The University Curriculum Committee recommends approval of the following:

1. New Courses

**CVEN 403. Applied Civil Engineering Surveying.** (0-6). Credit 2. Application of land surveying principles; topographic surveying, boundary surveying, and construction staking through field exercises using state-of-the-art equipment and data capture/analysis techniques; preparation of topographic and boundary maps with related documents; presentation of results. Prerequisites: CVEN 303; junior or senior classification.

**EHRD 345. Computer Applications for Training and Development.** (3-0). Credit 3. Computer applications in human resource development; use of technology in solving organizational problems; application of computer technology to particular problems using pre-written application-development software. Prerequisite: Junior or senior classification.

**EHRD 481. Human Resource Development Seminar.** (3-0). Credit 3. Transition from an academic environment to a professional business environment; preparation of an individual professional portfolio; steps in searching and securing an internship position. Prerequisite: Junior or senior classification.

**EPSY 430. Creativity Theories and Research.** (3-0). Credit 3. Theoretical base of creativity and the research methodologies used to study creativity. Prerequisite: Junior or senior classification.

**EPSY 431. Personal Creativity and Giftedness.** (3-0). Credit 3. Personal giftedness and creativity and its inner-relativity with development, relationships, and learning. Prerequisite: Junior or senior classification.

**EPSY 432. Creativity and Creative Problem Solving.** (3-0). Credit 3. Creativity research; historical background and application of the framework and tools of the Parnes/Osborn Creative Problem Solving Process. Prerequisite: Junior or senior classification.

**EPSY 433. Lateral Thinking.** (3-0). Credit 3. Edward deBono's theories and approach to creativity known as lateral thinking which is used throughout the world to increase creative thinking in individuals. Prerequisite: Junior or senior classification.

**GEOG 476. GIS Practicum.** (3-0). Credit 3. Introduction to current topics in Geographic Information Science including ethical and legal issues surrounding spatial technologies, proper GIS management practices and professional certification; development of professional research, technical and communication skills through participation in a coordinated internship or independent research project. Prerequisites: Senior classification and enrollment in Geographic Information Science Option in geography or approval by instructor.

**HORT 427. Fall Greenhouse Crops.** (0-2). Credit 1. Hands-on lab for growing fall greenhouse crops including bedding plants, poinsettias, foliage and other pot plants; participate in maintenance and decoration with plants in the interiorscape and flower beds. Prerequisites: HORT 428 or registration therein; junior or senior classification.
IDIS 420. Electronic Distribution Networks. (3-0). Credit 3. Study of concepts, issues, and techniques used to plan, analyze and control industrial/electronic distribution networks; interdisciplinary approach combining team projects, individual research, case study analysis, and interaction with industry executives; design of roadmaps and target plans for territory penetration. Prerequisite: Junior or senior classification in industrial distribution.

KINE 308. Integrated Adventure Education. (2-3). Credit 3. Philosophy of outdoor education in a physical education program; designing and implementing outdoor adventure activities in an experiential and interdisciplinary manner for reinforcing the Texas Essential Knowledge and Skills. Prerequisites: Admission to kinesiology program; junior or senior classification.


SOMS 380. Workshop in Leadership Education. (1-0). Credit 1. The study of leadership theory, intra group relationships, assessment tools for skills development, and techniques for achieving group goals. Prerequisite: Junior classification or approval of instructor.

SOMS 481. Seminar in Executive Leadership. (1-0). Credit 1. The study of contemporary leadership issues, organizational effectiveness, problem solving, and decision making. Prerequisite: Senior classification or approval of instructor.

2. Course Deletion

ATMO 475. Radar and Mesoscale Meteorology.

3. Changes in Courses

BICH 410. Comprehensive Biochemistry I.

Credit Hours
From: (3-0). Credit 3.
To: (3-1). Credit 3.

BICH 411. Comprehensive Biochemistry II.

Credit hours
From: (3-0). Credit 3.
To: (3-1). Credit 3.

HORT 301. Horticultural Techniques.

Course title
From: Horticultural Techniques.
To: Garden Science.
HORT 302. Horticultural Techniques Lab.

Course title
From: Horticultural Techniques Lab.
To: Garden Science Lab.

HORT 335. Sociohorticulture.

Credit hours
From: (2-3). Credit 3.
To: (3-0). Credit 3.

HORT 418. Nut Culture.

Credit hours
From: (2-3). Credit 3.
To: (3-0). Credit 3.


Course title
From: Greenhouse Management.
To: Commercial Greenhouse Management.

Credit hours
From: (2-3). Credit 3.
To: (3-0). Credit 3.

Course description
From: Understanding and management of greenhouse operations; history, structures, heating and cooling systems, media, irrigation, fertilizers, computerization and other requirements leading to efficient greenhouse production of flowers and vegetables.
To: Principles of greenhouse management for commercial production of floral crops; greenhouse construction and operation; regulating and controlling the environment; applying cultural practices as they affect plant processes and influence growth and development; management and marketing of high quality floriculture crops.
HORT 429. Greenhouse Crop Production

Course title
From: Greenhouse Crop Production.  
To: Floriculture Crop Production.

Credit hours
From: (2-3). Credit 3.  
To: (2-2). Credit 3.

Course description
From: Application of basic plant sciences to principles and practices involved in commercial production of floricultural crops; hands-on greenhouse production of bulbs, cut flowers, foliage, flowering potted plants, bedding plants, and perennials.
To: Production of floriculture crops in the greenhouse environment; scheduling and controlling crop growth for target market periods; specific flowering crops will be used as models to demonstrate potted flowering plant, cut flower, and garden plant production systems; hands-on crop production experience in lab.

4. Changes in Curricula

College of Agriculture and Life Sciences
Department of Horticultural Sciences
B.S. in Horticulture  
B.S. in Floriculture

College of Geosciences
Department of Geography
B.S. in Geography  
Geographic Information Science Option

5. Nonsubstantive Requests

College of Agriculture and Life Sciences
Department of Agricultural Economics
B.S. in Agricultural Economics

New Courses

AGEC 217. Fundamentals of Ag Economics Analysis. (1-4). Credit 3. Relates contemporary agribusiness issues to economic and financial management concepts, principles, and tools, illustrating and enhancing their integration toward pragmatic applications in the agricultural industry; lab focuses on the integration of mathematics and economics with computer skills, with particular attention directed toward spreadsheets, databases, web pages, and communications software. Prerequisites: AGEC 105; MATH 141 and 142; sophomore or junior agricultural economics or agribusiness major; or approval of department head.
AGEC 424. Rural Entrepreneurship I. (2-2). Credit 3. Strategic planning regarding economic and financial feasibility of rural business ventures; emphasis on processes for developing a comprehensive enterprise analysis, including management information system components; production, marketing, and financial plans; enterprise budget(s); and evaluation of risk management alternatives; exchanges with “real world” lenders and other agribusiness management personnel. Prerequisites: AGEC 217 and 330; ACCT 209 or 229; junior or senior classification; or approval of instructor.

AGEC 453. International Agribusiness Marketing. (3-0). Credit 3. Basic competencies in international marketing of agri-foods; market entry, pricing, payment, finance, and promotion. Prerequisite: AGEC 105 or 3 hours of economics; junior or senior classification.

Changes in Courses

AGEC 317. Quantitative Analysis in Agricultural Economics.

Course title  
From: Quantitative Analysis in Agricultural Economics.  
To: Economic Analysis for Agribusiness Management.

Course description  
From: Econometric methods used to solve problems in agricultural economics relating to marginal analysis; production and consumption functions; maximization and minimization principles; elasticity; agricultural firm and market equilibrium; the cobweb model; uncertainty; and static and dynamic models.  
To: Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms.

Prerequisites  
From: ECON 323; MATH 142; STAT 303; or equivalents.  
To: AGEC 217; ECON 323 or 322; STAT 303 or 302 or INFO 303; junior or senior classification.
AGEC 325. Principles of Farm and Ranch Management.

Course description
From: Economic and business principles applied to the organization of farms and ranches for more profitable operation; laboratory work uses data from actual farms and ranches.
To: Agribusiness managerial decision-making and analysis in different market environments; emphasis on profit maximization; lab focuses on using computerized methods for evaluating management alternatives for farming and ranching problem situations.

Prerequisites
From: AGEC 105 or 3 hours of economics; for non-majors only.
To: AGEC 105 or ECON 202; junior or senior non-agricultural economics majors only; knowledge of Excel.

AGEC 425. Advanced Farm and Ranch Management.

Course title
From: Advanced Farm and Ranch Management.
To: Rural Entrepreneurship II.

Course description
From: Management and decision-making principles in planning and organizing commercial farms and ranches; management functions of planning, implementation and control; entry, growth and exit stages in a firm's life cycle.
To: Strategic planning regarding feasibility of rural business ventures; emphasis on processes for developing comprehensive economic and financial prospectuses, including enterprise budgets, risk management planning, cash flow budgeting, net worth statements, income budgets, reconciliation statements, and shock analysis; exchanges with "real world" lenders and other agribusiness management personnel are included.

Prerequisites
From: AGEC 300; ACCT 209 or 229; or approval of instructor.
To: AGEC 424; junior or senior classification.
AGEC 432. Farm and Ranch Appraisal and Organization.

Course title
From: Farm and Ranch Appraisal and Organization.
To: Rural Real Estate and Finance Analysis.

Credit hours
From: (2-2). Credit 3.
To: (3-0). Credit 3.

Course description
From: Detailed problems involved in the appraisal and organization of specific farms and ranches covering appraisal principles, procedures, design, analysis and reporting.
To: Advanced topics in investment analysis; financial intermediation in agriculture; real estate markets and market analysis; and appraisal valuation.

Prerequisites
From: AGEC 422.
To: AGEC 330 and 422; ACCT 210 or 230; junior or senior classification.

AGEC 447. Agricultural Prices.

Course title
From: Agricultural Prices.
To: Food and Agricultural Price Analysis.

Course description
From: Factors influencing the level of agricultural commodity prices; price trends and seasonal variation; methods of forecasting demand and prices; and futures trading.
To: Factors influencing the level of food and agricultural prices; price trends and seasonal variation; methods of forecasting demand and prices; and futures trading.

Prerequisites
From: AGEC 317.
To: AGEC 314 and 317; junior or senior classification.

AGEC 314. Marketing Agricultural Products.

Course title
From: Marketing Agricultural Products.
To: Marketing Agricultural and Food Products.

Prerequisites
From: AGEC 105 or 3 hours of economics.
To: AGEC 105 or 3 hours of economics; junior or senior classification.
Report of the University Curriculum Committee
November 14, 2003
Page 8


Course title
From: Environment of Agribusiness
To: Agribusiness Management.

Prerequisites
From: AGEC 105 or 3 hours of economics.
To: AGEC 105 or 3 hours of economics; junior or senior classification.

AGEC 344. Agricultural Law.

Course title
From: Agricultural Law.
To: Food and Agricultural Law.

Prerequisite
From: Junior classification or approval of instructor.
To: Junior or senior classification, or approval of instructor.

AGEC 414. Agricultural Market Analysis.

Course title
From: Agricultural Market Analysis.
To: Agribusiness and Food Market Analysis.

Prerequisites
From: AGEC 317; MKTG 309 or 321.
To: AGEC 317; FINC 341; MKTG 321; junior or senior agribusiness majors only.

AGEC 440. Economics of Agribusiness.

Course title:
From: Economics of Agribusiness.
To: Agribusiness Strategic Analysis.

Prerequisites
From: AGEC 340; ECON 323; FINC 341; MGMT 363; MKTG 321.
To: AGEC 317 and 340; FINC 341; MGMT 363; MKTG 321; junior or senior agribusiness majors only.
College of Education and Human Development
  Department of Health and Kinesiology
    B.S. in Kinesiology
    All-level Physical Education Certification

6. Texas A&M University at Galveston

New Course

MARA 484. Management Internship. Credit 3 to 4. Internship in management: staffing, planning, organizing, leading and controlling. Enrollment is limited to those who have managerial responsibilities for the resources used by a business, non-profit, or other organization. Prerequisite: Approval of department head.

7. Special Consideration

College of Agriculture and Life Sciences
  Department of Agriculture Economics
    Certificate in International Trade and Agriculture

College of Agriculture and Life Sciences
  Department of Agricultural Education
    Minor in Agricultural Journalism
1. This request is submitted by the Department of Civil Engineering.

2. Course prefix, number and complete title: CVEN 403, Applied Civil Engineering Surveying

3. Course description (not more than 50 words): Application of land surveying principles; topographic surveying, boundary surveying, and construction staking through field exercises using state-of-the-art equipment and data capture/analysis techniques; preparation of topographic and boundary maps with related documents; presentation of results.

4. Prerequisite(s): CVEN 303

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 489/689? ☐ Yes ☐ No If yes, how many times? _____ Indicate the number of students enrolled for each academic period it was taught. 16 & 19

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)

B. S. in civil engineering

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)
    ---|---|---
    CVEN 403 | APPLIED C E SURVEYING |
    Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code |
    0 | 0 | 0 | 6 | 02 | - | 01 | 03 | 66 | Level |

Do not complete shaded area.

Approval recommended by: [Signature] 18 Sept. 2003
Head of Department

Chair, College Review Committee
Date

Head of Department (if cross-listed course)
Date

Dean of College
Date

Submitted to Coordinating Board by:
Dean of College
Date

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.
COURSE TITLE: Applied Civil Engineering Surveying. (0-6). Credit 2. Application of land surveying principles; topographic surveying, boundary surveying, and construction staking through field exercises using state-of-the-art equipment and data capture/analysis techniques; preparation of topographic and boundary maps with related documents; presentation of results. Prerequisite: CVEN 303.

COURSE DESCRIPTION: The goal of this surveying practical exercise at the undergraduate level is to expose the undergraduate students to a concentrated hands-on surveying experience through a two-week mini-semester that utilizes qualified survey crews and supervisors to help make the experience as practical as possible. Students will develop an understanding of how surveyors complete their work in the field and how engineers use the results of surveys in their civil engineering activities.

Professional engineers and licensed surveyors will assist with the course to make the experience more of a real world experience. The students will work in survey crews throughout the course.

COURSE LEARNING OBJECTIVES

1. The student will be able to complete a topographic survey using state-of-the-art equipment and develop a map of the area surveyed.
2. The student will be able to stake a construction site from drawings including tract boundary, streets, utilities, lots, and utility easements.
3. The student will be able to prepare a boundary survey map along with metes and bounds from survey data and deed descriptions.
4. The student will be able to prepare a topographic map of both improved and unimproved areas including drainage areas.
5. The student will be able to discuss typical problems encountered in surveying and how they affect civil engineering design.
6. The student will be able to discuss the value of surveying to the civil engineering profession.


