Graduate Council Report
7 December 2006

New Course Request

A704  ALEC 605  Facilitating Complete Secondary Agricultural Science Programs (3-0) Credit 3. Theory and practice in facilitating secondary agricultural science programs that include classroom instruction, supervised experience, and youth leadership development. Designed for students preparing to teach agricultural science in Texas public schools. Prerequisite(s): None.

A705  ALEC 620  Instrumentation and Survey Research Methods (3-0) Credit 3. Principles, theories, techniques, and applications for developing survey questionnaires and conducting survey research in agriculture; developing questions; constructing instruments; implementing surveys; and reducing coverage and sampling errors. Prerequisite(s): None.

A706  ALEC 693  Professional Study in Agricultural Leadership Education and Communications (3-0) Credit 3. Approved professional paper undertaken as the requirement for the Master of Agriculture. May be taken more than once, but not to exceed 3 hours of credit toward a degree. Prerequisite(s): Graduate classification.

A707  ALEC 695  Frontiers in Research (3-0) Credit 3. Basic concepts of quantitative and qualitative research; understanding the social science research process; using appropriate methods to address research problems; enabling students to effectively evaluate, consume, and communicate research findings. Designed to address needs of master level graduate students who are not completing a thesis. Prerequisite(s): Master's level students in non thesis degree programs.

A683  ANSC 623  Precision Diet Formulation (2-2) Credit 3. Theoretical and applied principles associated with precision feeding and diet formulation to optimize nutrient requirements; optimization using least-cost formulation, ingredient inventory, farm and feed mill management, and nutrient management of non-ruminants (poultry, swine, horse, and fish) and ruminant animals (beef and dairy). Prerequisite(s): POCS 411 or ANSC 318. Cross listed with POCS 625.

A717  BICH 664  Fluorescence Spectroscopy (1-0) Credit 1. Theory underlying fluorescence spectroscopy as well as practical considerations that must be understood when utilizing fluorescence as an analytical tool; the use of both steady-state and time-resolved fluorescence measurements to evaluate fluorescence quantum yield, quenching, anisotropy, and energy transfer. Prerequisite(s): Graduate classification.

A711  BUSH 617  State and Local Government: Institutions and Policy (3-0) Credit 3. Professional masters students gain a practical, working knowledge of the institutions and processes through which state and local policy is made and implemented. Students also learn about and apply the theoretical and empirical tools used to evaluate policy at the state and local levels. Prerequisite(s): Graduate Classification.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional

Submit original form and 2 copies. Attach a course syllabus to each.

1. This request is submitted by the Department of: **Agricultural Leadership, Education, and Communications**

2. Course prefix, number and complete title: **ALEC 605 - Facilitating Complete Secondary Agricultural Science Programs**

3. Course description (not more than 50 words): Theory and practice in facilitating secondary agricultural science programs that include classroom instruction, supervised experience, and youth leadership development. Designed for students preparing to teach agricultural science in Texas public schools.

4. Prerequisite(s): Cross-listed with

5. Is this a variable credit course? ☐ Yes ☐ No If yes, from _____ to _____.

6. Is this a repeatable course? ☐ Yes ☐ No If yes, this course may be taken _____ times. Will the course be repeated within the same semester/term? ☐ Yes ☐ No

7. Has this course been taught as a 489/689? ☐ Yes ☐ No If yes, how many times? _____ Indicate the number of students enrolled for each academic period it was taught. 06c - 5 students

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history) MEEd and MS students pursuing teacher certification in agricultural science
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (exclude punctuation)
       ALEC 605 Facilitat AGSC Programs

Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code
03 | 003 | 1313010005 | 015007-08 | 003632

Approval recommended by:

**Christine O. Townsend** 10/12/06
Head of Department
Date

Chair, College Review Committee 10/14/06
Date

Dean of College 10/16/06
Date

Submitted to Coordinating Board by:

Director of Academic Support Services Date

Effective Date

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.

OAR/AS-5/04

2 of 44 F
Dept. of Agricultural Leadership, Education, & Communications  
Texas A&M University

**ALEC 605**  
Facilitating Complete Secondary Agricultural Science Programs  
Fall 2007

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**Instructor:**  
Dr. Grady Roberts  
Assistant Professor  
Phone: 979-862-3707  
Email: groberts@tamu.edu

**Office Hours:**  
Face-face - by appointment; Email - anytime

**Description:**  
Theory and practice in facilitating secondary agricultural science programs that include classroom instruction, supervised experience, and youth leadership development. Designed for students preparing to teach agricultural science in Texas public schools.

**Course Goals:**  
Upon completion of this course you should be able to do the following:  
1. Plan a complete agricultural science program.  
2. Plan, supervise, and evaluate student Supervised Experience programs.  
3. Plan, facilitate, and evaluate an FFA chapter.  
4. Relate best practices to appropriate theories.

**Prerequisite:**  
Graduate classification or approval of department head.

**Class Meetings:**  
Regular Class Meetings: Monday, Wednesday, & Friday, 8:00 to 8:50, TBD

**Required Texts**  

**Official FFA Manual – Order online from National FFA**

Readings available from course web site.

