at the time of this submission, the Departments of Finance and Management have responded indicating no concerns. We do not anticipate that the changes will cause a problem for the Department of Marketing.

EFFECTIVE DATE: Summer 2009

Horticulture, Forestry and Recreation Resources

**New Program Proposal  
Basic Program Information**

1. Proposing Institution: Kansas State University
2. Title of proposed program: Master of Horticultural Therapy.
3. Degree to be offered: Master of Horticultural Therapy.
4. Anticipated date of implementation: Fall 2009
5. Responsible department(s): Horticulture, Forestry, and Recreation Resources.
6. Center for Education Statistics (CIP) code associated with the program: 01.1103



## Program Proposal Narrative

This proposal responds to an international demand to K-State for educational opportunities in horticultural therapy; the need for graduate-level horticultural therapy practitioner training to keep pace in the allied-therapy health field; and the strategic prioritization efforts of the Department of Horticulture, Forestry, and Recreation Resources and the College of Agriculture.

### Background

Approved by the Board of Regents in 1971, Kansas State University became the first land-grant university to offer an undergraduate degree in Horticultural Therapy in cooperation with Menningers, a private psychiatric hospital in Topeka, Kansas. Today, Kansas State University remains the only university in the United States to offer B.S., M.S. and Ph.D. Horticultural Therapy specializations within the Horticulture undergraduate and graduate programs. K-State is viewed as an international leader in research and education in the field of horticultural therapy.

### A. Program Need and Student Characteristics

#### 1. Centrality to Institutional Mission

The Kansas State University mission attests to the University's commitment to "being responsive to a rapidly changing world and the aspirations of an increasingly diverse society...to extending its expertise to individuals, business, education, and government...to preparing students for successful employment or advanced studies through a variety of disciplinary and professional degree programs...and to...enriching the lives of the citizens of Kansas by extending to them opportunities to engage in life-long learning."

This program directly supports two of Kansas State University's eleven institutional aspirations:

- *Utilizing available and potential resources in the development of graduate education and research programs.* This institutional aspiration stresses the need to develop cooperative efforts to support graduate programs. This program will translate the current campus-based instructional expertise in horticultural therapy and horticulture into a distance education opportunity.
- *Optimizing the use of all instructional resources of Kansas State University.* By partnering with the Division of Continuing Education, the faculty in HFRR are able to benefit from their expertise and assistance in offering a distance degree program.

In the mid 2000s, the university engaged in a Priority Setting Process that included the identification of priorities at the university, college, and department levels. This proposed program responds to identified priorities at all levels of the institution.

President Wefald and Provost Nellis established a set of seven university priorities. This program supports two of the university priorities:

- *Enhance graduate education and research.* This program responds to an international demand to K-State for educational opportunities in horticultural therapy and the changes in professional registration and educational obtainment required in the allied-therapy health field. This program enhances graduate education through being the first institution to provide this level of education.

- *Enhance diversity across the spectrum.* The projected student body for this program is international.

Through the Priority Setting Process the College of Agriculture identified seven areas of excellence. This program supports three:

- *Focus on serving the citizens of Kansas, the nation, and the world.* Based on inquiries to the Division of Continuing Education and the horticultural therapy faculty, this program will serve at all stated levels.
- *Expand programs via distance education.* This program will be a hybrid. Most of the program will be offered via distance education. One course will include two 5-day site experiences.
- *Increase all sources of funding to generate more resources to achieve our mission.* The revenue generated through this distance education program is expected to support the addition of faculty and staff as needed with the growth in enrollment in the program.

At the departmental level, three global focus areas were identified and action plans to achieve excellence in these focus areas across the teaching, research, and extension programs was developed. This program supports two focus areas:

- *.....substantially strengthen our graduate programs of study to include possible terminal master's degrees and distance education delivered programs.* This program is a practitioner training terminal Masters degree offered primarily via distance education.
- *.....target non-traditional audiences.....*The target student audience for this program are non-traditional students.

In addition to the prioritization efforts, all divisions in HFRR had to prepare 10-year plans in preparation for a Cooperative State Research, Education, and Extension Service (CSREES) review. Through that process, the faculty working on the horticultural therapy 10-year plan determined that the largest audience for horticultural therapy education was non-traditional, place-bound students. *Thus, we recognized during this planning process that future educational endeavors should encompass distance learning opportunities.*

## **2. Student Demand**

There are several indicators in support of student interest in this program.