COURSE CONTENT & ORGANIZATION:

This course will be taught as a “mini-semester” in a two week format, in a period between regular semesters, normally between the spring and summer semester.

1ST Monday (8 hrs)
General discussion of surveying profession and procedures. Develop plans for completing topographic surveys. Review construction layout plans. Training on software and refresher training on AutoCad.

1ST Tuesday (8 hrs)
Set baseline and start topographic survey of unimproved areas on Riverside Campus.

1ST Wednesday (8 hrs)
Complete topographic survey of unimproved areas and start topographic survey of dam, lake, and streams on Riverside Campus.

1ST Thursday (8 hrs)
Complete topographic survey of dam, lake, and conduct survey of improved areas on Riverside Campus.
1st Friday (8 hrs)
Use field data from boundary survey and deeds to reduce notes, plot deeds, and resolve boundaries. Briefing on licensing requirements for professional surveyors.

1st Saturday (6 hrs)
Finish boundary calculations, prepare boundary map, and finalize construction layout calculations. Prepare metes and bounds descriptions of boundary tracts; prepare utility easements.

2nd Monday (8 hrs)
Download data from data collection equipment, begin topographic maps from data collected, and calculate coordinates for construction layout.

2nd Tuesday (8 hrs)
Use plans and begin staking construction site on Riverside Campus.

2nd Wednesday (8 hrs)
Complete staking construction sites on Riverside Campus.

2nd Thursday (8 hrs)
Finalize topographic maps from data collected.

2nd Friday, 24 May (6 hrs) plus (2 hrs for exam)
Complete calculations and drawings. Final presentations and course examination.

GRADES:
Grades will be based on the following:

Field work Evaluations 30%
Drawing, Plots & Documents 30%
Presentation of Results 20%
Examination 20%

A - 90 or above
B - 80-90
C - 70-80
D - 60-70
F - less than 60

INSTRUCTORS:
Dr. Donald Maxwell
Dr. Roger Smith
Dr. Calvin Woods
Industry representatives will assist with both field and office work.

AMERICANS WITH DISABILITIES ACT (ADA)
The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 126 of the Koldus Building, 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 ____________________________

2. Course prefix, number and complete title: ____________________________

3. Course description (not more than 50 words): ____________________________

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.

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      Interdisciplinary Studies - Technology Management; Interdisciplinary Studies - Human Resource Development
   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)
    EHRD | 345 | COMP APPS FOR TRN & DEV

    Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code
    0 | 3 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 7 | 0 | 1 | 0 | 0 | 0 | 6 | 0 | 8 | 7 | 6 | 0 | 4 | 0 | 5 | 0 | 0 | 3 | 6 | 3 | 2

    Approval recommended by: ____________________________ Date: 10-29-03

    Head of Department ____________________________ Date: 10-29-03

    Chair, College Review Committee ____________________________ Date: 10-29-03

    Head of Department (if cross-listed course) ____________________________ Date: 10-29-03

    Dean of College ____________________________ Date: 10-29-03

    Submitted to Coordinating Board by: ____________________________ Date: ____________________________

    Director of Academic Support Services ____________________________ Date: ____________________________

    Effective Date ____________________________

* Attach a syllabus according to the guidelines on the Internet site eac.as.tamu.edu. To have this form reviewed, please send to Linda F. Lacey, Director of Academic Support Services, 1265 TAMU or fax to 847-8737.

OAR/AS-302
EHRD 345
Computer Applications for Training and Development

Instructor:
Larry M. Dooley
The Center for Distance Learning Research
Office Hours: By Appointment
Phone: 862-7574 (office)
E-mail: l-dooley@tamu.edu
URL: http://www.cdlr.tamu.edu

Teaching Assistants:

To Be Named
Office: The Center for Distance Learning Research
Office Hours: See the lab hours schedule!
Email:

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COURSE OBJECTIVE:

The primary objective of the course is to familiarize the student with computer applications in human resource development so the student can use this technology in solving organizational problems. The material in this course will provide opportunities for the student to identify and define problems, consider alternate solutions, and select and implement the optimal solution. Although not all solutions will involve computer applications, this course emphasizes how one can use technology as a problem-solving tool. After completing this course students will be able to apply computer technology to their own particular problems by using pre-written application-development software.

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COURSE APPROACH:

The primary source of course material is the textbook and class notes. I will place class notes, saved as pdf files, on electronic reserve at the library. It is your responsibility to download and print class notes before their scheduled class date in which they will be discussed. You are expected to have read the material before class and be prepared to discuss it during class. It is my hope that we can create a cooperative learning environment where everyone in the room contributes to the learning process. This will be a self-directed class so managing your time will be critically important.
COURSE MATERIALS:

TEXTBOOK (REQUIRED):

- 8 1/2" x 11" gray TAMU Measurement & Research Scantrons for each exam

It is important to check the class home page frequently to receive reminders, modifications, and other information about the course.

EXAMS

ALL exams are retained by the instructor and not returned to the student. Exam grades are FINAL one week after they are posted. Students may review the results of an exam within one week of posting of exam grades. Exams will consist of multiple-choice and/or true-false questions that cover material in the textbook, lectures and guest speakers. The major exams will be given during regularly scheduled class time on the days scheduled in the syllabus. Eligibility to take a make-up exam and the conditions applying to make-up exams are explained under Attendance Policy. All make up exams are of the essay/short answer type format.

COURSE GRADE:

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Second Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Quizzes/In class assignments</td>
<td>10%</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Semester Project</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Total Points</td>
<td>100%</td>
</tr>
</tbody>
</table>

The final grade breakdown will be as follows:

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = less than 60
HOMEWORK

Homework assignments are due at the beginning of class on the day scheduled. Assignments turned in after the due date/time are initially deducted 50% and then 10% each subsequent day, for a max of 3 days. No assignments will be accepted more than 3 days late. Homework grades are final one week after they are posted. Make up assignments are under the same conditions as exams.

QUIZZES/IN CLASS ASSIGNMENTS

During the semester there will be various quizzes and assignments that we will do in class. The quizzes/assignments will be at the end of class and will cover the material that should have been read for that day plus what we have covered that day. You should make every effort to be in class on time as the amount of time to take the quizzes/assignments will be limited. There is no make ups on any of these quizzes.

Course Outline:

<table>
<thead>
<tr>
<th>Class Date</th>
<th>TOPICS and/or Guest Speaker</th>
<th>ASSIGNED READINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week One</td>
<td>• Introduction and overview of the course</td>
<td>Chapter 1: Strategic Thinking</td>
</tr>
<tr>
<td></td>
<td>• Discussion of syllabus and course requirements</td>
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</tr>
<tr>
<td>Week Two</td>
<td>• Introduction to Microsoft Office Systems</td>
<td>Chapter 2: Personal Productivity</td>
</tr>
<tr>
<td>Week Three</td>
<td>• Introduction to Microsoft PowerPoint as a problem solving tool</td>
<td>Chapter 3: Solving Problems</td>
</tr>
<tr>
<td>Week Four</td>
<td>• Introduction to Microsoft Excel</td>
<td>Chapter 4: Operations and Transactions</td>
</tr>
<tr>
<td></td>
<td>• Chapter 5: Database Management</td>
<td></td>
</tr>
<tr>
<td>Week Five</td>
<td>• First Exam</td>
<td></td>
</tr>
<tr>
<td>Week Six</td>
<td>• Introduction to Microsoft Access</td>
<td>Chapter 6: Networks and Telecommunications</td>
</tr>
<tr>
<td>Week Seven</td>
<td>• Introduction to Microsoft Project</td>
<td>Chapter 7: Integration of Information</td>
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<tr>
<td>Week Eight</td>
<td>• Introduction to Microsoft FrontPage</td>
<td>Chapter 8: Models and Decision Support</td>
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<tr>
<td></td>
<td>• Chapter 9: Decisions in Business Arenas</td>
<td></td>
</tr>
<tr>
<td>Week Nine</td>
<td>• Second Exam</td>
<td>Chapter 10: Complex Decisions and Artificial Intelligence</td>
</tr>
<tr>
<td>Week Ten</td>
<td>• Advanced Problem Solving Techniques</td>
<td>Chapter 11: Strategic Analysis</td>
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<tr>
<td>Week 11</td>
<td>• Choosing the best software tool for the problem</td>
<td>Chapter 12: Systems Development</td>
</tr>
<tr>
<td>Week 12</td>
<td>• Guest Speaker demonstrating all the tools</td>
<td>Chapter 13: Organizing Information Systems Resources</td>
</tr>
<tr>
<td>Week 13</td>
<td>• Course summary &amp; Project presentation</td>
<td>Chapter 14: Information Management and Society</td>
</tr>
<tr>
<td>Week 14</td>
<td>• Final Exam</td>
<td></td>
</tr>
</tbody>
</table>

Please note that the above outline schedule is subject to change.
ATTENDANCE POLICY

The University views class attendance as a responsibility of the individual student. Students are expected to attend class and to complete all assignments on time, whether these are homework, exams, or projects. The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for any class absence or late assignment. If no evidence is available, the instructor will decide whether makeup work will be allowed. The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence. Please make yourself familiar with the University rules regarding notification for excused absences.

Absence Notification

The Department of Student Life in 320 YMCA Building provides instructors with prompt notification of student absences reported to them by parents and students. This office's telephone number is 845-3111, their FAX telephone number is 845-6138, and their email address is studentlife@tamu.edu. Immediately after being notified, the Department of Student Life prepares a memorandum that is sent to ALL of your instructors. This notification provides: (1) the date of notification, (2) the nature of notification (telephone call, official correspondence, etc.), (3) general information regarding the reason for missing class (death in immediate family, medical reasons, etc.), and (4) the dates that you are expected to miss class. You are strongly encouraged to take advantage of this service which precludes you from individually notifying each of your instructors when you will be absent from class. For more information on this service, visit their web site. Immediately upon returning from an absence that coincides with an assignment due date or examination date, you are requested to contact me personally or by email to make arrangements to make-up the missed work.

SCHOLASTIC DISHONESTY

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 should have the permission of that person. Plagiarism is one of the worst academic sins.

If it appears that you have been scholastically dishonest on an exam or assignment, your instructor will take the most extreme measures as specified by university policy. You should read the current Official TAMU University Regulations regarding Scholastic Dishonesty to be familiar with the seriousness with which TAMU views this matter.

DISABILITIES

The Office of Support Services for Students with Disabilities coordinates Texas A&M University's programs and efforts for the benefit of disabled students. Students who have documented disabilities or believe they have a disability should be referred to Support Services for Students with Disabilities. This office has the responsibility for verifying the existence of a disability and for suggesting what accommodations or modifications are appropriate. When there is a need for accommodation of a student's academic program, Support Services for Students with Disabilities will contact the student's classroom instructors regarding this need and direct the student to work directly with the classroom instructors to work out specific arrangements. You should notify your instructor within the first week of the semester if this applies to you.
COPYRIGHT OF DOCUMENTS

All documents, including handouts, used in this course are to be considered copyrighted. By "handouts," I mean all materials generated for the class, which include but are not limited to the syllabus, quizzes, exams, lab problems, in-class materials, review sheets, presentations, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.
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 ________________________________ .

2. Course prefix, number and complete title: ________________________________

3. Course description (not more than 50 words): ________________________________

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. ________________________________

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      Interdisciplinary Studies - Technology Management; Interdisciplinary Studies - Human Resource Development
   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)

    EHRD 435 Intro APP Stat METHODS

    Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code

    0 3 0 0 3 2 7 0 5 0 1 0 1 0 0 1 0 8 7 6 0 4 0 5 0 0 3 6 3 2

    Do not complete shaded area.

    Approval recommended by: ________________________________ Date: 10-29-03 ________________________________ Date: 10-29-03

    Head of Department ________________________________ Chair, College Review Committee ________________________________

    Head of Department (if cross-listed course) ________________________________ Date: 10-29-03 ________________________________ Date: 10-29-03

    Dean of College ________________________________ Date: ________________________________ Date:

    Submitted to Coordinating Board by: ________________________________ Date:

    Director of Academic Support Services ________________________________ Date: ________________________________ Effective Date:

* Attach a syllabus according to the guidelines on the Internet site oar.as.tamu.edu. To have this form reviewed, please send to Linda F. Lacey, Director of Academic Support Services, 1265 TAMU or fax to 847-8737.
EHRD 435
Introductory Applications of Statistical Methods in HRD
3 credits

Dr. Gonzalo Garcia

Course Description: This is a beginning level introductory quantitative course that focuses on the application of basic statistical methods in HRD.

Course Objectives: At the completion of this course, students will be able to:
1. compute and interpret basic descriptive statistics.
2. compute, understand, and interpret measures of correlation and simple linear regression.
3. understand the logic and steps of the hypothesis testing process.
4. compute, understand and interpret one and two sample inferential, hypothesis testing statistics.
5. understand and interpret one-way analysis of variance.

Course Text:
Required:

Course Requirements:
1. Attend and participate fully in all class sessions
2. Read all assigned chapters and handout material
3. Perform all homework assignments
4. Satisfactorily complete all in-class examinations
5. Satisfactorily complete an end of course final examination

Course Grade Determination:
Final grade for the course will be determined as follows:

Assigned Homework 20%
In-class Exams (3 @ 20 % each) 60%
Final Exam 20%

Total 100%

Dr. Garcia
845-9692

EHRD 489 Introductory Applications of Statistical Methods in HRD

Topical Course Outline

<table>
<thead>
<tr>
<th>Topics</th>
<th>Date</th>
<th>Assignment</th>
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</thead>
<tbody>
<tr>
<td>1. Introduction to Statistical Terminology</td>
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<tr>
<td>Basic Arithmetic Operations, Variables,</td>
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<tr>
<td>Order of Operations, Summation</td>
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<tr>
<td>2. Variables, Measurement scales</td>
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<tr>
<td>3. Frequency Distributions and Graphs</td>
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<td>4. Measures of Central Tendency (mode, median, mean)</td>
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<td>5. Measures of Variability (range, standard deviation, variance)</td>
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<td>6. Measures of Variability (continued)</td>
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<tr>
<td>in class exam #1</td>
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<td>7. Normal Distribution and Z scores</td>
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<td>8. Correlation (Pearson product moment)</td>
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<td>9. Correlation (continued), Spearman and other correlations</td>
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<tr>
<td>10. Simple Linear Regression</td>
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<td>in class exam #2,</td>
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<tr>
<td>11. Statistical Inference: Sampling &amp; Interval Estimation</td>
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<td>12. Scientific and Statistical Hypotheses</td>
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<tr>
<td>13. Two Sample t-test for independent &amp; dependant samples</td>
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<tr>
<td>in-class exam #3</td>
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<tr>
<td>14. Basic Concepts of Analysis of Variance &amp; One-way Analysis of Variance</td>
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</table>

Final Exam

Americans with Disabilities Act
The Americans with Disabilities Act (ADA) is a federal anti discrimination 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 accommodation, please contact the Office of Support Services for Students with Disabilities in Room 126 of the Student Services Building. The phone number is 845-1637.