**Web Site**  
TBD

**Attendance**  
Class participation will include class discussions as well as attendance. Attendance will be checked at each session. For further information and policy concerning **excused absences**, see **Student Rules**, Part 7, Attendance. Please note that student rules require immediate notification of your instructor of an EXCUSED absence. The opportunity to make up assignments as a result of an UNEXCUSED absence will be at the discretion of your instructor.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-M</td>
<td>Course Introduction</td>
<td></td>
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<tr>
<td>1-W</td>
<td>Learning from Experience</td>
<td></td>
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<tr>
<td>2-M</td>
<td>Experiential Learning</td>
<td>Roberts (2006)</td>
<td></td>
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<tr>
<td>2-W</td>
<td>Collecting School and Community Data</td>
<td></td>
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<tr>
<td>2-F</td>
<td>The Origins of Agricultural Education</td>
<td>Text - Ch 4</td>
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<tr>
<td>3-M</td>
<td>Philosophy of Education</td>
<td>Moore (1988)</td>
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<td>3-W</td>
<td>Selecting Agricultural Science Courses/</td>
<td>Text - Ch 6</td>
<td>School/Community Profile</td>
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<td></td>
<td>Developing Program Plans</td>
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<td>3-F</td>
<td>Philosophy of Agricultural Education</td>
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<td>4-M</td>
<td>New Directions for Ag Ed</td>
<td>National Research Council (1988)</td>
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<td>4-W</td>
<td>The Future of Agricultural Education</td>
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<td>4-F</td>
<td>Test 1 - Program Planning</td>
<td>Dept Program Plan</td>
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<td>5-M</td>
<td>The Project Method</td>
<td>Roberts &amp; Harlin (2006)</td>
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<tr>
<td>5-W</td>
<td>Introduction to SAE</td>
<td>Text – Ch 22</td>
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<tr>
<td>5-F</td>
<td>Non-traditional SAE</td>
<td>Layfield &amp; Sparace (2003)</td>
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<tr>
<td>6-M</td>
<td>Supervising SAE</td>
<td>Dyer &amp; Williams (1997b)</td>
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<tr>
<td>6-W</td>
<td>Planning and Supervising SAE</td>
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<tr>
<td>7-M</td>
<td>Benefits of SAE</td>
<td>Dyer &amp; Williams (1997a)</td>
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<tr>
<td>7-W</td>
<td>SAE Records</td>
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<td>7-F</td>
<td>SAE Records</td>
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<tr>
<td>8-M</td>
<td>Participation in SAE</td>
<td>Dyer &amp; Osborne (1995)</td>
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<tr>
<td>8-W</td>
<td>Proficiency Awards</td>
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<td>8-F</td>
<td>Record Book Workday</td>
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<tr>
<td>9-M</td>
<td>A Model for SAE Quality</td>
<td>Dyer &amp; Osborne (1996)</td>
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<tr>
<td>9-W</td>
<td>Test 2 - SAE</td>
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<td>SAE Record Book</td>
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<tr>
<td>9-F</td>
<td>Advising an FFA Chapter</td>
<td>Text – Ch 23</td>
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<tr>
<td>10-M</td>
<td>Beginning Teachers</td>
<td>Myers, Dyer, &amp; Washburn (2005)</td>
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<tr>
<td>10-W</td>
<td>Planning FFA Activities</td>
<td>Knight &amp; Wellert (2001)</td>
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<tr>
<td>10-F</td>
<td>Reporting Chapter Accomplishments</td>
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<tr>
<td>11-M</td>
<td>Effective Ag Teachers</td>
<td>Roberts &amp; Dyer (2004)</td>
<td></td>
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<tr>
<td>11-W</td>
<td>Preparing for CDEs and LDEs</td>
<td>Edwards &amp; Booth (2001)</td>
<td>CDE/LDE Practice Report</td>
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<tr>
<td>11-F</td>
<td>CDE/LDE Presentations</td>
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<td>Advisors Part of Opening</td>
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<td>Ceremonies</td>
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<td>12-M</td>
<td>CDE/LDE Presentations</td>
<td></td>
<td>POA/National Chapter Award</td>
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<td>12-W</td>
<td>Test 3 - FFA</td>
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<td>12-F</td>
<td>NO CLASS - Thanksgiving</td>
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<tr>
<td>13-M</td>
<td>The Big Picture</td>
<td>Luft (2005)</td>
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<tr>
<td>13-W</td>
<td>What makes SAE and FFA Experiential Learning?</td>
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<td>13-F</td>
<td>Integrating Classroom, FFA, and SAE</td>
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<td>Philosophy of FFA/SAE Paper</td>
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<td>14-M</td>
<td>Facilitating a Total Agricultural Education</td>
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<td>CDE/LDE Event Report</td>
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<tr>
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<td>Program</td>
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### Course Assignments

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Due Date</th>
<th>Points</th>
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<tbody>
<tr>
<td>School/Community Profile</td>
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<tr>
<td>Department Program Plan</td>
<td>TBD</td>
<td>50</td>
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<tr>
<td>SAE Record Book</td>
<td>TBD</td>
<td>100</td>
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<tr>
<td>CDE/LDE Practice Report</td>
<td>TBD</td>
<td>100</td>
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<tr>
<td>Facilitating Advisor’s Parts of FFA Opening Ceremonies</td>
<td>TBD</td>
<td>50</td>
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<tr>
<td>CDE/LDE Presentation</td>
<td>TBD</td>
<td>50</td>
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<tr>
<td>Program of Activities/National Chapter Award</td>
<td>TBD</td>
<td>50</td>
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<tr>
<td>Philosophy of FFA/SAE Paper</td>
<td>TBD</td>
<td>100</td>
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<tr>
<td>CDE/LDE Event Report</td>
<td>TBD</td>
<td>100</td>
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<tr>
<td>Tests</td>
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<td>100</td>
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<tr>
<td>Attendance/Participation</td>
<td>Throughout</td>
<td>50</td>
</tr>
</tbody>
</table>

**Total:** 1000

Assignments are due at the beginning of class on the date indicated above. Work turned in late will be penalized 10% per day late. When applicable, assignments may be submitted electronically. However, assignments submitted electronically **WILL NOT** be printed and returned. Electronically submitted assignments must be submitted by the **beginning of the class period on the day they are due.**

### Learning Communities

Students will be grouped into "learning communities" of 6 to 8 students at the beginning of the semester. Throughout the semester, the learning communities will discuss material covered in class and the required readings. Two assignments (POA/National Chapter Award and CDE/LDE presentations) will be completed as a learning community.
Grade Assignment

Assignments will be evaluated based on the stated criteria, professionalism, spelling, grammar, and completeness. Unless otherwise stated, all assignments are to be either word processed or typed, double spaced, 12 pt Times New Roman, with 1" margins.

<table>
<thead>
<tr>
<th>Grading Scale</th>
<th>Grade</th>
<th>Points</th>
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<tr>
<td></td>
<td>A</td>
<td>&gt; 900</td>
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<td></td>
<td>B</td>
<td>800 to 899</td>
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<td></td>
<td>C</td>
<td>700 to 799</td>
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<tr>
<td></td>
<td>D</td>
<td>600 to 699</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>&lt; 599</td>
</tr>
</tbody>
</table>

**General Expectations:** This course is one of three designed specifically for students preparing to student teach in an agricultural science classroom. You are expected to project effort and interest into each project and presentation as your major course of study. You are also expected to ask for help when needed. I expect you to be successful and am willing to help, but you must do your part.

Please also note that a grade **below C** in this course will **not** result in credit toward teacher certification.

**Course Assignments**

<table>
<thead>
<tr>
<th>Description of Assignments</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School/Community Profile</strong></td>
<td>50</td>
</tr>
<tr>
<td>You will be assigned a school in Texas. Using data from the US Census, USDA, TEA, and school web sites, develop a profile of that school, the community, and local agriculture. For the school, the profile should contain school demographics for students and faculty, administrative structure, current information about agriculture science programs, and student performance on state tests. For the community, the profile should include demographics and major industries. For agriculture, include local commodities and agribusinesses. This profile should not exceed 4 typed pages.</td>
<td></td>
</tr>
<tr>
<td><strong>Department Program Plan</strong></td>
<td>50</td>
</tr>
<tr>
<td>Develop a program plan of agricultural science courses offered at the school/community you profiled. Include a description and justification of the courses to be taught and a 4-year schedule of course offerings.</td>
<td></td>
</tr>
<tr>
<td><strong>Record Book for SAEP in Agricultural Science and Technology</strong></td>
<td>100</td>
</tr>
<tr>
<td>You will be provided data of a fictitious student. Using that data, complete the online SAE recordbook.</td>
<td></td>
</tr>
</tbody>
</table>
Facilitate Advisor’s Parts of FFA Opening Ceremonies 50
You will facilitate the advisor’s parts in the official FFA opening ceremonies and then recite those parts orally to one of your classmates. The recitation must be accurate and have appropriate inflection.

Program of Activities/National Chapter Award*** 50
Your learning community will act as a group of “FFA officers” and will work together to develop a Program of Activities for a local FFA chapter. The Program of Activities will include “goals” and “ways of means” for one section (four activities) of the twelve areas. Each learning community will then complete the appropriate National Chapter Award – Form 2 page for one of their activities.