Beginning in 1991, the first distance education course in horticultural therapy was offered at K-State. HORT 780, a one-credit course, was taught as a series of 15 videotape lectures. Since this first distance education course, there have been continued requests for more horticultural therapy distance education offerings. Currently there are four courses offered via distance education: HORT 256, Human Dimensions of Horticulture; HORT 525, Horticulture for Special Populations; HORT 640, Problems in Horticulture/Horticulture Therapy; and HORT 880, Topics in Horticulture/Horticulture Therapy. With little to no marketing, enrollment in the distance education courses since the 2003-2004 academic year has averaged 33 students per year. *These enrollment numbers show that Distance Education is an important component of the HT program.* A large percentage of students are non-traditional, involved with family or employment situations and unable to relocate to Kansas.

The American Horticultural Therapy Associations new professional registration criteria requires college accredited horticultural therapy instruction. Currently, most individuals receive their

horticultural therapy instruction through certificate programs at public gardens or not-for-profit institutes. This creates a new demand for college credit horticultural therapy instruction.

And finally, the number of inquiries to the horticultural therapy faculty in HFRR and the Division of Continuing Education *from around the world* for distance education degree opportunities in horticultural therapy averages about 5/week. Additionally, responses from an informal survey of campus-based horticultural therapy students over the past 5 years overwhelmingly support the need for a distance education graduate program. Many of these students would have chosen a horticultural therapy practitioner training graduate program rather than our research-based graduate program. The average enrollment in the campus-based program over the past 5 years has been eight students.

### **3. Demand for Graduates**

The dramatic changes in the health care field over the past ten years, primarily the shift to managed care, have influenced the profession of horticultural therapy and other allied therapy professions such as art therapy, music therapy, and occupational therapy. A study of these allied therapy professions by the AHTA Professional Standard Task Force in 2004 determined that the current registration process offered by AHTA would not be considered adequate by insurance companies and the educational standards were very sub-standard in today's marketplace. As a result, AHTA has focused on raising the educational and competency requirements for registered clinicians. Starting in fall 2008, a bachelor's degree and a minimum number of college credits in three subject areas (horticultural therapy (9 credits), horticulture (12 credits), and human services (12 credits)), will be required. The biggest challenge with these new standards for registration will be obtaining the college credit requirement in horticultural therapy. *There are very few universities currently offering coursework in horticultural therapy and only K-State offers courses via distance education.*

While the new requirement for professional registration for horticultural therapy is a B.S., many of the other allied-therapy health fields currently require or are moving towards requiring a Masters degree as a requirement for professional certification. It is inevitable that AHTA will move to this standard in the future. Also, most inquiries we receive are from individuals that already have a bachelor's degree.

### **4. Locational and comparative advantages**

Currently there are no other comparable programs in the State of Kansas or the nation. Kansas State University became the first land-grant university to offer an undergraduate degree in Horticultural Therapy in cooperation with Menningers, a private psychiatric hospital in Topeka, Kansas in 1971. Today, Kansas State University remains the only university in the United States to offer campus-based B.S., M.S. and Ph.D. Horticultural Therapy specializations within the Horticulture undergraduate and graduate programs. K-State is viewed as an international leader in research and education in the field of horticultural therapy.

The AHTA web site lists two other universities offering an option in horticultural therapy at the undergraduate level (Rutgers University and University of Maine – Orono) and two university certificate programs at the undergraduate level. All of these are campus-based programs.

## 5. Student characteristics

Based on characteristics of K-State campus-based masters students, inquiries of perspective students, and inquiries to AHTA headquarters it is likely that applicants for admission will come from the following sources:

- *Traditional graduate student populations.* Many of our inquiries and most of our campus-based graduate students of the past many years had interest in horticultural therapy practitioner training rather than our research-focused graduate programs.
- *Professionals* currently working in the health and human services related settings such as occupational therapists, recreational therapists, horticulturists, educators, architects, and health care administrators.
- *Career Changers.* Many inquiries to the national office of the American Horticultural Therapy Association regarding how to enter the profession of horticultural therapy today are from people wanting to make a career change (personal communication with AHTA staff).
- *International students.* K-State has an international reputation regarding horticultural therapy education and research. Typically, at least half of the horticultural therapy graduate students at K-State are international students. In particular, the profession of horticultural therapy is a rapidly expanding enterprise in South Korea, Japan, and Taiwan.