Faculty Senate Statement on Plagiarism

The handouts used in this course are copyrighted. By “handouts” I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission. 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 should 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 questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules under the section “Scholastic Dishonesty.”

Sexual Harrassment

Texas A&M University policy prohibits sexual harassment. Copies of this policy statement on sexual harassment are available. Complaints about sexual harassment should be reported to the EAHR Department or University Human Resources.

Make-Up Examinations/Assignments

There is a one-week make-up policy regarding examinations and assignments in cases where there is an officially documented emergency.
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 Educational Administration & Human Resource Development

2. Course prefix, number and complete title EHRD 481 - Human Resource Development Seminar

3. Course description (not more than 50 words)  Transition from an academic environment to a professional business environment, preparation of an individual professional portfolio, and steps in searching and securing an internship position.

4. Prerequisite(s) Junior Classification or Above 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)
      Interdisciplinary Studies - Technology Management; Interdisciplinary Studies - Human Resource Development
   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) EHRD 481 HRD DEVELOPMENT SEMINAR

<table>
<thead>
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<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:  

Head of Department 10-29-03

Chair, College Review Committee 10-29-03

Dean of College 10-29-03

Submitted to Coordinating Board by: Dean of College Date

Director of Academic Support Services Date Effective Date

* Attach a syllabus according to the guidelines on the Internet site oeas.tamu.edu. To have this form reviewed, please send to Linda F. Lacey, Director of Academic Support Services, 1265 TAMU or fax to 847-8737.
EHRD 481: Human Resource Development Seminar 
Human Resource Development or Technology Management

Texas A&M University


Instructor Information:
Dr. Jessica Li
Clinical Assistant Professor
Human Resource Development Program
Texas A&M University
559 Harrington Tower – EAHR TAMU 4226
College Station, Texas 77843
Ph# 979-854-8031
Fax# 979-862-4347
e-mail: jli@cdlr.tamu.edu

Course Description:
This course is designed to prepare students to fulfill the internship requirements of the undergraduate level for both the Technology Management and the Human Resource Development majors of the Bachelor of Science Degree in the Department of Educational Administration and Human Resource Development, College of Education.

This course is aimed at helping students making a smooth transition from an academic environment to a professional business environment. It will guide students through the process of preparing an individual professional portfolio. It will also lead students to take necessary steps in searching and securing an internship position. However, students are responsible for completing the required assignments; make necessary contacts; following up with the search to secure their own internship positions.

Course Objectives:
By the end of this course, students should be able to:

1. Understand what is a professional portfolio
2. Complete their own individual professional portfolio
3. Identify key preparations for a successful interview
4. Identify steps needed to conduct job search and secure an internship position
Prerequisites:
This course should be taken one semester prior to your internship program. Approval of your departmental advisor is required.

Required Texts
Currently, we have no required texts assigned to this course. Handouts and reading materials will be handled at each class meeting.

Additional Resources
Texas A & M University Career Center
http://careercenter.tamu.edu

Career Planning and Campus Recruiting Guide
By Career Center,
Texas A&M University

Career Journal
http://www.careerjournal.com

Monster.com
http://www.monster.com

Course Assignments and Requirements:
Each class member is expected to accomplish the following assignments:

1. Visit the Career Center office or explore Career Center Website to familiar yourself with the services the Career Center has to offer.

2. Sign up for On-Campus Interviewing and the Job Search at the Career Center.

3. Select and attend 8-9 workshops offered by the Career Center (include Job fairs). However, you need to take at least 6 workshops. At end of the each workshop you need to have the workshop facilitator sign your worksheets for approval of completion. – 30 points

4. Complete individual professional portfolio. – 30 points

5. Send out at least 10 inquire letter to companies of your choice with your portfolio attached. If you like to target at one or a couple of companies for a good reason, you need to discuss with me about this and this requirements can be waived. – 10 points

6. Target at least getting two site visits (interviews). However, if you accepted an offer for an internship, you need to inform the rest of companies who are interested in meeting with you about your decision. – 30 points
Meeting Schedule:

As a Directed Study course, the class will meet four times during the semester. However, I will make myself available as often as possible. The session on Advising and Office Hours will provide details on how to schedule additional meetings with me.

Below is a summary of what we plan to accomplish in these meetings.

<table>
<thead>
<tr>
<th>Class Date</th>
<th>Topic</th>
<th>Readings/Assignments</th>
</tr>
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</table>
| Sep 30     | Introduction to the class  
- Discuss course objectives  
- Discuss course requirements and assignments  
- Discuss course schedule  
- Other items on the Syllabus | Stop by the Career Center Office or explore the Career Center website and familiar with the service the Career Center has to offer  
Sign up for the Career Center Job Search Database  
Select at least 6 workshops from the Career Center and 3 job fairs which you would like to attend and schedule them in your calendar |
| Oct 21     | Review completion of requirements and assignments from last time  
Introduction on Professional Portfolio  
Identify Career Inspiration | Prepare individual professional portfolio – Items may be considered in your portfolio:  
- Summary of college classes  
- Thank you notes, or notes of appreciation  
- Performance evaluations/letters of reference  
- Certificates for completion of training or workshops  
- Photos of products you created or helped create  
- Articles about programs you worked on  
- Activity or membership in professional organizations  
- Writing samples (articles, proposals, scripts, training materials, papers)  
- Flow charts, diagrams, project plans  
- Printout from a database you designed  
- Brochures describing training events, retreats, workshops, etc.  
- Licenses, certifications  
- Samples from classes (papers, projects, reports, displays, video or computer samples)  
- Community service projects  
- Military records, awards, badges  
- Products showing your leadership qualities (mission statements, agendas, networks)  
- Evidence of public speaking (membership in Toastmasters, photograph of you at podium, speech |
| Nov 11 | Review steps in a successful job search  
|  | How to plan for job search |
|       | Attend workshops as scheduled |
|       | Identify Companies or industries you would like to target for your job search |
|       | Plans for job search |
|       | Send out letters and your professional portfolio to targeted companies and follow up as planned. |
|       | Prepare for job interviews |
| Dec 16 | Final Review of the progress made in preparation for internship |

**Incomplete**

Due to the nature of this course, you need to finish your assignments in a timely fashion. It is critical that you complete your professional portfolio before you start contacting companies. Often, job search takes time, if you didn’t leave you enough time for companies to review your requests, you won’t be able to schedule site visits within the time frame. Therefore, complete all your necessary assignment within schedule is important for your successful completion of this course requirements. However, I do realize that extreme circumstances require that students occasionally take an incomplete. If you feel that you cannot meet the class requirements by the end of the semester, you should contact me as soon as possible.

Texas A&M University policy requires that grades submitted as incomplete (I) be converted to a letter grade no later than the end of the semester following the semester in which the course was taken. If the coursework has not been completed and, therefore, a grade change is not submitted, the "I" automatically converts to an "F". My policy is that I will not consider converting an "F" to another letter grade if the coursework to complete the class was not turned in by the last class day of my class in the semester following the semester in which the course was taken.

EHRD 485

Jessica Li, 2003
Grading

The grades for this course will be based on the number of points you receive for each of the graded areas. The total possible points are 100.

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Numerical Score</th>
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<tr>
<td>A</td>
<td>90-100</td>
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<td>B</td>
<td>80-90</td>
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<tr>
<td>C</td>
<td>70-80</td>
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<tr>
<td>D</td>
<td>60-70</td>
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<tr>
<td>F</td>
<td>60 or below</td>
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</table>

Advising and Office Hours:

My goal is to be as available as possible to meet your needs during the semester. There are three basic ways you can reach me:

- E-mail: This is the best way to contact me. I check e-mail frequently and, unless I am out of town, I will usually respond to your e-mail within 24 hours.
- In Person: Although I will try to make myself available to you if you ‘drop by’, please do not expect a substantive conversation; I may have other commitments. I am available for appointments, however, and will be happy to meet with you in person.
- Phone: If you are just trying to contact me, the phone is perhaps the least reliable mechanism since I often overlook my voice mail! However, I do try to check voice mail several times each week. I am happy to do advising by phone and will make appointments to do so.
Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 Office of Support Services for Students with Disabilities in Room 126 of the Koldus Building. The phone number is 979-845-1637.

Individuals who have any disability that might affect their ability to perform in this class are encouraged to inform the instructor at the start of the course. Adaptation of methods, materials, or testing may be made as required to provide for equitable participation.

Scholastic Misconduct

Texas A&M University encourages Academic Integrity and strictly enforces policies against any form of scholastic dishonesty or misconduct. Scholastic misconduct is broadly defined by this university as “any act that violates the rights of another student in academic work or that involves misrepresentation of your own work is considered scholastic misconduct.” Scholastic dishonesty includes, but is not necessarily limited to:

- Cheating on assignments or examinations;
- Plagiarizing, which means misrepresenting someone else’s work as your own, or submitting the same paper or substantially similar papers to meet the requirements of more than one course without the approval of all involved instructors;
- Interfering with another student’s work;
- Depriving another student of necessary course materials.

Any student who engages in scholastic misconduct will be subject to University disciplinary action. Please review the Student Rules at http://student-rules.tamu.edu for more information regarding these policies.

Guidelines for Written Assignments

Written assignments should follow the below guidelines as a minimum, unless alternative arrangements are made with the instructor:

- Use APA formatting for your papers. Either 4th or 5th edition is acceptable.
- Papers should be stapled in the upper left corner (please do not use folders, covers, etc.)
- Please double-space, use 12-point font, and left justify your papers

For additional assistance, please contact the Writing Center on the 2d floor of Evans Library or consult the Writing Center website at http://uwcenter.tamu.edu.

Some basics you should consider in all written assignments:

- Have a clear and concise thesis statement very near the beginning of your paper. Thesis statements in the social sciences are somewhat different than what you might have experienced in the humanities. While in the humanities the general preference is to make the thesis statement blend seamlessly with the introduction, the general preference in the social sciences is to make the thesis statement stand out very clearly in articulating the purpose of the paper. In many cases, thesis statements begin with phrases such as, “The purpose of this paper is” or “In this paper, I will.”
• If a sentence requires more than four lines, it is probably too long. Break it up into two or more sentences.
• If a paragraph takes up more than one computer screen or more than half of a double-spaced page, it is probably too long. Break it down into two or more paragraphs. I suggest that you try to have a minimum of three sentences per paragraph.
• Proofread before you turn in any materials. If you find a typing error, at least make the correction with a pen or pencil. If errors become distracting, your grade will suffer.
• Follow basic grammar guidelines. For example, be sure that your sentences have subject-verb and tense agreement and that you are using punctuation appropriately. Do not trust blindly the spell and grammar checkers on your word processor; they are often incorrect!
• Make effective use of structuring techniques for your paper. Academic papers should be written in a professional, formal manner. (Note: This does not mean that you cannot use “I” in your papers. See the APA manual for guidelines on when and how to use “I” in your writing.) Every paper should have a beginning, a middle, and an end. Help the reader understand the structure of your paper by including appropriate headings (e.g., Literature Review, Conclusion).
  o The introduction informs the reader where you are going by introducing the main points. It is the “roadmap” for the rest of the paper and should include the thesis statement.
  o The body of the paper often contains separate sections for each of the main points. In these sections, each of the points is explained in detail and, in particularly long papers, separate headings are even used for each point.
  o The conclusion or summary of the paper should summarize how the points you developed in the body of the paper support the main points you described in the introduction. Just as its name suggests, the summary ‘sums up’ your paper by tying it all together.
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 course is submitted by the Department of EDUCATIONAL PSYCHOLOGY
2. Course prefix, number and complete title of course: Epsy 430 – Creativity Theories and Research
3. Course description (not more than 50 words): Theoretical base of creativity and the research methodologies used to study creativity.
4. Prerequisite(s) Junior or senior classification.
5. Is this a variable credit course? Yes X No If yes, from __________ to __________
6. Is this a repeatable course Yes X 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 X 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)
      Undergraduate General Academic (required for Creative Studies minor)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      Undergraduate General Academic
9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

<table>
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<th>Prefix</th>
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<td>430 CREATIVITY THEORY RESEARCH</td>
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<th>Academic Year</th>
<th>FICE Code</th>
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<td>1 0 3 6 6</td>
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</tr>
</tbody>
</table>

Approval recommended by:

[Signature]

Head of Department Date

[Signature]

Chair, College Review Committee Date

[Signature]

Dean of College Date

Submitted to Coordinating Board by:

[Signature]

Dean of College Date

Director of Academic Support Services Date Effective Date

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

OAR/AS-697
TEXAS A&M UNIVERSITY
College of Education
Department of Educational Psychology

COURSE OUTLINE and SYLLABUS
EPSY 430 Creativity Theories and Research

Instructor:

Dr. Joyce E. Juntune
Office 704H Harrington
Office phone: 845-1873
e-mail: j-juntune@tamu.edu

Textbooks:

Sternberg, R. J.(Ed.). (1999). Handbook of creativity,

Selected readings from other professional works.

Course Purpose: A study the theoretical base of creativity and the research methodologies used to study creativity.

Course Objectives:

1. To gain an understanding of the various research methodologies used in the study of creativity.

2. To build an understanding of the underlying theories in the field of creativity.

3. To develop an appreciation for the workings of creativity within and outside of the field of visual and performing arts.

4. To become aware of the differences and similarities in an understanding of creativity across cultures.

Prerequisites: Junior or Senior Classification
Course Requirements:

Attendance - Attendance is required and necessary for your understanding of the material; as well as, to gain feedback on course assignments. Attendance requirements will follow the guidelines for attendance set forth by Texas A&M University. Your attendance grade will also be determined by your completion of reading assignments and participation during in-class assignments.

Research Analysis Paper - Each student will be asked to read 3 research articles related to a particular area of interest within the field of creativity. Each article must be based on a different research methodology. Each student will complete a 5–7 page (1500–2100 word) discussion paper on the findings of the studies and an analysis of the choice and effectiveness of the various research methods. The paper will require adherence to the APA Style format.

Creativity Timeline - Each student will develop a timeline of the development of creativity across the decades. Information for this timeline will come from the readings and additional research. The timeline must include important events/research/theorists in the field of creativity with a brief explanation of the contribution made at the time noted on the timeline.

Reflection Journal - Beginning the first day of class, each student is to keep a journal in which s/he can record questions/thoughts regarding creativity. These questions or thoughts might arise as a result of course readings, class discussions, or during times of incubation. Students will be asked periodically to share some of their questions or thoughts with the class. The purpose of the journal is to lead to a focus of area of creativity that might be of interest in your own future study and practice of creativity.