CDE/LDE Presentation*** 50
Each learning community will be assigned a set of Career Development Events or Leadership Development Events and teach a 15-20 minute lesson that includes: (1) a description of the events, (2) the rules and regulations for the events, and (3) training tips and ideas for the events.

CDE/LDE Practice Report 100
You are required to attend a scheduled practice for an FFA Chapter preparing for competition in a CDE or LDE. Prepare a 1 page report on what you observed. Include the organization of the practice, the interaction between teachers and students, and your personal reflections.

CDE/LDE Event Report 100
You are required to attend an official Texas FFA CDE or LDE. Prepare a 1 page report on what you observed. Include the organization/Description of the event, the interaction between teachers and students, and your personal reflections.

Philosophy of FFA/SAE Paper 100
Write a three page paper, using information from class discussion, readings, and outside sources, on your philosophy of how classroom instruction, FFA, and SAE relate to a total agriculture science program. Be sure to cite appropriate references when necessary. Remember that spelling and grammar will be checked.

Tests (3) 300 (100 ea)
Three tests will be given during the semester, each covering the material since the last test. Tests may consist of multiple choice, true/false, short answer, and essay questions. No references will be used during the tests.

Attendance/Participation 50
Students are expected to attend each class session and participate in class discussions. Unexcused absences and/or lack of participation will result in a penalty of 5 points per day.

***These assignments will be completed in groups or teams.
Readings


Academic Integrity

AGGIE HONOR CODE  "An Aggie does not lie, cheat, or steal or tolerate those who do."

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit: www.tamu.edu/aggiehonor/

On all course work, assignments, and examinations at Texas A&M University, the following Honor Pledge shall be preprinted and signed by the student:

"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."

Copyright

Please note that all handouts and supplements used in this course are copyrighted. This includes all materials generated for this class, including but not limited to syllabi, exams, in-class materials, review sheets, and lecture outlines. Materials may be downloaded or photocopied for personal use only, and may not be given or sold to other individuals.

Plagiarism

As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty. You are also encouraged to discuss specific questions about whether a particular practice is plagiarism or not with your instructor.

Provisions For Students With Disabilities

The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room B118 of Cain Hall or call 845-1637.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 25 copies. Attach a course syllabus to each.*

1. This request is submitted by the Department of Agricultural Leadership, Education, and Communications.

2. Course prefix, number and complete title: ALEC 620 Instrumentation and Survey Research Methods

3. Course description (not more than 50 words)
Principles, theories, techniques, and applications for developing survey questionnaires and conducting survey research in agriculture; developing questions; constructing instruments; implementing surveys; and reducing coverage and sampling errors.

4. Prerequisite(s)

5. Is this a variable credit course? ☐ Yes ☐ No
If yes, from _______ to _______.

6. Is this a repeatable course? ☐ Yes ☐ No
If yes, this course may be taken _______ times. Will the course be repeated within the same semester/term? ☐ Yes ☐ No

7. Has this course been taught as a 489/689? ☐ Yes ☐ No
If yes, how many times? 1
Indicate the number of students enrolled for each academic period it was taught: 06A - 8 students

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
M.S., Ph.D., Ed.D. in agricultural leadership, education, and communications

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (exclude punctuation)

        ALEC 620 Instrumentation & Survey Research Methods

Lect. | Lab | SCH | Subject Matter | Content Code | Admin. Unit | Acad. Year | FICE Code
   0 | 3 | 0 | 0 | 0 | 3 | 1 | 3 | 1 | 3 | 0 | 1 | 0 | 0 | 4 | 0 | 1 | 5 | 0 | 0 | 7 | - | 0 | 8 | 0 | 1 | 0 | 3 | 6 | 6

Do not complete shaded area.

Approval recommended by:

Christine D. Townsend 10/12/06
Chair of Department

Dean of College

Date

Date

Date

Date

Submitted to Coordinating Board by:

Director of Academic Support Services

Date

Effective Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/oaras. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.

OAR/AS-10/99
Texas A&M University
Agricultural Education 689
Spring 2007

Course Title: Special Topics in Instrumentation and Survey Research Methods

Prerequisite: Professional experience or approval of department head

Course description and background:
Principles, theories, techniques, and applications for developing survey questionnaires and conducting survey research in agriculture; developing questions; constructing instruments; implementing surveys; reducing coverage and sampling errors.

Ary, Jacobs, and Razavieh (1996) noted that social science research has advanced as techniques for the measurement of social variables have improved. One such improvement is the use of systematic techniques in conducting survey research. The purpose of survey research is to explore and/or describe a given population—typically from samples of the population. Dillman (2000) stated that there are four major types of error that occurs when conducting survey research: sampling error, coverage error, measurement error, and nonresponse error. In carrying out survey research, it is critical that each of the types of errors is explicitly addressed to ensure the fidelity of the findings. Five prominent ways for collecting survey research data are mail, Internet, personal interview, personal administration, and telephone. Each method has distinct advantages and disadvantages.

Course objectives:
The primary objective of this course is to help students develop competence in the development of survey questionnaires and in the conduct of survey research. The course seeks to integrate theory and practice to better prepare professionals to conduct valid and reliable survey research.

Upon completion of the course, the student will be able to:
  • Use social exchange theory to develop and implement valid and reliable survey research instruments;
- Reduce measurement error by developing effective survey research questions;
- Reduce nonresponse error by developing and implementing mail and Internet surveys appropriately; and
- Reduce coverage and sampling errors by using appropriate sampling techniques.

Required text:

**Graded evaluation activities:**

<table>
<thead>
<tr>
<th>Instrument/Critique</th>
<th>100 points</th>
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<tbody>
<tr>
<td>Papers</td>
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<tr>
<td>Statement of the Problem and Objectives</td>
<td>50 points</td>
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<td>Pilot Study Letter</td>
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<td>Notice and Cover Letters</td>
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<td>Reminder Notifications</td>
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<td>Quiz 1-Based on class lecture and readings</td>
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<td>Quiz 2-Based on class lecture and readings</td>
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**Course grade:**

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<td>595 - 694</td>
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</table>