Full admission requires evidence of completion of a bachelor's degree from an accredited university with a grade point average above 3.0 on a 4.0 scale in the junior and senior years; two years of professional work experience; and college course work in horticulture (minimum of three courses), health and human services (minimum of two courses in subjects such as psychology and human development), and statistics. Applicants should have proficiency in the computer operations necessary to complete web-based distance courses. For international students a score of at least 550 (paper-based test), 213 (computer-based test), or 79 (IBT-internet-based test) on the TOEFL will be required.

Full utilization of K-State On-line will facilitate quality interactions between the students and the faculty as well as between the students. Given that students and faculty will be together a minimum of 8 am – 5 pm for five days at each on-site visit, there will naturally and through intent be many opportunities for student-to-student and student-to-faculty interactions.

## B. Curriculum of the Proposed Program

The Master of Horticultural Therapy program is a distance-education, terminal, professional degree program that focuses on the theory and delivery techniques of horticultural therapy. This program consists of 30 semester credit hours. Students taking a minimum of two classes each semester should be able to complete the program in two years while employed full time. Students must complete the program within seven years. NOTE: This distance education program is not designed for students with Ph.D. plans. The emphasis is practical, not theoretical.

The MHT degree consists of the following:

- **18 credit hours in required courses**
- **12 credit hours in elective courses** Elective courses must be approved by the students' Advisory Committee. Several possible elective courses are available through K-State's Division of Continuing Education

### **30 total credit hours**

#### **Required courses:**

HORT 750 Orientation to Horticultural Therapy 1 cr  
HORT 751 Human Issues in Horticultural Therapy 3 cr  
HORT 752 Horticulture in Horticultural Therapy 3 cr  
HORT 753 Clinical Skills in HT 6 cr  
HORT 755 Practicum in Horticultural Therapy 3 cr  
HORT 898 Masters Report 2 cr

#### **Elective courses: 12 credit hours**

#### **Schedule of Classes**

<b>Fall</b>	<b>Spring</b>	<b>Summer</b>
HORT 750 Orientation to Horticultural Therapy	HORT 750 Orientation to HT	HORT 752 Horticultural Therapy Theory and Practice
HORT 751 Human Issues in Horticultural Therapy	HORT 752 Horticulture in Horticultural Therapy	HORT 753 Clinical Skills in Horticultural Therapy
HORT 755 Practicum in Horticultural Therapy	HORT 755 Practicum in Horticultural Therapy	HORT 898 Masters Report
HORT 898 Masters Report	HORT 898 Masters Report	

In addition to the above required courses, one or more electives will be offered each semester. Past courses available through K-Sate Division of Education offered via distance education have included:

Statistics (STAT 703,704, 705)  
Research methods (EDCEP 816)  
ARCH 730 Environment & Aging  
FSHS 775 Perspectives in Gerontology  
FSHS 776 Program Evaluation and Research Methods in Gerontology  
GERON 630 Mental Health and Aging  
GRAD 801 Foundations of Leadership  
HORT 970 Topics in Horticultural Therapy  
POLSC 650 Not-for-Profit Management  
COMM 780 Intercultural Communication

Elective courses must be approved by the students' Advisory Committee.

## **COURSE DESCRIPTIONS**

### **HORT 750 Orientation to Horticultural Therapy 1cr (Fall, Spring)**

This course will introduce students to online delivery methods, graduate level research, writing and technology skills, create a community of practice, and introduce students to the profession of horticultural therapy.

### **HORT 751 Human Issues in Horticultural Therapy 3cr (Fall)**

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.

### **HORT 752 Horticulture in Horticultural Therapy 3cr (Spring)**

Application of horticulture principles and practices in therapeutic settings; considerations for greenhouse systems operations and management in therapeutic settings; landscape maintenance, fruit and vegetable gardening, and production horticulture as part of a therapeutic program; and plant propagation for production and therapy.