Assignments and Grading:

Attendance & Reading Synthesis Assignments .................. 15%
Creativity Timeline ..................................................... 30%
Research Analysis Paper ........................................... 30%
Reflection Journal ..................................................... 15%
Students with Disabilities Act

"The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 Office of Support Services for Students with Disabilities in Room 126 of the Student Services building. The phone number is 845-1637."

Academic Honesty

As commonly defined, plagiarism consists of passing off as one’s own words, writings, etc., which belong to another. Therefore, 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. In addition, all materials generated for this class are copyrighted. As such, you do not have the right to copy the handouts, unless I specifically grant permission. If you have any questions concerning plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section entitled “Scholastic Dishonesty.”

Students with Special Needs

Any student who could require assistance in the event of a necessary evacuation of the building in which this class is taught are asked to notify the instructor so that individuals can be identified to assist him/her during an evacuation.
COURSE SYLLABUS:

WEEK 1

- Introduction to creativity and related researchers
- What is your view of creativity?
- What is your background in creativity?

WEEK 2

Assignments: Read Sternberg, chap 1 & 2

- Paradigms of creativity
- Creativity over time

WEEK 3

Assignments: Read Sternberg, chap 7

- Biological foundations for creativity

WEEK 4

Assignments: Read Sternberg, chap 8 & 9

- The evolving development of creativity
- Creativity and development issues

WEEK 5

Assignments: Read Sternberg, chap 3 & 4

- Psychometric approaches to creativity
- Experimental studies in creativity

WEEK 6

Assignments: Read Sternberg, chap 5 & 11

- The case study approach to creativity
- Qualitative studies in creativity
WEEK 7
Assignments: Read Sternberg, chap 16
  • A systems approach to the study of creativity

WEEK 8
Assignments: Read Sternberg, chap 6
  • Creativity from the Historiometric Perspective

WEEK 9
Assignments: Read Sternberg, chap 1 & 2
  • Paradigms of creativity
  • Creativity over time

WEEK 10
Assignments: Read Sternberg, chap 10 & 13
  • Creative cognition
  • Creativity and intelligence

WEEK 11
Assignments: Read Sternberg, chap 12 & 22
  • 50 years of creativity research
  • Challenging the theorists

WEEK 12
Assignments: Read Sternberg, chap 17
  • Creativity across cultures

Research Analysis
Paper Due
WEEK 13

Assignments: Read Sternberg, chap 17

- Organizational creativity
- Enhancing creativity

WEEK 14

Assignments: Read Sternberg, chap 24

- Prodigies and creativity
- Looking back over the semester
- Looking ahead to future studies

Reflection Journals
Due with area of future focus
References


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 course is submitted by the Department of EDUCATIONAL PSYCHOLOGY

2. Course prefix, number and complete title of course: EPSY 431 - PERSONAL CREATIVITY AND GIFTEDNESS

3. Course description (not more than 50 words): Personal giftedness and creativity and its inter-relativity with development, relationships, and learning.

4. Prerequisite(s) Junior or senior classification.

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

6. Is this a repeatable course Yes X 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 X 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) Undergraduate General Academic (required for Creative Studies minor)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography) Undergraduate General Academic

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. 

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Do not complete shaded area.

Approval recommended by:

O. L. Williams 10/28/03
Head of Department Date

Chair, College Review Committee 10-27-03
Date

Dean of College 10-29-03
Date

Submitted to Coordinating Board by:

Dean of College Date

Director of Academic Support Services Date Effective Date

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

OAR/AS-697
Instructor:

Dr. Joyce E. Juntune
Office 704H Harrington
Office phone: 845-1873
e-mail: j-juntune@tamu.edu

Textbooks:


Selected readings from other professional works.

Course Purpose: A study of personal giftedness and creativity and how it interrelates with development, relationships and learning.

Course Objectives:

1. To gain an understanding of the stages and processes experienced during the growth and development a gifted and creative person.

2. To build an understanding of the interrelationship of levels of giftedness and creativity with human development.

3. To develop an appreciation for the perspective of a gifted and creative person on learning and life issues.

4. To become aware of the difficulties encountered by gifted and creative people in the education and work arenas.

Prerequisites: Junior or Senior Classification
Course Requirements:

Attendance - Attendance is required and necessary for your understanding of the material, as well as, to gain feedback on course assignments. Attendance requirements will follow the guidelines for attendance set forth by Texas A&M University. Your attendance grade will also be determined by your completion of reading assignments and participation during in-class assignments.

Literature Analysis Paper - Each student will be asked to conduct a basic literature review of sources related to a particular area of interest within the field of giftedness and creativity. As a result of this research, each student will complete a 5-7 page (1500-2100 word) paper that is a synthesis of your understanding of the research information. The paper will require adherence to the APA Style format.

In-depth study of a gifted/creative person - Each student will be study the life of a gifted/creative person. This person can be someone you know, yourself, or a person you can learn about through reading a biography or autobiography. The purpose of this assignment is to identify the elements of giftedness and creativity covered during the course and find examples of ways this person’s life aligned with the topics covered in the course. The findings will be provided to the class in the form of a chart, PowerPoint presentation, poster, or visual means of your choosing.

Reflection Journal - Beginning the first day of class, each student is to keep a journal in which s/he can record questions/thoughts regarding giftedness and creativity. These questions or thoughts might arise as a result of course readings, class discussions, or during times of incubation. Students will be asked periodically to share some of their questions of thoughts with the class. Some of your reflections will be private. You will not be asked to share thoughts that are very personal to you.

Assignments and Grading:

Attendance & Reading Synthesis Assignments ..................... 15%
In-depth Study of Gifted/Creative Person .......................... 30%
Literature Analysis Paper .............................................. 30%
Reflection Journal ...................................................... 15%
WebCT:

This course will rely on WebCT and e-mail for communication outside the classroom, as well as for the submission of certain assignments. Make sure that you are familiar and comfortable with the use of WebCT.

----------------------------------------

- Students with Disabilities Act

"The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 Office of Support Services for Students with Disabilities in Room 125 of the Student Services building. The phone number is 845-1637."

- Academic Honesty

As commonly defined, plagiarism consists of passing off as one's own words, writings, etc., which belong to another. Therefore, 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. In addition, all materials generated for this class are copyrighted. As such, you do not have the right to copy the handouts, unless I specifically grant permission. If you have any questions concerning plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section entitled "Scholastic Dishonesty."

- Students with Special Needs

Any student who could require assistance in the event of a necessary evacuation of the building in which this class is taught are asked to notify the instructor so that individuals can be identified to assist him/her during an evacuation.
COURSE SYLLABUS:

WEEK 1 ---------------------------------------------

Session 1
An introduction to creativity and giftedness.
Purpose for studying giftedness and creativity.

Session 2
Emotional development of gifted and creative people
Identifying overexcitabilities in gifted and creative people

Assignment:
- Read: (special reading) SILVERMAN - The Gifted Individual, from
  Counseling the Gifted and Talented

WEEK 2 ---------------------------------------------

Session 1
What makes a person gifted?

Assignment:
- Read: STREZNEWSKI - chap 1

Session 2
How does the gifted brain work?

Assignment:
- STREZNEWSKI - chap 2

WEEK 3 ---------------------------------------------

Session 1
The tangling of giftedness and creativity
Feldman’s gambit
Csikszentmihalyi’s Big C and little c

Assignment:
- Read: PIIRTO - chap 1, pg. 1-18

Session 2
Creative people and creative products
The domains of creativity

Assignment:
- Read: PIIRTO - chap 1, pg. 19-42

Be sure to choose the person you will focus on for your in-depth study this semester.
**WEEK 4**

Session 1
Masking your giftedness and creativity

Assignment:
- *STREZNEWSKI* - chap 3

**Session 2**
The role of the family in the blossoming of giftedness and creativity

Assignment:
- *STREZNEWSKI* - chap 4

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**WEEK 5**

Session 1
The role of formal education in the blossoming of giftedness and creativity

Assignment:
- *STREZNEWSKI* - chap 5

**Session 2**
The differences in home and school support for giftedness and creativity

Assignment:
- Bring examples from your “in-depth person” study that illustrate positive and/or negative influences from the home and school

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**WEEK 6**

Session 1
Giftedness and creativity—children to young adults

Assignment:
- *STREZNEWSKI* - chap 6

**Session 2**
The desire for challenging and meaningful work

Assignment:
- *STREZNEWSKI* - chap 7
WEEK 7

Session 1
Traditional theories of the creative process

Assignment:
- Read: PIIRTO - chap 2, pg 43 - 53

Session 2
Newer theories of the creative process

Assignment:
- Read: PIIRTO - chap 2, pg 54 - 76

WEEK 8

Session 1
Mixing the new and the old creative processes
What works when and which situations

Assignment:
- Find examples of the creative process at work

Session 2
Examining your own creative processes

Assignment:
- Try a creative process this week that is new to you. Share your experience with the class.

WEEK 9

Session 1
Creativity in the visual domain

Assignment:
- Read: PIIRTO - chap 5, pg 131 - 147

Session 2
Studies of visual artists

Assignment:
- Read: PIIRTO - chap 5, pg 148 - 170
WEEK 10

Session 1
Creativity in the semantic domain

Assignment:
• Read: PIIRTO – chap 6

Session 2
Studies of creative writers

Assignment:
• Read: PIIRTO – chap 7

WEEK 11

Session 1
Creativity in the math/science domain

Assignment:
• Read: PIIRTO – chap 8, pg. 225 – 243

Session 2
Studies of creative mathematicians and scientists

Assignment:
• Read: PIIRTO – chap 8, pg 244 – 262

WEEK 12

Session 1
Creativity in the domain of music

Assignment:
• Read: PIIRTO – chap 9

Session 2
Creativity in the domain of physical performance

Assignment:
• Read: PIIRTO – chap 10
WEEK 13

Session 1
The difficulties faced by creative and gifted people

Assignment:
  - Read: STREZNEWSKI – chap 8

WEEK 14

Session 1
Understanding the bigger picture

Assignment:
  - Come prepared to share insights from your literature analysis

Session 2
The value of being gifted and creative

Assignment:
  - Read: STREZNEWSKI – chap 12
References


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 course is submitted by the Department of ____________________________
   EDUCA TIONAL PSYCHOLOG Y

2. Course prefix, number and complete title of course: EPSY 432 - Creativity and Creative Problem Solving

3. Course description (not more than 50 words): Creativity research, historical background and application of the framework and tools of the Parnes/Osborn Creative Problem Solving Process.

4. Prerequisite(s) Junior or senior classification.

5. Is this a variable credit course? Yes X No If yes, from _____________ to ____________

6. Is this a repeatable course Yes X 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 X 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)
      Undergraduate General Academic (required for Creative Studies minor)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      Undergraduate General Academic

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)
    EPSY 432 CREATIVITY PROBLEM SOLV

    Lect. Lab SCH Subject Matter Content Code Admin. Unit Academic Year FICE Code
    03000342180100409200405010366

    Approval recommended by:
    C. L. Pasztor 10-29-03
    Chair, College Review Committee Date

    Head of Department (if cross-listed course) Date
    Dean of College

    Submitted to Coordinating Board by:
    Dean of College Date

    Director of Academic Support Services Date Effective Date

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

OAR/AS-697
TEXAS A&M UNIVERSITY
College of Education
Department of Educational Psychology

COURSE OUTLINE and SYLLABUS
EPSY 432: Creativity and Creative Problem Solving

Instructor:

Dr. Joyce E. Juntune
Office: 704H Harrington
Office phone: 845-1873
e-mail: j-juntune@tamu.edu

Textbooks:

Dubuque, IA: Kendall/Hunt Publishing.

Parnes, S. J. (1997). *Optimize the magic of your mind*

Selected readings from other professional works.

Course Purpose: A general study of the emerging field of creativity research.
with specific attention given to the historical background
and application of the framework and tools of the
Parnes/Osborn Creative Problem Solving Process.

Course Objectives:

1. To gain an understanding of the historical background and international
impact of creativity and the Creative Problem Solving Process.

2. To build an understanding of the tools and techniques used within the
framework of the Creative Problem Solving Process.

3. To develop an appreciation for the current issues and applications
addressed by the Creative Studies scholars.

4. To gain the experience and skills needed to apply the creative Problem
Solving Process to a variety of situations.

Prerequisites: Junior or Senior Classification
Course Requirements:

- **Attendance** - Attendance is required and necessary for your understanding of the material; as well as, to gain feedback on course assignments. Attendance requirements will follow the guidelines for attendance set forth by Texas A&M University. Your attendance grade will also be determined by your completion of reading assignments and participation during in-class assignments.

- **Literature Analysis Paper** - Writing is necessary for a more successful organization of the knowledge that has been gained as well as produced as a result of the course material. Each student will be asked to conduct a basic literature review of sources related to a particular area of interest within the field of creativity. As a result of this research, each student will complete a 5–7 page (1500–2100 word) paper that is a synthesis of your understanding of the research information. The paper will require adherence to the APA Style format.

- **Facilitation Project** - Each student will be expected to facilitate a Creative Problem Solving Session with a group of people familiar to the student. It is recommended that this group be limited to 5–7 people. The purpose of this project is to facilitate the entire CPS process with a group of people who are not familiar with the process. The problem must be owned by at least one person in the group, but all group members should be interested in the problem’s outcome. A written debrief/reflection of the session will be turned in following the session. The written debrief is to include (1) a detailed summary of what happened during each stage of the CPS Process, and (2) reflections (and suggestions for improvement) of your facilitation skills with regards to the CPS Process.

- **Creativity Learning Journal** - Beginning the first day of class, each student is to keep a journal in which s/he can record questions/thoughts regarding creativity. These questions or thoughts might arise as a result of course readings or during incubation periods such as taking a shower. This journal will serve as the backbone for your implicit theory or theories that you formulate during the semester. Each student should have at least 3 entries per week.

- **Implicit Theory Paper** - As the Knowledge Age approaches production of new knowledge will become the determining factor of a person’s success. To produce new knowledge one must have a personal understanding of what creativity means to them. Without any assistance from literary sources, other people, or personal notes, each student will be asked to complete a paper that explains a particular theory that has been personally formulated by you with relation to the field of creativity research. This paper will have a time limit and must be at least 300 words long. There will be no maximum length requirements.
Grading:

Attendance ........................................ 20%
Facilitation Project ............................. 25%
Literature Analysis Paper ..................... 20%
Creativity Learning Journal ................... 10%
Implicit Theory Paper .......................... 25%

WebCT:

This course will rely on WebCT and e-mail for communication outside the classroom, as well as for the submission of certain assignments. Make sure that you are familiar and comfortable with the use of WebCT.

Students with Disabilities Act

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Students with Special Needs

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COURSE SYLLABUS:

WEEK 1

Session 1
An introduction to the understanding of creativity through the 4Ps.