**Tentative Lecture Schedule and Course Links**

<table>
<thead>
<tr>
<th>Session #</th>
<th>Assignments/Course Topic</th>
<th>Required Reading Chapters</th>
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</thead>
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<tr>
<td>Week 1</td>
<td>Introduction to instrumentation and survey research</td>
<td>Course Syllabus</td>
</tr>
<tr>
<td>Week</td>
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<td>methods</td>
<td>Dillman Preface</td>
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<td>3</td>
<td>Social Exchange theory</td>
<td>Dillman Ch 1</td>
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<td>4</td>
<td>Writing questions</td>
<td>Dillman Ch 2</td>
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<td>5</td>
<td><strong>Statement of problem and objective [DUE]</strong></td>
<td></td>
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<td></td>
<td>Writing questions continued</td>
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<td>6</td>
<td><strong>Instrument critique [DUE]</strong></td>
<td>Lindner, Instrument Critique</td>
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<td></td>
<td>Critiquing instruments</td>
<td>Handout</td>
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<td>Quiz 1</td>
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<td>8</td>
<td>Principles for constructing questionnaire pages</td>
<td>Dillman Ch 3-4</td>
</tr>
<tr>
<td>9</td>
<td><strong>Pilot Study Letter [DUE]</strong></td>
<td></td>
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<tr>
<td></td>
<td>Principles for constructing questionnaire pages continued</td>
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<tr>
<td>10</td>
<td><strong>Notice and Cover Letters [DUE]</strong></td>
<td>Dillman Ch 5</td>
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<tr>
<td></td>
<td>Survey implementation</td>
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<tr>
<td>11</td>
<td>Coverage and sampling error</td>
<td>Krejcie, &amp; Morgan, (1970)</td>
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<td></td>
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<td>Handout</td>
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<tr>
<td>12</td>
<td><strong>Reminder notifications [DUE]</strong></td>
<td>Lindner, Murphy, &amp; Briers</td>
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<tr>
<td></td>
<td>Handling nonresponse error</td>
<td>(2001)</td>
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<tr>
<td>13</td>
<td>Quiz 2</td>
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<td>14</td>
<td><strong>Timeline [DUE]</strong></td>
<td>Van Teijlingen, &amp; Huyndley</td>
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<td></td>
<td>Conducting a pilot study</td>
<td>(2001)</td>
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<td></td>
<td><strong>Instrumentation [DUE]</strong></td>
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<td></td>
<td>Mixed modes and alternate questionnaire delivery</td>
<td>Dillman Ch 6-12</td>
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<td>Wingenbach Invited and Accepted</td>
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**Schedule:**

Lecture: Wednesday, 4:00pm-7:00pm, Scoates (SCTS 118)
Instructor: Dr. James Lindner, 226 Scoates, 458-2701, j-lindner@tamu.edu

Instrument critique
For this assignment each student will write a one-page critique of a selected survey research instrument. The student will attach the critique to a copy of the instrument. Students are also expected to mark up the instrument as well. The critique should be based on social exchange theory.

Statement of the Problem and Objectives
Students will prepare a short one-to-two page paper describing the purpose of their survey research to be undertaken, the nature of the problem to be addressed, and objectives of the study.

Pilot Study Letter
Students will prepare a one-page cover letter addressed to a panel of experts requesting their assistance in establishing face and content validity of their instrument.

Cover Letter
Students will prepare a one-page letter giving selected participants notice that they have been selected to participate in your study. Students will prepare a one-page letter inviting selected participants to complete the attached instrument.

Reminder Notifications
Students will prepare both a postcard and cover letter reminder for selected participants that have not responded.

Timeline
Outline the major activities that will be conducted in carrying out your survey research. Provide a timeline for when specific activities will occur and estimate expenses for the research project.

Instrumentation
For this activity students will develop a survey research instrument related to their research topic. The instrument should address both the overall purpose of the research and the specific objectives. The instrument should be developed based on Dillman’s Tailored Design method. The instrument will
be evaluated on overall appearance and adherence to Dillman's principles for writing survey questions, constructing questionnaire pages, and overall questionnaire construction. Prior to submission, conduct a peer (someone with expertise on the content covered) review of the instrument. Comments from the peer reviewer should be made directly on the instrument. Using the peer review, revise the instrument. Include the peer reviewed instrument with the final copy.

Quizzes
Quizzes and will be a combination of multiple choice, true-false, matching, short answer, and essay questions. Quizzes will be completed in class and will cover materials from both text and lecture.

Reference Materials


**Americans with Disabilities Act (ADA) Policy Statement**

The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of Cain Hall or call 845-1637.

**Academic Integrity Statements**

**AGGIE HONOR CODE** "An Aggie does not lie, cheat, or steal or tolerate those who do."

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: http://www.tamu.edu/aggiehonor/

On all course work, assignments, and examinations at Texas A&M University, the following Honor Pledge shall be preprinted and signed by the student:

"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional

Submit original form and 25 copies. Attach a course syllabus to each.

1. This request is submitted by the Department of ALEC

2. Course prefix, number and complete title: ALEC 693, Professional Study in Agricultural Leadership, Education, and Communications

3. Course description (not more than 50 words): Approved professional paper undertaken as the requirement for the Master of Agriculture. May be taken more than once, but not to exceed 3 hours of credit toward a degree.

4. Prerequisite(s): Graduate classification

5. Is this a variable credit course? ☐ Yes ☐ No If yes, from ___ to ___.

6. Is this a repeatable course? ☐ Yes ☐ No If yes, this course may be taken ___ up to ___ times. Will the course be repeated within the same semester/term? ☐ Yes ☐ No

7. Has this course been taught as a 489/689? ☐ Yes ☐ No If yes, how many times? _______ Indicate the number of students enrolled for each academic period it was taught.

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   Master of Agriculture in Agricultural Education

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (exclude punctuation)
     ALEC | 693 | Professional Study

     Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
     0 3 0 0 0 3 1 3 1 0 1 0 0 0 5 0 1 5 0 0 7 - 0 8 0 1 0 3 6 6

     Do not complete shaded area.

Approval recommended by:

Christine T. Townsend 10/12/06
Head of Department

Chair, College Review Committee 10/15/06
Dean of College 10/17/06

Submitted to Coordinating Board by:

Director of Academic Support Services

Date Effective Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/oaras. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional

Submit original form and 25 copies. Attach a course syllabus to each.*

1. This request is submitted by the Department of ALEC
2. Course prefix, number and complete title ALEC 695, Frontiers in Research

3. Course description (not more than 50 words) Basic concepts of quantitative and qualitative research; understanding the social science research process; using appropriate methods to address research problems; enabling students to effectively evaluate, consume, and communicate research findings. Designed to address needs of master level graduate students who are not completing a thesis.

4. Prerequisite(s) Master's level students in non thesis degree programs Cross-listed with

5. Is this a variable credit course? ☐ Yes ☑ No If yes, from _____ to _____

6. Is this a repeatable course? ☐ Yes ☑ No If yes, this course may be taken _____ times. Will the course be repeated within the same semester/term? ☐ Yes ☑ No

7. Has this course been taught as a 489/689? ☐ Yes ☑ No If yes, how many times? _____ Indicate the number of students enrolled for each academic period it was taught.

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      Master of Agriculture and Master of Education degree within the department (non-thesis)
      b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix Course # Title (exclude punctuation)
    ALEC 695 FRNTRS IN RESEARCH

Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
0 3 0 0 0 3 1 3 1 3 0 1 0 0 5 0 1 5 0 0 7 - 0 8 0 1 0 3 6 6

Do not complete shaded area.

Approval recommended by:

Christine O. Townsend 10/12/06
Chair, College Review Committee Date

Head of Department Date

Head of Department (if cross-listed course) Date

Dean of College 10-16-06

Submitted to Coordinating Board by:

Director of Academic Support Services Date

Effective Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/oaas. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
Texas A&M University
Agricultural Leadership, Education, and Communications 695
ALEC 695
Fall 2007

Course Title
Frontiers in Research

Prerequisite
Master's level Graduate Students in Nonthesis Degree Programs

Course description
Basic concepts of quantitative and qualitative research; understanding the social science research process; using appropriate methods to address research problems; enabling students to effectively evaluate, consume, and communicate research findings. This course will address needs of Master's level graduate students in nonthesis degree programs.