### **HORT 753 Clinical Skills in HT 6cr (Summer through Fall)**

This course begins summer semester, concludes fall semester, and requires two 5-day on-site experiences. 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.: HORT 751.

### **HORT 755 Practicum in Horticultural Therapy 3cr (Fall, Spring)**

The practicum is a means of demonstrating the interconnections between ‘theory’ and ‘practice’. By conducting a practicum project, students demonstrate the ability to apply concepts and ideas from their study of horticultural therapy to a specific population or setting. Pr.: HORT 752, HORT 753

### **HORT 898 Masters Report 2cr (Fall, Spring, Summer)**

Investigations in horticultural therapy as applied to real-life settings for preparation of master’s report.

### **HORT 970 Topics in Horticultural Therapy 3cr (Fall, Spring)**

Readings and discussion on important papers and contributions in horticultural therapy.

## **C. Faculty**

### **1. Program Faculty and Qualifications**

#### **Core Faculty**

Three HFRR faculty will serve as the core faculty in the program. All are tenured, two are full professors, and all are graduate faculty.

**Greg Davis, Ph.D.**, Associate Professor

**Candice Shoemaker, Ph.D.**, Professor

**Kim Williams, Ph.D.**, Professor

#### **Additional K-State Faculty**

Three years after implementation three additional faculty positions will provide support to the program. Two HFRR faculty positions will be redefined and there will be one new position created to specifically support this program. Tuition fees generated from the program will support these changes.

### **2. Number of graduate assistants**

This program does not offer graduate assistantships because it is an online program.

## **D. Academic support**

### **1. Academic Support Services**

The K-State library provides access to library materials and the Division of Continuing Education technical support staff provide technical support to students in the specialization.

### **2. New library materials or other types of resources needed**

The Division of Continuing Education coordinates library services. Current holdings are very good and the virtual library services will meet the needs of this program. No additional library or other academic support will be needed.

### **3. New support staff**

Based on 3-year student enrollment projections, support staff to help oversee student services and coordinate management of the program will be needed. This position will be funded by student fees.

## **E. Facilities and Equipment**

### **1. Anticipated facilities required**

Existing facilities at K-State are sufficient for offering this program. Since the courses are delivered via the Internet, minimal demands are placed upon on-campus facilities and equipment. Computer upgrades and software are an ongoing need and will be funded through course enrollment fees.

## **2. New equipment required**

Assuming a routine maintenance/replacement schedule, existing computer resources should support the program adequately.

## **F. Program review, assessment and accreditation**

### **1. Evaluation and/or review processes**

The program of study has been designed to meet the guidelines suggested by the American Horticultural Therapy Association. The curriculum will be monitored to assure that students are fulfilling these requirements, and if changes in these national guidelines occur, the program of study will be modified if needed. Program effectiveness measures will include student completion of individual courses and the degree program, program costs, technical support strategies, and program administration strategies

### **2. Measuring student outcomes**

Upon completing the program students will

- Be able to explain the delivery models and systems used in settings where horticultural therapy is currently practiced and where it is emerging as a service
- Have achieved entry-level competence through a combination of academic and fieldwork education
- Be prepared to articulate and apply horticultural therapy theory and evidence-based evaluations and interventions to achieve expected outcomes
- Be prepared to be a lifelong learner and keep current with evidence-based professional practice
- Uphold the ethical standards, values, and attitudes of the horticultural therapy profession
- Understand the distinct roles and responsibilities of the horticultural therapist
- Be prepared to advocate as a professional for the horticultural therapy services offered and for the recipients of those services
- Be prepared to be an effective consumer of the latest research and knowledge bases that support practice and contribute to the growth and dissemination of research and knowledge

These SLOs will be achieved through program content that will include:

- *Foundational content:* prerequisite coursework in the behavioral and horticultural sciences
- *Basic tenets of horticultural therapy:* the history and philosophical base of the profession; the application of horticulture as therapy in various settings and with various population groups; the role of horticulture in the promotion of health and the prevention of disease and disability; client and facility assessment to formulate an intervention plan
- *Horticultural therapy theoretical perspectives:* describe theories that underlie the practice of horticultural therapy; compare and contrast models of practice; how to use theories and models in horticultural therapy evaluation and intervention
- *Screening, evaluation, and referral:* the use of standardized and non-standardized screening and assessment tools to determine the need of horticultural therapy intervention; the selection of appropriate assessment tools based on client needs and contextual factors; procedures and protocols when administering assessments; factors that might bias assessment results, such as culture, disability status, and situational variables;



documentation procedures to adhere to facility, local, state, federal, and reimbursement agencies