Assignments:
- Read: DAVIS - pp. 39 - 49 (stop at Classic Theories of Creativity)
- Formulate your personal definition of creativity and bring to next class

Session 2
Exploring everyone's personal definitions of creativity.
Understanding implicit theories of creativity.
Warm-up exercise to creative process.

Assignments:
- Read: DAVIS - pp. 49 - 63 and pp. 113 - 132
- Read: PARNES - pp. 1 - 8 "An overview"

WEEK 2

Session 1
Class discussion on the creative process.
Revisiting the warm-up exercise from the previous class.
Understanding that every problem has multiple solutions.
Specifically understanding the framework of the Creative Problem Solving (CPS) Process.

Assignments:
- Read: DAVIS - pp. 19 - 31
- Read: PARNES - pp. 44 - 54 "How do we overcome our blocks?"

Session 2
Class discussion on barriers, blocks, and idea squelchers.
Understanding the very important phrase "Defer Judgment".
Exploring the guidelines to Divergent Thinking.

Assignments:
- Read: PARNES - pp. 55 - 65 "Completing the creative process - From ideas to action!"
- Incubate and synthesize the information you have gained thus far
- Don't forget about your Creativity Journals
- Begin research on Literature Analysis Paper
WEEK 3

Session 1
Understanding Convergent Thinking.
Why must we converge for CPS to work?
Exploring the guidelines to Convergent Thinking.

Assignments:
- Read: DAVIS - pp. 73 – 105

Session 2
Class discussion: “Are all people creative.”
Understanding your own creative attributes.
Revisiting the CPS Process Framework for next week.

Assignments:
- Read: PARNES - pp. 66 – 71 “Warming up to the full process”

WEEK 4

Session 1
Understanding the importance of using Warm-Ups before using the CPS Process.
Exploring what kind of warm-ups work best.

Assignments:
- Read: PARNES - pp. 72 – 89 “How about a stretch through the process?”
- Practice the process using a personal challenge as your read the text and bring write-up to next class

Session 2
Class discussion of material covered during last class.
Exploring the CPS Framework even further.
Breaking it down step by step.
Seeing the process in action.

Assignments:
- Read: DAVIS - pp. 167 – 187

WEEK 5

Session 1
Understanding and practicing tools for Divergent Thinking.
Specific exploration of Divergent Thinking Tools that can be used in the CPS Process.

Assignments:
- Dig deeper into research for Literature Analysis Paper
Session 2
Understanding and practicing tools for Convergent Thinking. Specific
exploration of Convergent Thinking Tools that can be used in the CPS Process.

Assignments:
- Read: PARNES - pp. 90 – 110
- Practice the process again using another personal challenge and bring
  write-up to next class

WEEK 6

Session 1
Understanding Task Analysis Process.
Digging deeper into the Mess-Finding Stage and the Fact-Finding Stage.
Practicing Task Analysis Process in class with a partner.

Session 2
Digging deeper into the Problem-Finding Stage.
50% of solving a problem is knowing that you are solving the “right” problem.

Assignments:
- Dig deeper into research for Literature Analysis Paper

WEEK 7

Session 1
Digging deeper into the Idea-Finding Stage.
Why use CPS to generate ideas?

Session 2
Digging deeper into the Solution-Finding Stage.
Exploring the difference between a good idea and a good solution.

Assignments:
- Finalizing the Literature Analysis Paper
- Literature Analysis Paper Due Next Class

WEEK 8

Session 1
Literature Analysis Paper Due Today.
Digging deeper into the Acceptance-Finding Stage.
Understanding the CPS Process doesn’t work without proper communication of
solutions.

Assignments:
- Read: DAVIS - pp. 1 – 13
- Begin searching for a client and resource group for Facilitation Project
Session 2

Guest Lecture: Dr. Don Sweeney - Professor: Department of Landscape Architecture and Urban Planning. Lecture Title “Self-actualization”.

WEEK 9  ---------------------------------------------------------------

Session 1
Seeing a facilitator in action.
In-class CPS Session with a real client.

Assignments:
  • Read: PARNES - pp. 111 - 144

Session 2
Becoming a facilitator.
Performing Task Analysis with classmate as client.
Understanding the Facilitator Tool-Kit.
Understanding the Process Buddy.

Assignments:
  • Read: PARNES - pp. 145 -154
  • Begin preparations for Facilitation Project (i.e.
    perform Task Analysis with client and begin Process Planning.)

WEEK 10  ---------------------------------------------------------------

Session 1
In-class facilitations and debrief of CPS Process.

Session 2
In-class facilitations and debrief.
Discussion – How the understanding of creativity differs within disciplines

WEEK 11  ---------------------------------------------------------------

Session 1
In-class facilitations and debrief.

Session 2
In-class facilitations and debrief.
Discussion – How the understanding of creativity differs within cultures

WEEK 12  ---------------------------------------------------------------

Session 1
How to debrief after a real CPS Session.
Session 2  
**Guest Lecture**: Rodney Hill - Professor: Department of Architecture. Lecture Title "Creation of New Knowledge."

Assignments:
- **Facilitation Project Due Next Class**

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WEEK 13

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Session 1  
**Out-of-Class Facilitation Project Due Today.**
What is an Implicit Theory of Creativity.

Assignments:
- Read: *Mark A. Runco* article: "Implicit Theories" - From *Encyclopedia of Creativity.*

Session 2  
Facilitation Project Debrief.
Discuss **Implicit Theory Paper**

Assignments:
- Close down Creativity Thinking Log
- **Creativity Thinking Log Due Next Week**

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WEEK 14

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Session 1  
Lecture "Third Culture Semantics".

Assignments:
- **Implicit Theory Paper Due**

Session 2  
**Creativity Thinking Log Due Today.**
Synthesis of past learning.
References


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 course is submitted by the Department of EDUCATIONAL PSYCHOLOGY

2. Course prefix, number and complete title of course: EPSY 433 - Lateral Thinking

3. Course description (not more than 50 words): Edward deBono's theories and approach to creativity known as Lateral thinking which is used throughout the world to increase creative thinking in individuals.

4. Prerequisite(s) Junior or senior classification

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

6. Is this a repeatable course? Yes X 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 X 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)
      Undergraduate General Academic (required for Creative Studies minor)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      Undergraduate General Academic

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)
    EPSY 433 LATERAL THINKING

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Approval recommended by:

[Signature] [Date]
Head of Department

[Signature] [Date]
Chair, College Review Committee

[Signature] [Date]
Dean of College

Submitted to Coordinating Board by:

[Signature] [Date]
Dean of College

Director of Academic Support Services

[Signature] [Date]

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

OAR/AS-697
Instructor:

Dr. Joyce E. Juntune
Office 704H Harrington
Office phone: 845-1873
e-mail: j-juntune@tamu.edu

Textbooks:


Selected readings from other professional works.

Course Purpose: A study of the theories and approach to creativity known as Lateral Thinking. This approach was developed by Edward deBono and is used throughout the world to increase creative thinking in people from all walks of life.

Course Objectives:

1. To develop an appreciation of the medical and philosophical approach to creativity

2. To build an understanding of the various constructions of the mind which help and hinder creative thinking.

3. To develop an understanding the tools and techniques that are a part of the lateral thinking approach to creative thinking.

Prerequisites: Junior or Senior Classification
Course Requirements:

Attendance - Attendance is required and necessary for your understanding of the material; as well as, to gain feedback on course assignments. Attendance requirements will follow the guidelines for attendance set forth by Texas A&M University. Your attendance grade will also be determined by your completion of reading assignments and participation during in-class assignments.

Analysis Paper - Each student will be asked to read studies on the application of Lateral Thinking techniques in at least three countries. As a result of this search, each student will complete a 5-7 page (1500-2100 word) paper detailing their findings. The paper will require adherence to the APA Style format.

Applying the process - Each student will choose two of the techniques studied in class and apply them to an individual or small group project. Each student will write a 4-5 page summary detailing the application and summarizing the experience.

Reflection Journal - Beginning the first day of class, each student is to keep a journal in which s/he can record questions/thoughts regarding creativity. These questions or thoughts might arise as a result of course readings, class discussions, or during times of incubation. Students will be asked periodically to share some of their questions of thoughts with the class. Some of your reflections will be private. You will not be asked to share thoughts that are very personal to you.

Assignments and Grading:

Attendance & Reading Synthesis Assignments ............... 15%
Applying the Process.................................................. 30%
Analysis Paper ............................................................. 30%
Reflection Journal......................................................... 15%
Students with Disabilities Act

The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 Office of Support Services for Students with Disabilities in Room 126 of the Student Services building. The phone number is 845-1637.

Academic Honesty

As commonly defined, plagiarism consists of passing off as one’s own words, writings, etc., which belong to another. Therefore, 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. In addition, all materials generated for this class are copyrighted. As such, you do not have the right to copy the handouts, unless I specifically grant permission. If you have any questions concerning plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section entitled “Scholastic Dishonesty.”

Students with Special Needs

Any student who could require assistance in the event of a necessary evacuation of the building in which this class is taught are asked to notify the instructor so that individuals can be identified to assist him/her during an evacuation.
COURSE SYLLABUS:

WEEK 1

Session 1
- An introduction to the concept of Lateral Thinking
- Who is Edward deBono? What is his background?

WEEK 2

Assignments: Read: Serious Creativity – Part 1
- Argument versus parallel thinking
- Who are the “Big Three”?
- The need for creativity
- The misconceptions about creativity

WEEK 3

Assignments: Read: Mind – pages 1 - 31
- Levels of creativity

WEEK 4

Assignments: Read: Mind – pages 32 - 65
- Memory surfaces and creativity

WEEK 5

Assignments: Read: Mind – pages 66 - 100
- Circular systems of creativity

WEEK 6

Assignments: Read: Mind – pages 101 - 128
- Patterns and creativity
WEEK 7 - ---------------------------------------------

Assignments: Read: *Serious Creativity* – Part II, pages 77 - 90
  - The Six Thinking Hats

WEEK 8 - ---------------------------------------------

Assignments: Read: selected materials
  - The Six Thinking Hats in action

WEEK 9 - ---------------------------------------------

Assignments: Read: ... *Serious Creativity* – Part II pages 91 - 189
  - Lateral Thinking tools

WEEK 10 - ---------------------------------------------

Assignments: Read: *Serious Creativity* – Part II – pages 91 – 189, cont
  - Lateral Thinking tools in action

WEEK 11 - ---------------------------------------------

Assignments: Read: *Serious Creativity* – Part II – pages 190 - 236
  - Applying the Lateral Thinking tools

WEEK 12 - ---------------------------------------------

Assignments: Read: ... *Mind* – pages 129 - 185
  - Insights into creative thinking
  - Mechanisms of creativity

WEEK 13 - ---------------------------------------------

Assignments: Read: ... *Mind* – pages 186 - 219
  - Overcoming limitations to creativity productivity

WEEK 14 - ---------------------------------------------

Assignments: Read: ... *Mind* – pages 220 - 281
  - Types of creative thinking
References


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 Geography  

2. Course prefix, number and complete title: GEOG 476 - GIS Practicum

3. Course description (not more than 50 words): Introduction to current topics in Geographic Information Science including ethical and legal issues surrounding spatial technologies, proper GIS management practices, and professional certification. Development of professional research, technical and communication skills through participation in a coordinated internship or independent research project.

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 489/689? Yes ☐ No ☐ If yes, how many times? _____ Indicates 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.S. in Geography · Geographic Information Science Option
   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)  
       GEOG | 476 | GIS PRACTICUM

       Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code  
       03 | 00 | 03 | . | . | 04 - 05 | 01 36 6  

       Do not complete shaded area.

Approval recommended by:  
Head of Department Date  
Chair College Review Committee Date  
Head of Department (if cross-listed course) Date  
Dean of College Date

Submitted to Coordinating Board by:  
Dean of College Date

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.
GEOG476
GIS Practicum

Instructor

Dr. Andrew G. Klein
Office: O&M 814B
Tel: 845-5219
Email: klein@geog.tamu.edu

Catalog Course Description
Introduction to current topics in Geographic Information Science including ethical and legal issues surrounding spatial technologies, proper GIS management practices and professional certification. Development of professional research, technical and communication skills through participation in a coordinated internship or independent research project.

General Course Description
This course is the capstone learning experience of the Department of Geography's Geographic Information Science (GISci) option. Through seminar style discussions, course participants are introduced to current topics in the spatial sciences profession. Through an accompanying independent research project or internship students will build professional research skills. The course introduces students to the ethical issues surrounding spatial technologies and information. The basics of project management and professional presentation of scientific and technical results will be taught and practiced. The course will also introduce students to GISci certification activities and help them to construct a professional GISci portfolio.

Course Meeting Times
The course will meet one three hour period each week.

Textbook and Required Readings

In addition to the textbook, the lecture portion of the class will incorporate extensive readings on topics of current interest in Geographic Information Science.
Website

A course website will be developed prior to the start of the course. Websites that will serve as a template can be found at

http://geog.tamu.edu/klein/geog203 & http://geog.tamu.edu/klein/geog332

Internship/Independent Research Project

A key component of the course is undertaking an internship with a company/organization outside the university or pursuing an independent research project under the tutelage of an A&M faculty member.

Grading

Your grade in this class will be based on the following:

A. Final Report and Presentation of internship or research project 75%
B. Professional Development Projects 20%
C. Participation in Class Discussions 5%

Grades will be assigned according to the following scale:

A  90+ %
B  80-89%
C  70-79%
D  60-69%
F  < 60%

A major portion of the course grade will be a final written and oral report describing your internship or independent project. The written paper should be presented in an appropriate journal style and of a length typical of papers in that journal.

Class Attendance

Texas A&M University views attendance is the responsibility of the individual student. However, a major goal of this course is to develop professionalism in its participants and class attendance and participation should be viewed in this light.
Scholastic Dishonesty

It is my hope that academic dishonesty will not be a problem in this class. Texas A&M does, however, have a Scholastic Dishonesty policy to which both students and faculty must comply. If you have any questions about the University’s Scholastic Dishonesty policy please review the Student Rules or contact me.

The handouts used in this course are copyrighted. By “handouts,” I mean all materials generated for this class, which includes but are not limited to syllabi, quizzes, exams, lab problems; in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted you do not have the right to copy the handouts, unless I expressly grant permission.

As commonly defined, plagiarism consists of passing off as one’s ideas, words, writings, etc. those 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 should have the permission of that person. Plagiarism is one 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”

“Aggies don’t lie, cheat, or steal, nor tolerate those that do”
Student Support

The American with Disabilities Act (ADA) is a federal anti-discrimination 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 126 of the Koldus Building. The phone number is 845-1637.