Course objectives
Upon completion of the course, the student will be able to:

- Demonstrate how to evaluate, consume, and communicate social science research findings.
- Describe qualitative research methods and understand the appropriate use of such in studying a research problem
- Describe quantitative research methods and understand the appropriate use of such in studying a research problem
- Understand the nature of social science research and the value of conducting research and reporting findings
- Demonstrate an understanding of the social science research process by identifying a research problem and develop a research plan for studying the problem
- Analyze data using descriptive statistics and basic inferential statistics
Required Text and materials


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<tr>
<th>Graded evaluation activities</th>
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<tbody>
<tr>
<td>Research Exercises and Final Portfolio</td>
<td>260pts</td>
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<tr>
<td>Research Activities (RA 1-13) worth 15 pts each</td>
<td>195pts</td>
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<tr>
<td>Final Portfolio</td>
<td>75pts</td>
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<td>Case study. Content Analysis of a Qualitative Study</td>
<td>100pts</td>
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<td>Case study. Content Analysis of a Quantitative Study</td>
<td>100pts</td>
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<tr>
<td>Class participation and in-class activities</td>
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<td>Class Activities (CA 1-14) worth 10 pts each</td>
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<td>Mid Term Exam</td>
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<td>Session #</td>
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<tr>
<td>Week 1</td>
<td>The nature of research</td>
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<td>CA 1</td>
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<td>Week 2</td>
<td>The research problem &amp; variable and hypothesis</td>
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<td>RA 1 due</td>
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<td>CA 2, 3</td>
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<td>Week 3</td>
<td>Ethics and research &amp; Review of the literature</td>
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<td>RA 2,3 due</td>
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<td>CA 4</td>
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<td>Week 4</td>
<td>Sampling &amp; instrumentation</td>
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<td>RA 4,5 due</td>
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<td>Week 5</td>
<td>Validity and reliability &amp; internal validity</td>
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<td>RA 6,7 due</td>
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<td>Week 6</td>
<td>Descriptive statistics</td>
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<td>RA 8,9 due</td>
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<td>Week 7</td>
<td>Midterm Exam</td>
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<td>Week 8</td>
<td>Inferential statistics &amp; statistics in perspective</td>
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<td>RA 10 due</td>
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<td>CA 8</td>
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<td>Week 9</td>
<td>Experimental research &amp; single-subject research</td>
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<td>RA 11, 12 due</td>
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<td>CA 9</td>
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<td>Week 10</td>
<td>Correlational research &amp; causal-comparative research</td>
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<td>CA 10</td>
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<tr>
<td>Week 11</td>
<td>Survey research</td>
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| Week 12 | The nature of qualitative research & Observation and interviewing
Case study. Content Analysis of a Qualitative Study due
CA 12 | F&W Chapter 18,19 |
| Week 13 | Ethnographic research & historical research
CA 13 | F&W Chapter 21,22 |
| Week 14 | Action research & preparing research proposals and reports
CA 14 | F&W Chapter 23,24 |
| Final | Final Exam & Research Exercise Portfolio due |

Schedule
Lecture: TBD

Instructor: Dr. James Lindner, 226 Scoates, 458-2701, j-lindner@tamu.edu

Research Exercise Portfolio
For this assignment each student will complete one of thirteen assignments designed to help the student identify a research problem and develop a research plan for studying the problem. Assignment topics covered include: Types of research, the research question, the research hypothesis, ethics and research, review of the literature, sampling plan, instrumentation, validity and reliability, internal validity, descriptive statistics, inferential statistics, statistics in perspective, & research methodology. Each research activity (RA 1-13) will be worth 15pts and the final portfolio will be worth 75pts.

Case Study
Students will conduct a content analysis of an assigned research article (one each of a qualitative study and a quantitative study). Students will prepare a report (3-5 pages) describing the: Type of research, justification, clarity, definition of terms, sampling procedures, internal validity, instrumentation, external validity, appropriateness of results and interpretations, data analysis, justification of conclusions, and relevance of citations.
Class Participation and in-class activities
During each class period we will be discussing the required reading and completing an in-class activity related to the topic. Each in-class activity (CA 1-14) will be worth 10pts.

Exams
Exams and will be a combination of multiple choice, true-false, matching, short answer, and essay questions. Exams will be completed in class and will cover materials from both text and lecture.

Reference Materials


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Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 2 copies. Attach a course syllabus to each.

1. This request is submitted by the Department of _____________
2. Course prefix, number and complete title: ANSC 623 Precision Diet Formulation

3. Course description (not more than 50 words): Theoretical and applied principles associated with precision feeding and diet formulation to optimize nutrient requirements; optimization using least-cost formulation, ingredient inventory, farm and feed mill management, and nutrient management of non-ruminants (poultry, swine, horse, and fish) and ruminant animals (beef and dairy).

4. Prerequisite(s): POSC 411 or ANSC 318

5. Is this a variable credit course? ☐ Yes ☑ No If yes, from _________ to _________.

6. Is this a repeatable course? ☐ Yes ☑ No If yes, this course may be taken ________ times. Will the course be repeated within the same semester/term? ☐ Yes ☑ No

7. Has this course been taught as a 489/689? ☐ Yes ☑ No If yes, how many times? ________ Indicate the number of students enrolled for each academic period it was taught.

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   [Not completed]

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   M.S., Ph.D. in Animal Science, Poultry Science, Nutrition

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (exclude punctuation) | ANSC 623 Precision Diet Formulation

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>Subject Matter Content Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
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Do not complete shaded area.

Approval recommended by:

[Signatures and dates]

[Signatures and dates]

[Signatures and dates]

Submitted to Coordinating Board by:

[Signatures and dates]

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.

OAR/AS-5/04

27 of 44 F
Texas A&M University

Artificial Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of [Poultry Science].

2. Course prefix, number and complete title of course: POSE 625 Least-Cost Feed Formulation.

3. Change requested:
   a) Prerequisite(s): From POSE 411; ANSC 309 To POSE 411 or ANSC 318
   b) Withdrawal (reason)
   c) Cross-list with ANSC 623

   [Cross-listed courses require the signatures of both department heads.]

   d) Change in course title and description. Enter complete current course title and current course description; complete proposed course title and proposed course description in items 4 and 5.

   e) Change in credit/contact hours. Complete item 6b. Underscore change(s). Attach a course syllabus.


   Theoretical and applied principles associated with least-cost feed formulation, ingredient inventory, farm and feed mill management; computer optimization of resources for most efficient least-cost production with applications to all domestic farm animals; applications of micro-computer technology.

5. Complete proposed course title and proposed course description (not to exceed 50 words): Precision Diet Formulation.

   Theoretical and applied principles associated with precision feeding and diet formulation to optimize nutrient requirements; optimization using least-cost formulation, ingredient inventory, farm and feed mill management, and nutrient management of non-ruminants (poultry, swine, horse, and fish) and ruminant animals (beef and dairy).