- *Formulation and implementation of an intervention plan:* the use of evaluation findings based on appropriate theoretical approaches, models of practice, and frames of reference to develop horticulture-based intervention plans and strategies based on the stated needs of the client as well as data gathered during the evaluation process in collaboration with the client and others
- *Context of service delivery:* the differentiation among the contexts of health care, education, community, and social systems as they relate to the practice of horticultural therapy; the current policy issues and social, economic, political, geographic, and demographic factors that influence the contexts for practice of horticultural therapy; the role and responsibility of the practitioner to address changes in service delivery policies to effect changes in the system, and to identify opportunities in emerging practice areas; the trends in models of service delivery and their potential effect on the practice of horticultural therapy
- *Management of horticultural therapy services:* how the various practice settings (e.g. medical institutions, school systems, community systems) affect the delivery of horticultural therapy services; the impact of contextual factors on the management and delivery of horticultural therapy services; how to plan, develop, organize, and market the delivery of services
- *Research:* the importance of research, scholarly activities, and the continued development of a body of knowledge relevant to the profession of horticultural therapy; how to locate, understand, and evaluate information, including the quality of research evidence; the use of research literature to make evidence-based decisions; how to understand and critique the validity of research studies, including designs (both quantitative and qualitative) and methodologies

The Student Learning Outcomes will be assessed in a similar manner to the departmental M.S. assessment plan. In that plan, evaluation of achievement of the SLOs occurs primarily during the thesis defense by the Graduate Supervisory Committee. For the MHT, this will occur during the final examination for graduate students which will occur as part of their Masters Report. In this course students will be expected to apply all their prior knowledge to a real-life situational intervention. Final exam questions will highlight the student learning outcomes. Scoring rubrics will be used for this assessment. In addition, exit surveys for the students will include questions related to student learning outcomes.

### **3. Program Accreditation**

There is no accrediting body for higher education horticultural therapy programs.

**Degree Program**  
**Assessment of Student Learning Plan**  
Kansas State University

**A. College, Department, and Date**

College:        *Agriculture*  
Department:   *Horticulture, Forestry, and Recreation Resources*  
Date:            *September 19, 2008*

**B. Contact Person(s) for the Assessment Plans**

*Candice A. Shoemaker, Professor*

**C. Degree Program**

*Master of Horticultural Therapy*

**D. Assessment of Student Learning Three-Year Plan**

**1. Student Learning Outcome(s)**

**a.     List (or attach a list) all of the student learning outcomes for the program.**

*Upon completing the Master of Horticultural Therapy program students will*

- 1. Be able to explain the delivery models and systems used in settings where horticultural therapy is currently practiced and where it is emerging as a service*
- 2. Have achieved entry-level competence through a combination of academic and fieldwork education*
- 3. Be prepared to articulate and apply horticultural therapy theory and evidence-based evaluations and interventions to achieve expected outcomes*
- 4. Be prepared to be a lifelong learner and keep current with evidence-based professional practice*
- 5. Uphold the ethical standards, values, and attitudes of the horticultural therapy profession*
- 6. Understand the distinct roles and responsibilities of the horticultural therapist*
- 7. Be prepared to advocate as a professional for the horticultural therapy services offered and for the recipients of those services*
- 8. Be prepared to be an effective consumer of the latest research and knowledge bases that support practice and contribute to the growth and dissemination of research and knowledge*

**b. Identify outcomes that will be assessed in the first three years of the plan.**

*SLOs #1, 2, 3 and 6 will be assessed in the first three years of the program.*

Relationship to K-State Student Learning Outcomes (insert the program SLOs and check all that apply):

Program SLOs	University-wide SLOs ( <u>Graduate Programs</u> )			Program SLO is conceptually different from university SLOs
	Knowledge	Skills	Attitudes and Professional Conduct	
1. <i>HT Delivery Models &amp; Services</i>	☆			
2. <i>Entry level competence</i>	☆	☆	☆	
3. <i>Evidence-based HT programming</i>	☆	☆	☆	
4. <i>Roles and Responsibilities</i>	☆		☆	