For more information please contact:

Services for Students with Disabilities
126 John J. Koldus Building, 845-1637, http://studentlife.tamu.edu/sss/

There are numerous other student support organizations on campus including

Center for Academic Excellence and Academic Assistance Clearinghouse
529 Blocker, 845-3735, www.tamu.edu/aac

Student Counseling Service
Henderson Hall, 845-4427, www.scs.tamu.edu, Helpline 5:00pm-8:00am: 845-2700

Please do not hesitate to ask me if you have any problems or if you are having any trouble in the class, see me before it becomes a problem.
Course Schedule

Part I – Current Issues in Geographic Information Science

Week 1 – Introduction to the Course
A structured discussion on what it means to be a professional Geographer and what are some of the expectations. The major national and international professional GISci organizations and conferences will be introduced.

Assignment
From organization websites, read about the major GISci professional organizations. Write a 2-page memo summarizing the society’s stated mission; identify its primary constituents, and describe how it serves the needs of the GISci community.

Readings

Week 2 – Professional Ethics and GISci
A structured discussion of the ethical behavior of GIS professionals assessing the ethical dilemmas and correct ethical conduct from current case studies discussed in class.

Assignment
Prepare a 2-page memo detailing your internship or research project. The memo should include a statement about the objectives of your work. If applicable, provide a timeline or list of milestones for its successful completion.

Readings


Week 3 – Spatial Technologies, Information and the Law

A structured discussion concerning ethical and legal issues surrounding the use of spatial technologies and information. As in the previous week, current case studies will be discussed.

Assignment

Write a 3-page summary describing one of the articles or cases found on the GIS and the Law website: /www.spatial.maine.edu/~onsrud/GISlaw.htm

Readings


Other Useful Resources on GIS and the Law

http://www.geog.ubc.ca/courses/klink/gis.notes/negia/u70.html
http://www.fes.uwaterloo.ca/crs/gp555/week6resource.htm

Week 4 – Certification Issues in GISci

A structured discussion of the rationale behind and needs for certifying GISci professionals. The certification criteria for GISci professionals developed by the Urban and Regional Information Systems Association (URISA) will be a major focus of the discussion, but certification of remote sensing and mapping specialists by the American Society for Photogrammetry and Remote Sensing (ASPRS) as well as specific state and international certification programs will also be addressed.

Assignment

Edit and critique another student's 3-page summary on GIS and the Law

Readings


ASPRS certification programs.
Information on other certification programs worldwide.
http://institute.redlands.edu/users/kemp/certification/

Week 5 – Management Issues in GISci
A structured discussion of how to assess the needs of a GIS project or program and how to implement it successfully.

Assignments
1) Prepare a draft resume or curriculum vitae based on our discussions of GIS certification. Also prepare a 1-page summary identifying areas or competencies that you may need to address if you wish to become a certified GIS professional by the Urban and Regional Information Systems Association.
2) Provide an outline for your final project paper.

Readings
NCGIA GIS Core Curriculum for Technical Programs, Unit 52: Program Management.
http://www.ncgia.ucsb.edu/cctp/units/unit52/52_f.html

Week 6 - Spatial Data Standards
A structured discussion on the rationale behind and need for standards in spatial data. Specifics about some of the spatial data standards currently in use for both vector and raster data will be discussed. The metadata standards developed by the Federal Geographic Data Committee (FGDC) will also be described.

Assignments
Working in teams, students will create the appropriate metadata that adheres to the FGDC’s standards to accommodate a GIS spatial data product.

Readings
Maitra, J. B. and Anderson, N. Geospatial Standards.
Geospatial Metadata Standards including the Content Standard for Digital Geospatial Metadata.
http://www.fgdc.gov/metadata/meta_stand.html

Week 7 – Research Progress Report
A roundtable discussion in which each student describes their progress and any hurdles they have faced with their internship or independent research project at the midway point in the semester.
Each student will be expected to give a concise 10-minute synopsis of their research. Other members of the group will be expected to provide feedback.

**Assignment**
Prepare a rough draft of your final research paper

**Part II – How to Present Your Results in a Professional Manner**

**Week 8 – A Brief Introduction to Writing a Professional Paper**
A lecture and discussion about how to write a professional paper for a Geographic literate audience. The lecture will focus on correct structuring of a professional paper depending on the venue and audience as well as how to select a proper publication outlet. Different types of professional literature will be discussed including referred journals, conference proceedings and other gray literature as well as the role of an abstract. The academic peer-review process will also be discussed. The material presented here should aid students in writing their final class report.

**Assignment**
Write a 300 word abstract describing the results of your research project or internship

**Readings**
Hay, Chapters 1 & 2

**Week 9 – Professional Presentations: a how-to guide**
This class will give students an introduction to presenting research to a professional audience as a poster or oral presentation. Recent talks and posters by faculty and graduate students will serve as examples.

**Assignment**
Prepare a computer-aided brief 5 minute presentation describing the underlying question of interest in your research project or internship following the guidelines presented in class. This presentation will be given in class the following week.

**Readings**
Hay, Chapters 5 & 8

David A. Patterson, David A. circa 1983. *How to Give a Bad Talk.*
http://www.cs.wisc.edu/~markhill/conference-talk.html#badtalk

**Week 10 – A Brief Introduction to Producing Professional Quality Graphics**
This lecture and discussion will address the production of publication and commercial quality graphics focusing on issues associated with the creation and production of large format maps and posters as well as production of graphics to accompany manuscripts and your final project.
Assignment
Write a 2-3 page critique of a map from the most recent year’s ESRI® Map Book

Readings
Hay, Chapters 6 & 7

Week 11 – Preparing your Professional GISci Portfolio
This seminar discussion will discuss how to prepare a professional GISci portfolio. Examples of professional materials produced by current faculty and graduate students will serve as examples.

Readings
Hay, Chapter 10

Week 12 – Presentation of a Professional GISci Portfolio
Following the previous week’s discussion, this week’s seminar will consist of an open presentation of each student’s professional GISci portfolio. Each student will present a collection of GISci materials that demonstrates their technical proficiency to potential employers. Each student’s portfolio will be critiqued by their peers.

Week 13
Presentations of Student Research

Week 14
Presentations of Student Research

I reserve the right to make changes to the syllabus at any time.
1. This request is submitted by the Department of Horticultural Sciences

2. Course prefix, number and complete title: HORT 427, Fall Greenhouse Crops

3. Course description (not more than 50 words): Hands on lab for growing fall greenhouse crops including bedding plants, poinsettias, foliage and other pot plants; participate in maintenance and decoration with plants in the interiorscape and flower beds.

4. Prerequisite(s): HORT 428 or registration therein

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)

   B.S. Horticulture, B.S. Floriculture

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))

    HORT 427 FALL GREENHOUSE CROPS

    Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
    0 0 0 2 0 1 0 6 0 4 0 0 0 5 1 5 2 0 0 4 0 5

    Do not complete shaded area.

Approval recommended by:

Head of Department Date

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

Dean of College Date

Director of Academic Support Services Date Effective Date
HORT 427 Fall Greenhouse Crops Lab

Course Syllabus

Instructor: Dr. Terri W. Starman, PhD
Office: HFSB 424
Office Hours: by appointment
Office Phone: 979-862-2910
email: tstarman@tamu.edu

Description: Hands-on lab for growing and managing fall greenhouse crops including fall bedding plants, poinsettias, foliage and other flowering potted plants. Participate in installation and maintenance of plants in the HFSB atrium and campus flower beds and containers. Optional to be taken simultaneously or subsequently with HORT 428.

Course Objectives: Upon the satisfactory completion of class assignments and the classroom experiences provided in the course, the student should expect to be able to:

1. Grow poinsettias and other fall crops in the greenhouse.
2. Manage fall crops with records including: graphical tracking; insect scouting; root substrate EC and pH; cost accounting; cultural; photographic and others.
3. Practice installation and maintenance of fall color crops.

Grades

Grades will be based on weekly lab grades and the final project. The final project is a portfolio of crop records for those grown in class.

Grade Components:

Lab grades (16 at 10 points) 160 points
Final Project 100 points
Total Points Possible 260 points
Grading Scale:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A</td>
<td>excellent work throughout the semester</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
<td>above average work</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
<td>average work</td>
</tr>
<tr>
<td>60-69</td>
<td>D</td>
<td>below average work</td>
</tr>
<tr>
<td>&lt;60</td>
<td>F</td>
<td>failure to do much of the work</td>
</tr>
</tbody>
</table>

Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1</td>
<td>Introduction to HORT 427</td>
</tr>
<tr>
<td></td>
<td>8 Foliage Plant Growing</td>
</tr>
<tr>
<td></td>
<td>15 Foliage Plant Management</td>
</tr>
<tr>
<td></td>
<td>22 Foliage Plant Installation</td>
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<tr>
<td></td>
<td>29 Foliage Plant Maintenance</td>
</tr>
<tr>
<td>October 6</td>
<td>Bedding Plant Growing</td>
</tr>
<tr>
<td></td>
<td>13 Bedding Plant Management</td>
</tr>
<tr>
<td></td>
<td>20 Bedding Plant Installation</td>
</tr>
<tr>
<td></td>
<td>27 Bedding Plant Maintenance</td>
</tr>
<tr>
<td>November 3</td>
<td>Poinsettia Growing</td>
</tr>
<tr>
<td></td>
<td>10 Poinsettia Management</td>
</tr>
<tr>
<td></td>
<td>17 Poinsettia Installation</td>
</tr>
<tr>
<td></td>
<td>24 Poinsettia Maintenance</td>
</tr>
<tr>
<td>December 1</td>
<td>Project Presentations</td>
</tr>
</tbody>
</table>
AMERICAN DISABILITIES ACT
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 126 of the Koldus Building, or call 845-1637.

COPYRIGHTS
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.

SCHOLASTIC DISHONESTY
As commonly defined, plagiarism consists of passing off as one’s own ideas, work, 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 should 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 questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section “Scholastic Dishonesty.”
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 Engineering Technology and Industrial Distribution
2. Course prefix, number and complete title IDIS 420—Electronic Distribution Networks

3. Course description (not more than 50 words) Study of concepts, issues, and techniques used to plan, analyze, and control industrial/electronic distribution networks; interdisciplinary approach combining team projects, individual research, case study analysis, and interaction with industry executives; design of roadmaps and target plans for territory penetration.

4. Prerequisite(s) Junior or senior classification in IDIS 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. 23 (03A), 20 (03C)

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)

B.S. in Industrial Distribution

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)
    IDIS | 420 | ELECTRONIC DISTRIBUTION NETWORKS

    Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code
    0 | 3 | 0 | 03 | 3 | - | 010366

    Do not complete shaded area.

Approval recommended by:

[Signature] 9/17/03
Head of Department Date

Chair, College Review Committee

[Signature] 10/7/03
Date

Dean of College

[Signature] 10/7/03
Date

Submitted to Coordinating Board by:

Dean of College

Date

Director of Academic Support Services

Date

Effective Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/oeras. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
INDUSTRIAL DISTRIBUTION PROGRAM
TEXAS A&M UNIVERSITY

Electronics Distribution Networks
IDIS 420

Professor: Ms. Laura Kane-Sellers
Director of National Electronic Distributors Association Education Foundation
(NEDA)

Office: FERM 205F
Phone: 845-4984
Email: lks75248@aol.com
Office Hours: Thursday, 11:30AM-12:30PM or by appointment

COURSE DESCRIPTION:
The purpose of this course is to expose students to the electronic distribution industry through
an interdisciplinary approach combining team projects, individual research, case study
analysis, and exposure to industry executives. Student deliverables will consist of mid-term
project, article review, exercises, and a final project. Assignments will combine individual
and group work. There will be a final exam based on concepts discussed in class and reading
assignments.

REQUIRED TEXTS:
Review of the Electronic and Industrial Distribution Industries published by NEDA – Order
directly from NEDA website (www.nedassoc.org)

Connecting Resources: The Primer for Effective Electronics Distribution Relationships,
Kane-Sellers, Laurie, Joan Koerber-Walker, and Dr. Behbood Zoghi, pre-publication version
available from the Copy Corner.

RECOMMENDED READING:
NEDA Fifty Year Anniversary Edition

PREREQUISITES:
Junior or senior standing in the IDIS curriculum and should be taken in the last two semesters
before graduation.
PROCEDURE:
This project-based course requires 2.5 hours of lecture and/or progress reports and an average of 10 hours of outside class work per week. Teams of 4-5 people will be responsible for a final project. The team will choose a team leader whose primary function is to act as a contact person. The projects must be completed, an initial formal proposal must be submitted, semi-monthly progress reports submitted, and a mid-point and final project report will be presented formally in class.

STUDENT EVALUATION:
Students will be evaluated on the basis of individual and team assignments and examinations. Team projects will graded based on team performance and peer evaluation of team member contribution.

- Classroom Participation (must be present to participate) 15%
- Individual Assignment 10%
  Article Review
- Team Assignments 25%
  o Mid-Term Project
  o Final Project 35%
  o Project Evaluation Method
    - Group Paper 50%
    - Instructor Evaluation of Class Presentation 25%
    - Group Peer Evaluation 12.5%
    - Classmate Evaluation 12.5%
- Final Exam 15%

ATTENDANCE:
Attendance is mandatory since curriculum is based on guest speaker presentations and classroom interaction.