6. a) As currently in course inventory:

   Prefix | Course # | Title (exclude punctuation) |
   ------ | -------- | ----------------------------|
   POSE   | 625      | LEAST-COST FEED FORMATION    |

   Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | FICE Code |
   0 | 2 | 0 | 3 | . | . | . |
   0 | 0 | 3 | 6 | 3 | 2 |

   Do not complete shaded area.

   b) Changed to:

   Prefix | Course # | Title (exclude punctuation) |
   ------ | -------- | ----------------------------|
   POSE   | 625      | PRECISION DIET FORMULA      |

   Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code |
   0 | 2 | 0 | 3 | . | . | . |
   0 | 0 | 7 | 0 | 8 | 0 | 0 | 3 | 6 | 3 | 2 |

   Level 6

   Approval recommended by:

   Head of Department [Signature] 9/11/06
   Head of Department (if cross-listed course) [Signature] 9/11/06

   Chair, College Review Committee [Signature] 9/16/06

   Dean of College [Signature] 9/16/06

   Submitted to Coordinating Board by:

   Director of Academic Support Services [Signature] Date

   Effective Date

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
OAR/AS-5/04

28 of 44 F
ANSC 623/POSC 625 - Precision Diet Formulation

Mondays and Wednesdays 3:00 – 4:40 pm

Spring 2007

Instructors:
C. A. Bailey
Room 242A, Kleberg Building
Professor
Phone: (979) 845-7537
Texas A&M University
Fax: (979) 845-1921

G. E. Carstens
230 Kleberg Center
Professor
2471 TAMU
Texas A&M University
Phone: (979) 845-5065
Fax: (979) 845-5292

L. O. Tedeschi
230 Kleberg Center
Assistant Professor
2471 TAMU
Texas A&M University
Phone: (979) 845-5065
Fax: (979) 845-5292

http://nutritionmodels.tamu.edu

Course Description: Theoretical and applied principles associated with precision feeding and diet formulation to optimize nutrient requirements; optimization using least-cost formulation, ingredient inventory, farm and feed mill management, and nutrient management of non-ruminants (poultry, swine, horse, and fish) and ruminant animals (beef and dairy).

Course requirements: The prerequisite for this course is POSC 411 or ANSC 318 or approval of the instructor. All students should have taken one or more general nutrition courses prior to taking this course.

Textbooks: There will not be a required textbook for this course. A number of suggested text's are listed below.

Poultry Nutrition and Feeding (Optional)
By Gene M. Pesti, R.I. Bakalli, J.P. Driver, A. Atencio and E.H.Foster, 2005
Trafford Publishing (http://Trafford.com/05-2431)

National Research Council Publications on Nutrient Requirements (Optional)
Poultry, Beef Cattle, Dairy Cattle, Swine, Horses, Sheep, Fish, etc. National Academy of Sciences, Washington, D.C.
(http://www.nap.edu/catalog/2114.html)
Other books on NRC Nutrient Requirements from National Academy Press:
(http://www.fao.org/ag/aga/agap/frg/nrcnut.htm)

Feeding Systems and Feed Evaluation Models (Optional)
Edited By M.K. Theodorou and J. France
CABI Publishing New York, NY 10016 USA

Grading system: Homework assignments will be assigned weekly and due the following week. Homework will comprise 50% of the final grade, midterm exam will comprise 25% of the final grade, and the final exam will comprise 25% of the final grade. Final grades will be assigned based on the grid shown below.

<table>
<thead>
<tr>
<th>Lower</th>
<th>Letter</th>
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<tbody>
<tr>
<td>92</td>
<td>A</td>
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<td>84</td>
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<td>84</td>
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<tr>
<td>68</td>
<td>D</td>
<td>78</td>
</tr>
</tbody>
</table>

Americans with Disabilities Act (ADA) Policy Statement: ✓

The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B-118 in the Cain Building, or call (979) 845-1637.

Academic Integrity Statement: ✓

"An Aggie does not lie, cheat or steal or tolerate those who do."

For more information on Academic Integrity, please refer to the Honor Council Rules and Procedures on the web at http://www.tamu.edu/aggiehonor.

Plagiarism is defined as "failing to credit sources used in a work product in an attempt to pass off the work as one's own; attempting to receive credit for work performed by another, including papers obtained in whole or in part from individuals or other sources." Plagiarism is one of the worst academic sins because it destroys the trust among colleagues without which research cannot be safely and widely communicated (http://library.tamu.edu/aggiehonor).
**Course Outline:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Description</th>
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<tbody>
<tr>
<td>January 17</td>
<td>Feed Manufacturing Technology</td>
</tr>
<tr>
<td></td>
<td>- Feed Mill Flow</td>
</tr>
<tr>
<td></td>
<td>- Poisson Distribution in Mixtures</td>
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<td></td>
<td>- Factors Affecting Uniformity</td>
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<td></td>
<td>- Optimizing Ingredient Selection</td>
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<td></td>
<td>- Ingredient Mixing Considerations</td>
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<td></td>
<td>- Mixer Considerations</td>
</tr>
<tr>
<td>January 22</td>
<td>Grain processing and quality control</td>
</tr>
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<td>- Particle Size Reduction</td>
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<td>- Uniformity of Particle Size</td>
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<td>- Roller Mills vs. Hammermills</td>
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<td>- Pelleting and Expanding</td>
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<td></td>
<td>- Statistical Measures</td>
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<td>- Sampling</td>
</tr>
<tr>
<td>January 24</td>
<td>Commercial Feeds: Laws and Regulations</td>
</tr>
<tr>
<td></td>
<td>- Mr. Roger Hoestenbach - Head of Feed and Fertilizer Control for Texas</td>
</tr>
<tr>
<td>January 29</td>
<td>Least Cost Feed Formulation</td>
</tr>
<tr>
<td></td>
<td>- Introduction to least cost formulation</td>
</tr>
<tr>
<td></td>
<td>- Price Margins</td>
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<td></td>
<td>- Shadow prices</td>
</tr>
<tr>
<td>January 31</td>
<td>Feed Formulation Software for Monogastrics</td>
</tr>
<tr>
<td></td>
<td>- Introduction to the Agri-Data Concept 5 System</td>
</tr>
<tr>
<td>February 5</td>
<td>Concept 5 Feed Formulation</td>
</tr>
<tr>
<td></td>
<td>- Using the Concept 5 Least Cost Feed System</td>
</tr>
<tr>
<td>February 7</td>
<td>Formulating Feeds for Poultry</td>
</tr>
<tr>
<td></td>
<td>- Replacement Pullets</td>
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<tr>
<td>February 12</td>
<td>Formulating feeds for poultry</td>
</tr>
<tr>
<td></td>
<td>- Laying Hens</td>
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<tr>
<td>February 14</td>
<td>Formulating feeds for poultry</td>
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<tr>
<td></td>
<td>- Broilers</td>
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<tr>
<td>February 19</td>
<td>Formulating feeds for poultry</td>
</tr>
<tr>
<td></td>
<td>- Turkeys</td>
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</tbody>
</table>