**2. How will the learning outcomes be assessed? What groups will be included in the assessment?**

SLO	Direct Assessment Method	Indirect Assessment Measure
<i>Be able to explain the delivery models and systems used in settings where horticultural therapy is currently practiced and where it is emerging as a service</i>	Final examination as part of the Masters Report (HORT 899). Scoring rubrics will be used for this assessment (in development).	Exit survey asking students their confidence in performing each of the SLOs (in development).
<i>Have achieved entry-level competence through a combination of academic and fieldwork education</i>	Final examination as part of the Masters Report (HORT 899). Scoring rubrics will be used for this assessment (in development).	Exit survey asking students their confidence in performing each of the SLOs (in development).  Fieldwork supervisor evaluation.
<i>Be prepared to articulate and apply horticultural therapy theory and evidence-based evaluations and interventions to achieve expected outcomes</i>	Final examination as part of the Masters Report (HORT 899). Scoring rubrics will be used for this assessment (in development).	Exit survey asking students their confidence in performing each of the SLOs (in development).
<i>Understand the distinct roles and responsibilities of the horticultural therapist</i>	Final examination as part of the Masters Report (HORT 899). Scoring rubrics will be used for this assessment (in development).	Exit survey asking students their confidence in performing each of the SLOs (in development).

**3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?**

*The Master of Horticultural Therapy (MHT) is a proposed graduate program currently moving through the approval channels. If approved, this program will begin fall 2009. Given that almost all assessment will occur near the end of a student's program, assessment rubrics and exit surveys will be ready by spring of 2011 and assessment will occur every semester as follows:*

<b>SLO</b>	<b>Assessment every semester as part of:</b>
<i>Be able to explain the delivery models and systems used in settings where horticultural therapy is currently practiced and where it is emerging as a service</i>	Masters Report defense Student Exit survey
<i>Have achieved entry-level competence through a combination of academic and fieldwork education</i>	Masters Report defense Student Exit survey Field Supervisor evaluation
<i>Be prepared to articulate and apply horticultural therapy theory and evidence-based evaluations and interventions to achieve expected outcomes</i>	Masters Report defense Student Exit survey
<i>Understand the distinct roles and responsibilities of the horticultural therapist</i>	Masters Report defense Student Exit survey

*All MHT program faculty will meet once each semester to discuss the assessment results*

**4. What is the unit's process for using assessment results to improve student learning?**

*The MHT program faculty will work together to prepare the assessment rubrics, student exit survey, and field supervisor evaluation form. Since this is a new program, assessment will be viewed as "standard operating protocol" rather than an additional administrative requirement. Thus, assessment results will be the guide for understanding and improving student learning as we implement and build this program.*

*At each semester meeting that will focus on assessment results, the MHT program faculty will consider the results in the context of the full curriculum as well as within the courses intended to target specific SLOs.*

## Appendix

- a. Summary of Proposed Academic Program
- b. Curriculum Outline for Proposed Academic Program
- c. Fiscal Summary for Proposed Academic Program