ACADEMIC DISHONESTY:
There is zero tolerance for academic dishonesty. Violations will result in an “F” for the course. Additional repercussions will be determined by the program coordinator in compliance with Texas A&M regulations.

http://student-rules.tamu.edu/rules20.htm
AMERICANS WITH DISABILITIES:

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# IDIS 420

## COURSE SCHEDULE OUTLINE

<table>
<thead>
<tr>
<th>Week</th>
<th>Classroom Topic</th>
<th>Assignment</th>
</tr>
</thead>
</table>
| 1    | **Course Overview**<br>Electronic Distribution Overview<br>Determine Course Teams | Reading: Chapters 1-3 *Connecting Resources* ...
|      |                                                                                 | Individual Assignment: Be prepared to discuss questions at end of Chapters 1-3<br>Analyze Agilent Product Portfolio<br>Select Articles for Individual Reports |
| 2    | **Electronic Distribution – A Historical Perspective; It Starts with Product**   | Reading: Chapter 4 *Connecting Resources* ...
|      |                                                                                 | Individual Assignment: Be prepared to discuss questions at end of Chapter 4<br>Team Assignment: Preliminary outline for Mid-Term Project Due |
| 3    | **It Starts with Product – Pre-work for Channel Design**                        | Reading: Chapter 5 *Connecting Resources* ...
|      |                                                                                 | Individual Assignment: Be prepared to discuss questions at end of Chapter 5 |
| 4    | **Defining the Channels to Market for Electronic Components**                   | Reading: Chapter 6 *Connecting Resources* ...
|      |                                                                                 | Individual Assignment: Be prepared to discuss questions at end of Chapters 6<br>Hand in written reports on Articles |
| 5    | **Channel Design; Students: Present Article Summaries**                         | Reading: Chapter 7 *Connecting Resources* ...
|      |                                                                                 | Individual Assignment: Be prepared to discuss questions at end of Chapters 6<br>Hand in written reports on Articles |
| 6    | **Channel Selection**<br>Students: Complete Article Summaries Presentations     | Assignment: Chapter 9<br>Individual Assignment: Be prepared to discuss questions at end of Chapter 7<br>Group Assignment: Work on Mid-term Projects |
| 7    | **Students: Mid-Term Project Presentations**                                    | Team Assignment: Written Mid-Term Project; Hand in will be Hard- and electronic copy of presentation and paper |
| 8    | **Electronic Distribution Engagement Process**                                  | Reading Assignment: Chapter 10 in *Connecting Resources* ...
<p>|      |                                                                                 | Individual Assignment: Be prepared to discuss questions at end of Chapter 9 |</p>
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<th>In Class Team Activity: Prepare an engagement and kick-off plan with a new distributor based on scenario provided in class</th>
<th>Individual Assignment: Be prepared to discuss questions at end of Chapter 10 Team Assignment: Continue working on Final Projects</th>
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<td>10</td>
<td>Using Distributor Business Plans as a Tool to Guide the Relationship; Ongoing Performance Assessment</td>
<td>Reading Assignment: Chapter 8 in <em>Connecting Resources</em> ... Team Assignment: Continue Working on Final Projects</td>
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<td>11</td>
<td>Distributor Contracts; Inside the Distributor – Guest Speaker</td>
<td>Reading Assignment: Chapter 11-13 in <em>Connecting Resources</em> ... Individual Assignment: Be prepared to discuss questions at end of Chapter 8 Team Assignment: Complete Final Projects</td>
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<td>12</td>
<td>Inside the Manufacturer; Channel Conflicts</td>
<td>Reading Assignment: Chapter 14 in <em>Connecting Resources</em> ... Individual Assignment: Be prepared to discuss questions at end of Chapters 11-13</td>
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<td>14</td>
<td>Final Project Presentations - 20 minute/team w/ 10 minutes for questions; - Course Evaluations</td>
<td>Team Assignment: Submit Final Team Project (hard-copy and electronic version) Individual Assignment: Peer evaluations of Final Projects (in class) Assignment: Study for Final Exam</td>
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<td>Optional Final Exam Review</td>
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<td>Final Exam</td>
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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 course is submitted by the Department of Health & Kinesiology

2. Course prefix, number and complete title of course: KINE 308 - Integrated Adventure Education

3. Course description (not more than 50 words): Philosophy of outdoor education in a physical education program; designing and implementing outdoor adventure activities in an experiential and interdisciplinary manner for reinforcing the Texas Essential Knowledge and Skills.

4. Prerequisite(s) Admission to KINE program 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?

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.S. Kinesiology, Teacher Certification
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      B.A. RPTS

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

10. 

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<th>Prefix</th>
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<tr>
<td>KINE</td>
<td>308</td>
<td>INTEGRATED ADVENTURE EDUCATION</td>
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Do not complete shaded area.

Approval recommended by:

Diana Johnson 9/13/03
Head of Department

Chair, College Review Committee 10-2-03
Dean of College

Submitted to Coordinating Board by:

Dean of College

Director of Academic Support Services

Date Effective Date

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

OAR/AS-6/97
## DEPARTMENT OF HEALTH AND KINESIOLOGY

### CONDENSED COURSE SYLLABUS

Course Number **KINE 308**  
Name of Course **Integrated Adventure Education**

Hours **2**  
Practice **3**  
Credit **3**

Prerequisites **Admission to KINE teacher certification program**

### Description of Course:
The philosophy of outdoor education in a physical education program; designing and implementing outdoor adventure activities in an experiential and interdisciplinary manner for reinforcing the Texas Essential Knowledge and Skills.

### Textbooks Used:
Reading packet of journal articles and instructor generated materials.

### Outline by Topics:

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<tr>
<th>Topic</th>
<th>Theory</th>
<th>Practice</th>
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<tr>
<td>1. Definitions, history &amp; philosophy</td>
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<td>2. Theoretical foundation</td>
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<td>3. Current issues and trends</td>
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<td>4. ODED pedagogy: experiential &amp; interdisciplinary</td>
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<td>5. Experiential cycles of learning &amp; teaching</td>
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<td>6. Teaching, facilitating, leading, instructing</td>
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<td>7. Interdisciplinary lesson planning &amp; connecting with TEKS</td>
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<td>8. Class organization and management for the outdoors</td>
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<td>9. Evaluating experience-based learning</td>
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<td>10. Exam</td>
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<td>11. Activity skill development</td>
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<td>12. ODED pedagogy implementation</td>
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KINE 308 Integrated Adventure Education

Instructor: Camille J. Bunting, Ph.D.  
Office: 216 GRW  
Phone: 845-3758

E-Mail: cbunting@tamu.edu  
Office Hrs: Tues. 4-5; Thurs. 11-12

Required Textbooks:  
Reading Packet: available from MSC Print 'N Copy

Course Objectives:

1. To understand the meaning and purpose of outdoor experiential & interdisciplinary education and its evolution.
2. To understand the theoretical basis of outdoor experiential education and its issues and trends.
3. To develop and demonstrate an understanding of experiential and interdisciplinary pedagogy and the ability to plan these types of lessons that reinforce the Texas Essential Knowledge & Skills.
4. To experience being a student in outdoor experiential and interdisciplinary lessons.
5. To develop some basic skills in outdoor adventure activities.
6. To demonstrate the ability to implement outdoor experiential and interdisciplinary lessons that intentionally reinforce the TEKS.

Grading:

Class Participation  15%
Unannounced Tests  15%
Written Lesson Plans  20%
Exam  30%
Teaching Evaluations  20%

Class Participation – Classroom sessions will consist of both lecture and student participation in large and small groups. Your concerted involvement is expected. Cell phones must be turned off during class time, and your reading packet should be brought to each class meeting. Several times during the semester instructions and feedback will be sent to you via your university “neo” Internet account. It is your responsibility to check that account on a regular basis. Roll will be taken each class period. You cannot participate if you are not present during class.

Unannounced Tests – These will be short tests over assigned reading and/or previous class topics. They may be short answer, multiple choice, fill-in-the-blank, or essay.

Exam – There will be only one major exam. The unannounced tests will foreshadow some of the questions, however the emphasis will be on your ability to apply information rather than merely recall information. This exam will be a combination of multiple choice, short answer, fill-in-the-blank, and essay.

Written Lesson Plans – Lesson plan format will be provided. The student will develop plans that must meet four requirements and use the proscribed format. The requirements are: 1) Focus on
teaching an outdoor adventure activity (PE TEKS), 2) integrate at least one or two other curriculum area TEKS into the lesson for purposes of reinforcement and making connections, 3) highlight one or two character qualities that are relevant for the activity itself or the connections between curriculum areas, and 4) include a plan for assessment of student learning.

**Teaching Evaluation & Laboratory Requirement** – Teaching evaluation guidelines (rubric) will be provided after the first month of instruction.

The laboratory requirement will be in the form of two three-day workshops that will be held at the Fred Lenin Youth Camp in Magnolia, TX.

1. The first workshop will be a Friday – Sunday. During this workshop, professionals will teach you a variety of outdoor adventure activity skills that can be taught in schools and on most school campuses. These professionals will be demonstrating teaching techniques that you will be expected to emulate, techniques of experiential, interdisciplinary, discovery, and reflective teaching/learning. The interdisciplinary connections will be specifically designed to reinforce TEKS from across curricular areas.

2. The second workshop will be a Wednesday – Friday. You and your classmates will present this workshop for a group of middle school students from the Conroe ISD. You will develop lesson plans in two outdoor adventure activity areas and will teach the middle school students using techniques of experiential, interdisciplinary, discovery, and reflective teaching/learning. You will also implement an evaluation of your teaching success. Your teaching evaluation will be conducted during this workshop.

**Classroom policies:** The following issues should be clearly understood by students:

1. Roll is taken at each class. Due to the nature of class activities, students who do not attend regularly are much less likely to be successful in this class, and may not be permitted to participate in the second workshop.

2. Class participation is important for maximum benefit from the topics covered. Therefore, repeated tardiness or absences will result in a lower participation grade.

3. Bring course reading packet with you to each class period.

4. You are expected to maintain the highest standards of academic integrity (e.g., to refrain from plagiarism and academic misconduct).

*Please Note:*  **Plagiarism** is “using the ideas or words of another person without giving appropriate credit.”

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.”

**Cheating** on tests will result in a grade of F in this class and possible dismissal from the university.

5. All assignments are expected to be of high quality. Grades will be assigned according the following standards: **A** - exceeds expectations; **B** - meets expectations; **C** - meets minimal standards; **D** - falls below minimum standards; **F** - unacceptable.
NOTE: The handouts used in this course are copyrighted. By “handouts,” I mean all materials generated for this class, which include, but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 126 of the Koldus Building. The phone number is 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 Mechanical Engineering

2. Course prefix, number and complete title MEEN 433. Mechatronics

3. Course description (not more than 50 words) Mechatronics; fundamentals of analog/digital circuit theory, microprocessor programming, microprocessor interface, microprocessor application.

4. Prerequisite(s) MEEN 364; Junior or Senior Classification Cross-listed with MEEN 667

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. 02a - 12, 03a - 8

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)

B.S. in Mechanical Engineering

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)
    MEEN 4 3 3 MECHATRONICS

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<th>Lect.</th>
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Approval recommended by:

Head of Department Date 10/20/03

Chair College Review Committee Date 10/28/03

Head of Department (if cross-listed course) Date 10/28/03

Dean of College Date

Submitted to Coordinating Board by:

Dean of College Date

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  
College of Engineering  

MECHANICAL ENGINEERING DEPARTMENT  

CONDENSED COURSE SYLLABUS  
(Use 14 weeks as a standard semester)  

Number and Name of Course: MEEN 433. Mechatronics  

Hours: Theory 2  Practice 3  Total 5  Credits 3  

Prerequisites: MEEN 364; Junior or Senior Classification  

Curricula requiring this course:  
1.  
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8.  
9.  

Description of Course (Concise statement of purpose or design.)  
Mechatronics: fundamentals of analog/digital circuit theory, microprocessor programming, microprocessor interface, microprocessor application  


Course Outline by Major Topics and Approximate Time Assigned to Each:  

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Total hours 28  42  

Date  9/30/03  
Course Supervisor: Sooyong Lee  

Evaluation: Exams (2) 40%; Term Project 20%  
Laboratory 20%; Homework 20%  

*The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 a reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Office of Support Services for Students with Disabilities in Room 126 of the Koldus Building. The phone number is 845-1637.*
Memo

To: University Curricula Committee
From: Karan Watson, Dean of Faculties and Associate Provost
CC: John Van Alstyne, Commandant of the Corps of Cadets
Date: 10/8/2003
Res: New Courses: SOMS 380 and SOMS 481

The School of Military Science is requesting approval of two new courses. Each of these courses has been taught eight times as 489s in the School. Our request has four aspects for consideration:

1. We would like to create a new course prefix of SOMS. In the past all permanent courses offered by the School have been for the ROTC programs and thus held the appropriate military branch prefix of MLSC, NVSC, or AERS. The courses we are proposing are designed specifically for Juniors and Seniors in the Corps of Cadets who are not pursuing military commission and will be open to any non-Corps students. Therefore, we need a prefix that distinguishes these courses from the ROTC courses.

2. We request that the two courses proposed be coded with either CIP code 30.9999.22, Leadership Studies, or 24.0103.20, Behavioral Science, either of which indicates that these are Social Science courses in leadership. In SOMS 380 the students must demonstrate an understanding of leadership theories and relate them to competencies in data organization, decision-making, critical thinking and evaluation. In SOMS 481 the students will develop competencies in discerning leadership styles, assessing performance of personnel in groups, strategies for conflict resolution, and planning for problem solving and personal development. Both of these courses focus on the study of human relations in group settings and particularly the effects of leaderships on groups.

3. We request that both of these courses be listed as Social Science options in the Core Curriculum for the University. The information in 2. above and the fact that other courses with similar topics and outcome goals are currently listed in the Core Curriculum is our primary motivation. These courses will always be taught by instructors who have the required credentials of the University's accreditation agency (SACS).

4. We request that each of these courses be repeatable once for credit (that is can be taken twice each). The practical reason for this is so that our students in the Corps of Cadets who are not seeking a military commission can enroll in the course each semester. The materials covered will always work from similar theoretical frameworks, however the experiential and team activities of the courses will be different every semester, and therefore significantly different from one semester to the next. However, no student who opts to take the course only in the Spring will suffer a prerequisite disadvantage if they did not enroll in the course in the Fall.

We have attached the course request forms and syllabi. In addition, we have requested that units which appear to have similar courses review these SOMS course and inform us of any objections. Their responses are attached.
18 August 2003

MEMORANDUM

TO: John Van Alstyne, Lieutenant General, USA (Ret)
Commandant, Corps of Cadets

FROM: Jerry Strawser
Dean and Development Council Chair
Mays Business School

SUBJECT: New Course Requests, July 8, 2003

Thank you for the opportunity to review your plans for the Corps’ leadership courses. In the Mays Business School, we are aware of the critical need for leadership education for undergraduate and graduate students. Your approach of combining leadership theory and practice is both practical and timely and one we fully support.

The organization of these courses to include skills and competencies, paralleled with a discussion of leadership theory, is very practical. Both courses emphasize an intentional, progressive approach to the study of leadership. The courses seem to lend themselves to the use of case studies, a method long practiced and successfully employed at top business schools throughout the world. While your reading list was quite extensive and impressive, I suggest you consider adding Good To Great, by Jim Collins. This particular work contains some valuable insights on individual leadership development.

I am very pleased with your effort to bring the courses to the attention of the academic community. Formal, rigorous leadership education is such a critical need for today’s students. Be assured that you have my full support for this initiative.

Please do not hesitate to contact me if Mays Business School or myself can be of further assistance.
July 29, 2003

Lt. General John Van Alstyne, USA (Ret.)
Texas A&M University
1227 TAMU
College Station, TX 77843-1227

Dear General Van Alstyne:

I recently received draft information concerning two courses in Military Science dealing with the topic of “leadership” (SOMS 380 and SOMS 481). These materials were passed on to me by Dean Strawser since I am the head of the Management Department, and leadership is a topic covered in Management courses. I believe that Dean Strawser has recommended an additional assignment but, aside from, that I have only one comment. I am not familiar with the Northouse text assigned for SOMS 380. I believe that this course would benefit from a solid text that covers the major theories and models of leadership. If the Northouse book accomplishes this, that is fine.