Page 3 of 5
<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Description</th>
</tr>
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<tbody>
<tr>
<td>February 21</td>
<td>Formulating feeds for swine I</td>
</tr>
<tr>
<td></td>
<td>• Dr. Darrel Knabe</td>
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<tr>
<td>February 26</td>
<td>Formulating feeds for swine II</td>
</tr>
<tr>
<td></td>
<td>• Dr. Darrel Knabe</td>
</tr>
<tr>
<td>February 28</td>
<td>Formulating feeds for aquatic species I</td>
</tr>
<tr>
<td></td>
<td>• Dr. Delbert Gatlin</td>
</tr>
<tr>
<td>March 5</td>
<td>Formulating feeds for aquatic species II</td>
</tr>
<tr>
<td></td>
<td>• Dr. Delbert Gatlin</td>
</tr>
<tr>
<td>March 7</td>
<td>Formulating feeds for Horses</td>
</tr>
<tr>
<td></td>
<td>• Dr. Gary Potter</td>
</tr>
<tr>
<td>March 12 – 16</td>
<td><strong>Spring Break</strong></td>
</tr>
<tr>
<td>March 19</td>
<td><strong>Midterm exam</strong></td>
</tr>
<tr>
<td>March 21</td>
<td>Feeds and feeding for cattle</td>
</tr>
<tr>
<td></td>
<td>• Overview of feeds commonly used for beef and dairy cattle</td>
</tr>
<tr>
<td></td>
<td>• Chemical characterization of feedstuffs</td>
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<td></td>
<td>• Concepts of fiber and non-fiber</td>
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<td></td>
<td>• Degradation and passage rates</td>
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<tr>
<td></td>
<td>• Ruminal digestibility</td>
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<tr>
<td>March 26</td>
<td>Meeting the rumen requirements</td>
</tr>
<tr>
<td></td>
<td>• Concept of RDP/DIP and RUP/UIP</td>
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<tr>
<td></td>
<td>• Microbial requirements</td>
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<td></td>
<td>• Controlling the ruminal pH</td>
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<td></td>
<td>• Shifting VFA and methane production; affects on DE</td>
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<td></td>
<td>• Antimicrobials (ionophores)</td>
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<tr>
<td>March 28</td>
<td>Ruminal and intestinal digestibility</td>
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<td></td>
<td>• Grain processing</td>
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<td></td>
<td>• Particle size concept</td>
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<tr>
<td>April 2</td>
<td>Decision support systems for beef and dairy cattle</td>
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<tr>
<td></td>
<td>• The NRC system</td>
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<tr>
<td></td>
<td>• The CNCPS model</td>
</tr>
<tr>
<td></td>
<td>• Other models for beef: TAURUS and DECI</td>
</tr>
<tr>
<td></td>
<td>• Other models for dairy: Molly and Caroline</td>
</tr>
<tr>
<td>Date</td>
<td>Lecture Description</td>
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<tr>
<td>April 4</td>
<td>Diet formulation for beef cattle</td>
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<td></td>
<td>- Cow supplementation</td>
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<td></td>
<td>- Calf creep-feeding</td>
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<td>April 9</td>
<td>Diet formulation for beef cattle</td>
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<td>- Stocker</td>
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<tr>
<td>April 11</td>
<td>Diet formulation for beef cattle</td>
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<td>- Feedlot</td>
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<tr>
<td>April 16</td>
<td>Diet formulation for beef cattle</td>
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<tr>
<td></td>
<td>- Mineral supplementation</td>
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<tr>
<td>April 18</td>
<td>Diet Formulation for dairy cattle</td>
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<tr>
<td></td>
<td>- Energy and protein</td>
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<td></td>
<td>- Physically effective fiber</td>
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<tr>
<td>April 23</td>
<td>Diet formulation for dairy cattle</td>
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<tr>
<td></td>
<td>- Minerals and vitamins</td>
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<tr>
<td></td>
<td>- Dietary Cation-Anion Balance (DCAB)</td>
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<tr>
<td>April 25</td>
<td>Diet formulation for dairy cattle</td>
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<tr>
<td></td>
<td>- Herd formulation</td>
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<tr>
<td>April 30</td>
<td>Nutrient management systems</td>
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<tr>
<td></td>
<td>- Precision feeding</td>
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<tr>
<td></td>
<td>- Nutrient management systems</td>
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<tr>
<td></td>
<td>- An integrated optimization</td>
</tr>
<tr>
<td>May 7</td>
<td>Final exam</td>
</tr>
</tbody>
</table>
Texas A&M University  
**Departmental Request for a New Course**  
**Undergraduate • Graduate • Professional**

Submit original form and 2 copies. Attach a course syllabus to each.

1. This request is submitted by the Department of **Biochemistry and Biophysics**

2. Course prefix, number and complete title **BICH 664 Fluorescence Spectroscopy**

3. Course description (not more than 50 words) **Theory underlying fluorescence spectroscopy** as well as practical considerations that must be understood when utilizing fluorescence as an analytical tool; the use of both steady-state and time-resolved fluorescence measurements to evaluate fluorescence quantum yield, quenching, anisotropy, and energy transfer.

4. Prerequisite(s) **Graduate Classification** Cross-listed with

5. Is this a variable credit course? ☐ Yes ☐ No   If yes, from ________ to ________.

6. Is this a repeatable course? ☐ Yes ☐ No   If yes, this course may be taken ________ times. Will the course be repeated within the same semester/term? ☐ Yes ☐ No

7. Has this course been taught as a 489/689? ☐ Yes ☐ No   If yes, how many times? ________ Indicate the number of students enrolled for each academic period it was taught. **9/2003A, 5/2005A**

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   n/a

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   M.S., Ph.D. in biochemistry, and chemistry

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (exclude punctuation) |
       | BICH | 664 Fluorescence Spectro |

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>Subject Matter</th>
<th>Content Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
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<td>26</td>
<td>02</td>
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<td>20</td>
</tr>
</tbody>
</table>

Do not complete shaded area.

Approval recommended by: __________ 
Head of Department  10/18/06

Chair, College Review Committee  11/21/06

Dean of College  11-28-06

Submitted to Coordinating Board by: __________ 
Dean of College  

Date  __________ 
Date  __________ 

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.

OGS #:  A717  
CATALOG: 

34 of 44 F
BICH 664 - Fluorescence Spectroscopy: Theory and Practice

Spring, 2007

Instructor: Gregory D. Reinhart
Office: 420 Bio/Bio
Lab: 416-424 Bio/Bio
Phone: 862-2263
E-mail: gdr@tamu.edu
Office hours: Drop in or by appointment

BICH 664, Fluorescence Spectroscopy: Theory and Practice is a graduate level, 1 credit course covering the use of fluorescence spectroscopy as a tool in modern biochemical research.

A useful reference for this course is Principles of Fluorescence Spectroscopy, Second Edition, by Joseph R. Lakowicz. In addition, papers from the primary and review literature will be assigned.

Grading will be determined by performance on a take-home problem set midway through the course and an in-class exam at the end of the course.

mid-term problem set 100
final exam 100
TOTAL POINTS = 200

Final course letter grades will be curved. However, no pre-established quota for any grade exists.

Please Note:

Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact Dr. Reinhart personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunity.