*Attachment 1 Summary of Proposed Academic Program*

**New Degree Request—Kansas State University**

<b><u>Criteria</u></b>	<b><u>Program Summary</u></b>
1. Program Identification	01.1103 Horticulture Science
2. Academic Unit	Department of Horticulture, Forestry, and Recreation Resources, College of Agriculture
3. Program description	The Master of Horticultural Therapy offered through Kansas State University, is a distance-education, terminal, professional degree program that focuses on the theory and delivery techniques of horticultural therapy. The program includes two on-site sessions with the remainder of the program completed at a distance via the web.
4. Demand/Need for the program	The dramatic changes in the health care field over the past ten years, primarily the shift to managed care, have influenced the profession of horticultural therapy and other allied therapy professions such as art therapy, music therapy, and occupational therapy. A study of these allied therapy professions by the American Horticultural Therapy Association (AHTA) Professional Standard Task Force in 2004 determined that the current registration process offered by AHTA would not be considered adequate by insurance companies and the educational standards were very sub-standard in today's marketplace. As a result, AHTA has focused on raising the educational and competency requirements for registered clinicians. Many professionals currently working in horticultural therapy and even many of those who are providing direct care do not have education specific to horticultural therapy and the issues surrounding it. Starting in fall 2008, a bachelor's degree and a minimum number of college credits in three subject areas (horticultural therapy (9 credits), horticulture (12 credits), and human services (12 credits)), will be required for professional registration. The biggest challenge with these new standards for registration will be obtaining the college credit requirement in horticultural therapy.
5. Comparative/ Locational Advantage	Currently there are no other comparable programs in the State of Kansas or the nation. Kansas State University became the first land-grant university to offer an undergraduate degree in Horticultural Therapy in cooperation with Menningers, a private psychiatric hospital in Topeka, Kansas in 1971. Today, Kansas State University remains the only university in the United States to offer campus-based B.S., M.S. and Ph.D. Horticultural Therapy specializations within the Horticulture undergraduate and graduate programs. K-State is viewed as an international leader in research and education in the field of horticultural therapy. Our international reputation, and the international and national inquiries for

	education and training as a result, were the impetus for developing this distance learning program.
6. Curriculum	Please see details in narrative.
7. Faculty Profile	This program is supported by current Ph.D. faculty in horticultural therapy and horticulture at Kansas State University.
8. Student Profile	The primary audience is professionals currently working in health and human services related settings who are interested in extending their education and expertise. Other likely students are horticulturists, educators, architects, and administrators that work with people with disabilities, older adults and those recovering from illness. Full admission requires evidence of completion of a bachelor's degree from an accredited university with a grade point average above 3.0 on a 4.0 scale in the junior and senior years; two years of professional work experience; and course work in horticulture, health and human services, and statistics. Applicants should have proficiency in the computer operations necessary to complete web-based distance courses.
9. Academic Support	The K-State faculty who participate in this program are currently participating in the campus-based horticultural therapy and horticulture programs. New positions are projected to be added beginning in year 3, based on projected student enrollment numbers.
10. Facilities and Equipment	No new facilities and equipment are sought.
11. Program review, assessment, accreditation	The program review plan is presented in the attached narrative. There are no specialized accrediting agencies for this program.
12. Costs, Financing	The projected costs of the program are covered by tuition revenue. A fiscal summary is attached.

**CURRICULUM OUTLINE  
NEW DEGREE PROPOSALS  
Kansas Board of Regents**

I. Identify the new degree: Master of Horticultural Therapy

II. Provide courses required for each student in the major:

	Course Name & Number	Credit Hours
CORE COURSES	HORT 750 Orientation to Horticultural Therapy	1
	HORT 751 Human Issues in Horticultural Therapy	3
	HORT 752 Horticulture in Horticultural Therapy	3
	HORT 753 Clinical Skills in HT	6
	HORT 755 Practicum in Horticultural Therapy	3
	HORT 898 Masters Report	2
	TOTAL CORE CREDITS	18
	ELECTIVES	12
	TOTAL PROGRAM CREDITS	30



**IMPLEMENTATION YEAR FY 2010**

## Fiscal Summary for Proposed Academic Programs

Institution: **Kansas State University**Proposed Program: **Master of Horticultural Therapy**

Part I. Anticipated Enrollment	Implementation Year		Year 2		Year 3	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
A. Headcount		10		20		30
B. Total SCH taken by all students in program	100		180		220	
Part II. Program Cost Projection						
A. In implementation year one, list all identifiable General Use costs to the academic unit(s) and how they will be funded. In subsequent years, please include only the additional amount budgeted.						
	Implementation Year		Year 2		Year 3	
Base Budget: Salaries	--\$0--		--\$0--		New faculty (1) and staff (1) supported by enrollment in program and cost returned to university	
OOE	--\$0--		--\$0--			
Total	--\$0--		--\$0--			

Indicate source and amount of funds if other than internal reallocation: The needs of this program for the first two years will be met with existing faculty. In year 3, two HFRR faculty positions will be redefined and one new faculty position will be created to support this program. Additionally in year 3 a staff position will be created to provide student advising support and program management. These new positions will be supported through tuition fees generated from the program, therefore no new funds are anticipated.