Tentative Schedule

Date Coverage
March 27 T Steady-state measurements
March 29 R Steady-state measurements (continued)
April 6 T Time-resolved measurements
April 8    R    Time-resolved measurements (continued)
April 13   T    Fluorescence Quenching
April 15   R    Fluorescence Anisotropy
April 20   T    Energy Transfer
April 22   R    Advanced topics (FCS)
April 27   T    Advanced topics (Imaging)
April 29   R    Final Exam

**Americans with Disabilities Act (ADA) Policy Statement**
The following ADA Policy Statement (part of the Policy on Individual Disabling Conditions) was submitted to the University Curriculum Committee by the Department of Student Life. The policy statement was forwarded to the Faculty Senate for information.
The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of Cain Hall or call 845-1637.

**Academic Integrity Statement**
All syllabi shall contain a section that states the Aggie Honor Code and refers the student to the Honor Council Rules and Procedures on the web.

**Aggie Honor Code**
"An Aggie does not lie, cheat, or steal or tolerate those who do."
Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community
Texas A&M University

Departmental Request for a New Course

Undergraduate • Graduate • Professional

Submit original form and 2 copies. Attach a course syllabus to each.

1. This request is submitted by the Department of [Department Name]

2. Course prefix, number and complete title **BUSH 617: State and Local Government: Institutions and Policy**

3. Course description (not more than 50 words)

   Professional masters students gain a practical, working knowledge of the institutions and processes through which state and local policy is made and implemented. Students also learn about and apply the theoretical and empirical tools used to evaluate policy at the state and local levels.

4. Prerequisite(s) **Graduate Classification**

5. Is this a variable credit course? ☐ Yes ☑ No If yes, from _____ to _____.

6. Is this a repeatable course? ☐ Yes ☑ No If yes, this course may be taken _____ times. Will the course be repeated within the same semester/term? ☐ Yes ☑ No

7. Has this course been taught as a 489/689? ☐ Yes ☑ No If yes, how many times? _______ Indicate the number of students enrolled for each academic period it was taught.

8. This course will be:
   
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   MPSA (Master of Public Service and Administration Program)

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (exclude punctuation)

    **BUSH 617** State and Local Government

    | Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code |
    |-------|-----|-----|-----------------------------|-------------|------------|----------|
    | 0     | 3   | 0   | 0 0 3 6 3 2                |             |            |          |

    Do not complete shaded area.

Approval recommended by:

Head of [Department Name] Date

Head of Department (if cross-listed course) Date

Chair, College Review Committee Date

Dean of College Date

Dean of College Date

Submitted to Coordinating Board by:

Director of Academic Support Services Date

Effective Date

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.

OAR/AS-5/04

37 of 44 F
Pat,

See if this course description is OK for state and local.

Thanks,

Bill
Professional masters students gain a practical, working knowledge of the institutions and processes through which state an local policy is made and implemented. Students also learn about and apply the theoretical and empirical tools used to evaluate policy at the state and local levels.
From: Patricia Hurley [PAT_HURLEY@politics.tamu.edu]
Sent: Monday, October 16, 2006 1:24 PM
To: West, William
Subject: RE: state and local

Bill -- I ran this by the folks at the meeting and all are OK with it.

pat

From: West, William [mailto:WWest@bushschool.tamu.edu]
Sent: Thursday, October 12, 2006 3:47 PM
To: Patricia Hurley
Subject: state and local

Pat,

See if this course description is OK for state and local.

Thanks,

Bill
BUSH 689 States and Local Government: Institutions and Policy
Spring 2006

Instructors: Dr. Lori Taylor (ltaylor@bushschool.tamu.edu) and Dr. Carol L Silva (clsilva@tamu.edu)
Office Hours: Monday 1:30-3:00 and Tuesday 1:30-3:00

COURSE CONTENT
This is a graduate course designed to provide the student with a solid working knowledge
of the institutions and policy mechanisms at the state and local level. We will examine
the role of governors, state legislators, the courts, political parties, and special districts in
the development and implementation of state and local policy, and the empirical and
theoretical evidence concerning the likely consequences of such policies. There will be an
emphasis on hands-on analysis of three current public policy issues: education policy,
environmental policy and economic development. The intent is to give the student both
the theoretical knowledge and the practical experience necessary to provide sound and
rigorous analysis of public issues to policy makers. We seek to improve basic skills in
analytical thinking, information gathering, the clear presentation of complex information
and professional writing in this course.

The course consists of three overlapping parts. The first part will introduce the
theoretical foundations and institutional structures of state and local government. The
second part will concentrate on the evidence concerning the effects of state and local
policy. The third part will focus on the integration of the theoretical work on institutions,
generic policy mechanisms and a focus on an important and current policy issue.

COURSE READINGS


Legislatures,” Legislative Studies Quarterly.


Houghton Mifflin Co.

83(3):729-750.

Michael Mintrom, Sandra Vergari. 1989. “Policy Networks and Innovation Diffusion:


An Economic Evaluation of Alternative Sources of Tax Revenue for the State of Texas, http://bush.tamu.edu/research/faculty%5Fprojects/txschoolfinance/


**COURSE GRADES AND ATTENDENCE**

Regular attendance in class sessions is expected. The material that we will cover is challenging, and classroom discussion will be an essential ingredient for fully understanding the concepts and techniques contained in the readings. A simple benefit-cost analysis will indicate that class attendance *and participation* are well worth the effort.

1. In class presentation and discussion leader (20 points)
2. Exam #1 (20 points)
3. Exam #2 (20 points)
4. Final Project (40 points)

Earning 100 points will be considered a perfect score for this course. Grades will be allocated based on your earned points.

**Extra Credit:** There is no extra credit for this course.

**Late work policy:** Late work will not be accepted.

**NEO Account:** You must have a NEO email account. It is necessary to log in to the webCT vista system that we are using. Also, we often send out class announcements, reminders, or logistical instructions using this email system. You are responsible for making sure that your neo account is current and working. If you don’t have one, you can get one at this address: [http://neo.tamu.edu/](http://neo.tamu.edu/).
Honor Code: As you know the University is introducing a new system for the enforcement of the Aggie Honor Code, to which every student—graduate as well as undergraduate—is expected to adhere and whose violation can result in disciplinary action. The Code is: “An Aggie does not lie, cheat or steal nor tolerate those who do.” If you have questions about Honor Council Rules and Procedures, you may find more information at http://www.tamu.edu/aggiehonor.

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Cheating or Plagiarism: A grade of zero will be given to anyone cheating on any exam, homework assignment or committing plagiarism in a paper. As commonly defined, plagiarism consists of passing off as one’s own ideas, the words, writings, music, graphs/charts, etc that were created by another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. It does not matter from where the material is borrowed—a book, article, material off the web, another student’s paper—all constitute plagiarism unless the source of the work is fully identified and credited. Plagiarism is cheating and a violation of academic and personal integrity and will not be tolerated. It carries extremely serious consequences. To avoid plagiarism it is necessary when using a phrase, a distinctive idea, concept or sentence from another source to reference that source in your text, a footnote, or endnote. The Bush School policy is that the APSA style is the default reference. You also have received a copy of “Credit Where Credit is Due: A Guide to the Citation of Sources for Bush School Students.” Use it as your guide unless you are specifically instructed otherwise.