Otherwise, the courses look to be well-designed, and they should serve A&M students well. I appreciate your sending this by, but, these do not overlap with courses that we offer and, after reading these materials, I am in full support of your offering these courses. Please let me know if you have any questions.

On a much different note, I believe that I have met an old friend of yours. Do you recall someone named Steve Sellman?

Sincerely,

[Signature]

Angelo S. DeNisi

Cc: Dean Jerry Strawser
John Van Alstyne, Commandant
Lieutenant General, USA (Ret)
Office of the Commandant
The Military College of Texas
1227 TAMU
Campus

Dear General Van Alstyne,

Upon your request, I have reviewed the course philosophy and content of Soms 380 and Soms 481. I am excited about the potential contribution of these courses and the complementarity to the efforts in leadership education within our department.

The competency based approach of Soms 380 addresses critical knowledge and skills. The format engages a team to address and accept responsibility for the application of leadership theory. I am impressed by the rigor of the course framework.

The proposed seminar in leadership education, Soms 481, integrates key learning objectives into action-oriented community service. The praxis of the work begins with theory and culminates in application, a proven approach. This pragmatic methodology will serve students well in diverse situations, both public and corporate.

Effective leadership is grounded in vision and collaboration. The Department of Agricultural Education supports your new course requests and looks forward to working together to enhance leadership education.

Sincerely,

Glen C. Shinn, Ph.D.
Professor and Head
30 July 2003

MEMORANDUM

TO: John Van Alstyne, Lieutenant General, USA (Ret)  
Commandant, Corps of Cadets

FROM: Dick Chilcoat  
Dean and Edward & Howard Kruse Endowed Chair for the Dean  
The George Bush School of Government & Public Service

SUBJECT: Memorandum, Subject: New Course Requests, July 8, 2003

Thank you for the opportunity to review your plans for the Corps' leadership courses. At the Bush School, we recognize the importance of leadership education for undergraduate and graduate students, and agree with your balanced approach to leadership theory and practice. We also agree that it is significant to teach leadership as a set of critical skills and competencies. In line with President Gates' initiatives, we strongly agree with your emphasis on ethics and academic integrity. Furthermore, we agree with your active learning approach in the class – including a mix of lectures, workshops and simulations.

I have several suggestions for leadership program development for your consideration. First, it would be useful to develop a research base to capture data on undergraduate leadership skills. Second, to evaluate your program’s effectiveness, you may consider designing a longitudinal approach for measuring student leadership development, in accordance with each class' learning objectives. Third, it may be useful to develop a method for tracking graduating students in order to monitor the leadership needs for entry-level positions. Finally, it would add value if you would consider initiating an informal network of Texas A&M leadership development subject matter experts across undergraduate and graduate/professional schools to provide input on course development, as needed.

Please contact me or our Bush School Leadership Development Program staff if we can be of further assistance (Joe Cerami jcerami@bushschool.tamu.edu and Allison Dunn adunn@bushschool.tamu.edu).
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 School of Military Science.  
2. Course prefix, number and complete title: SOMS 380 Workshop in Leadership Education.  

3. Course description (not more than 50 words): The study of leadership theory, intra group relationships, assessment tools for skills development, and techniques for achieving group goals.  

4. Prerequisite(s) Junior Classification or Instructor approval. 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. 260 - 290 per semester.  

8. This course will be:  
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)  
   Junior in Corps of Cadets not pursuing a military commission  
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)  
   Any non-corps student  

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)  
    50 NS 380 Workshop in Leadership Ed  
    Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code  
    0 1 0 0 0 1 2 3 4 5 6 7 8 9 0 0 3 6 3 2  
    Do not complete shaded area.  

Approval recommended by:  

[Signature]  
[Date]  

Head of Department  
Date  
Chair, College Review Committee  
Date  

Head of Department (if cross-listed course)  
Date  
Dean of College  
Date  

Submitted to Coordinating Board by:  

[Signature]  
[Date]  

Dean of College  
Date  

Director of Academic Support Services  
Date  
Effective Date  

*Attach a syllabus according to the guidelines on the Internet site omnis.tamu.edu. To have this form reviewed, please send to Linda F. Lacey, Director of Academic Support Services, 1265 TAMU or fax to 847-8737.
WORKSHOP IN LEADERSHIP EDUCATION
SOMS 380
SCHOOL OF MILITARY SCIENCE

COURSE TITLE: Workshop in Leadership Education

PREREQUISITE: Junior Classification or instructor approval

COURSE DESCRIPTION: This workshop course is designed to allow students to demonstrate competence in various leadership and management practices applicable to an array of situations. This course includes individual assessment instruments to be used in evaluating overall individual performance as well as mastery of course content.

OBJECTIVES: Demonstrate mastery of selected competencies essential for leadership performance. The case studies and presentations will require students to demonstrate an understanding of leadership theories related to specific competencies discussed in class. Students will be able to organize data, evaluate alternative actions, determine preferred outcomes, and express alternative points of view both orally and in writing.

COURSE PHILOSOPHY: This course is pragmatic in its approach and one you can use for many years in your contacts and work with people. Because of the emphasis on leadership, this course requires that you be ready for interactive experiences in class. Although a great deal of learning takes place in class, your learning capacity will depend significantly on how much effort you put into this course outside of class.

Specific competencies have been identified for effective leadership. Each competency has several components for which you will demonstrate knowledge, comprehension, application, analysis, synthesis, and evaluation.

The grading policy is designed to evaluate students’ learning accomplishments based on selected competencies. Your grade will reflect your mastery of the subject material.

GRADING:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written case examinations 2 @ 30</td>
<td>60</td>
</tr>
<tr>
<td>Oral case presentation 1 @ 25</td>
<td>25</td>
</tr>
<tr>
<td>Written book review 1 @ 25</td>
<td>25</td>
</tr>
<tr>
<td>Team project 1 @ 50</td>
<td>50</td>
</tr>
<tr>
<td>Final exam 1 @ 40</td>
<td>40</td>
</tr>
<tr>
<td>Total points</td>
<td>200</td>
</tr>
</tbody>
</table>

COURSE GRADE:

- 180 – 200 Points = A
- 160 – 179 Points = B
- 140 – 159 Points = C
- 120 – 139 Points = D
- Below 120 Points = F
COPYRIGHTS

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.

THE AMERICANS WITH DISABILITIES

The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 126 of the Koldus Building. The phone number is 845-1637.

SCHOLASTIC DISHONESTY

As commonly defined, plagiarism consists of passing off as one’s own ideas, work, 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 should 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 questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section “Scholastic Dishonesty.”
### SOMS 380 COURSE OUTLINE BY WEEKS

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction and Overview of Leadership</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Historical Perspectives on Leadership</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Vision and Mission</td>
<td>Goal Setting</td>
</tr>
<tr>
<td>4</td>
<td>Leadership Traits and Principles</td>
<td>Skill Appraisal</td>
</tr>
<tr>
<td>5</td>
<td>Signature Strengths</td>
<td>Team Structure</td>
</tr>
<tr>
<td>6</td>
<td>Leadership Power</td>
<td>Delegation</td>
</tr>
<tr>
<td>7</td>
<td>Situational Leadership</td>
<td>Environmental Assessment</td>
</tr>
<tr>
<td>8</td>
<td>Establishing Appropriate Environment</td>
<td>Implementing Policy</td>
</tr>
<tr>
<td>9</td>
<td>Honor/Integrity/Loyalty</td>
<td>Ethics</td>
</tr>
<tr>
<td>10</td>
<td>Performance Feedback</td>
<td>Communication</td>
</tr>
<tr>
<td>11</td>
<td>Decision Making Models</td>
<td>Conflict</td>
</tr>
<tr>
<td>12</td>
<td>Developing Leadership in Others</td>
<td>Coaching</td>
</tr>
<tr>
<td>13</td>
<td>Risk Management</td>
<td>Planning</td>
</tr>
<tr>
<td>14</td>
<td>Final Examination</td>
<td></td>
</tr>
</tbody>
</table>

Cases for examination and presentation will be assigned by the instructor. Books-for-review must be approved by the instructor.

The team project will be a demonstration of students' understanding and application of leadership theory. Projects will be based on contemporary leadership practices and issues as reported in current periodicals and trade journals.

**READINGS AND CASES WILL BE FROM THE FOLLOWING LIST**

Fujishin, Randy (1997). *Discovering the leader within*. Acada Books


Case Studies to be assigned from *Hartwick Classic Leadership Case Studies*. 
SOMS 380  
Workshop in Leadership Education. Credit 1.

The study, understanding and solution of human-organizational leadership problems based on classroom theory, case studies, laboratory and fieldwork completed by individuals and teams. Prerequisite: Junior classification or instructor approval. May be taken two times for credit.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of School of Military Science.

2. Course prefix, number and complete title SOMS 481 Seminar in Executive Leadership

3. Course description (not more than 50 words) The study of contemporary leadership issues, organizational effectiveness, problem solving, and decision making

4. Prerequisite(s) Senior Classification or Instructor Approval

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. 250 - 280 per semester

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history) *
   * Seniors in Corps of Cadets not pursuing a military commission
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
   Any non-corps student

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)
     SOMS 481 Seminar

     Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
     0 0 0 0 1 3 0 3 6 0 0 0 9 2 0 2 0 0 4 0 0 0 0 0 3 6 3 2

     Do not complete shaded area.

Approval recommended by:

[Signature]

Chair, College Review Committee

Head of Department

Date

Dean of College

Date

Submitted to Coordinating Board by:

Dean of College

Date

Director of Academic Support Services

Date

Effective Date

* Attach a syllabus according to the guidelines on the Internet site oar-as.tamu.edu. To have this form reviewed, please send to Linda F. Lacey, Director of Academic Support Services, 1265 TAMU or fax to 847-8737.
Seminar in Executive Leadership
SOMS 481
School of Military Science

COURSE TITLE: Seminar in Executive Leadership

PREREQUISITE: Senior Classification or instructor approval

COURSE DESCRIPTION: This seminar is designed to include a group of advanced students studying with a professor, conducting guided inquiry, and exchanging results through reports, presentations, and discussions.

OBJECTIVES: Upon completion of the course the student will be able to:
1. distinguish among differing leadership styles
2. assess personal level of performance in group environments
3. develop effective leadership strategies for conflict resolution
4. plan and implement innovative problem solving
5. use individual leadership skills to develop a personal development plan

COURSE PHILOSOPHY: Leadership is a study of human relationships. This course is pragmatic in its approach and one that can be used in organizations no matter what your title; program coordinator, department manager, staff member. The class sessions will include an examination of theory (finding out), conceptualizing (taking action), reflection (examining the way we act), and application (applying the "gain" we experienced). A vast majority of our learning will come from sharing our experiences in everyday life and learning how to predict outcomes based on reliable theoretical models. There is a high expectation for you; you are expected to do your work, take an active role in discussions, THINK, and learn from each other.

GRADING:

Assignments:
1. Written critiques (2 @ 25 points) (Theory) 50 points
2. Oral critique (2 @ 25 points) 50 points
3. Team project (Finding out) 50 points
4. Leadership journal (Reflection) 50 points
5. Community service (Application) 50 points
6. Final exam 50 points

TOTAL POINTS = 300

COURSE GRADE:
270 - 300 Points = A
240 - 269 points = B
210 - 239 Points = C
180 - 209 Points = D
Below 180 Points = F
## COURSE OUTLINE AND EXPLANATION OF REQUIREMENTS

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Learning Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What is leadership?</td>
<td>Leadership Theories</td>
</tr>
<tr>
<td>2</td>
<td>What's my style?</td>
<td>Profiling Personal Behaviors</td>
</tr>
<tr>
<td>3</td>
<td>Leadership in the not-for-profit world</td>
<td>Situational Leadership</td>
</tr>
<tr>
<td>4</td>
<td>The change process</td>
<td>Performance Measures</td>
</tr>
<tr>
<td>5</td>
<td>Creative solutions</td>
<td>Problem Solving</td>
</tr>
<tr>
<td>6</td>
<td>Critical thinking</td>
<td>Leadership Strategies</td>
</tr>
<tr>
<td>7</td>
<td>Leading Peers</td>
<td>In-Group/Out-Group Theory</td>
</tr>
<tr>
<td>8</td>
<td>Decision traps</td>
<td>Assessing Consequences</td>
</tr>
<tr>
<td>9</td>
<td>Team building</td>
<td>Group Dynamics</td>
</tr>
<tr>
<td>10</td>
<td>Organizational culture and leadership</td>
<td>Attribution Theory</td>
</tr>
<tr>
<td>11</td>
<td>Ethics and public leadership</td>
<td>Conflict of Interest</td>
</tr>
<tr>
<td>12</td>
<td>Power and influence</td>
<td>Theory X and Theory Y</td>
</tr>
<tr>
<td>13</td>
<td>Public leadership and service</td>
<td>Social Change Theory</td>
</tr>
<tr>
<td>14</td>
<td>Final Examination</td>
<td></td>
</tr>
</tbody>
</table>

Critiques may be from the reading list or by instructor’s approval. Articles from selected journals, classic literature, and current literature will be utilized to demonstrate understanding of relevant theories. Critiques will be written and oral.

Community service will be an activity of your choice. You may select an activity you are familiar with or a new experience to broaden your experience. The activity requires at least one hour outside class per 2 hours of class session. The objective is to evaluate leadership styles in use by the volunteer program’s director, manager, or coordinator.

The journal will be a record of your observations and insights while participating in some group interaction. The group may be a service organization, a class project, or a training group. The objective is to encourage you to examine methodologies, effectiveness of activities, strong and weak points of your performance, leadership style in use, etc.

The team project will be a comprehensive demonstration of your ability to solve a problem in a group environment. The project will be the culmination of your studies in theory, conceptualization, reflection, and application.

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READINGS AND CASES FROM THE FOLLOWING LIST

Case Studies to be assigned from Hartwick Classic Leadership Case Studies Journal of Leadership Studies and other journals to be determined.
SOMS 481
Seminar. Credit 1.

Review of current literature and research as related to organizational effectiveness, organizational learning, and executive level leadership methods. Based on case studies, selected field problems, assessment methods, and organizational interventions. Prerequisite: Senior classification or instructor approval. May be taken two times for credit.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Atmospheric Sciences

2. Course prefix, number and complete title of course: ATMO 475: Radar and Mesoscale Meteorology

3. Change requested:
   a) Prerequisite(s): From ____________________ To ____________________
   b) Withdrawal (reason) ____________________ Course content is being subsumed into newly created undergraduate and graduate courses.
   c) Cross-list with ____________________ 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.*

4. Complete current course title and current course description:

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

6. a) As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>Subject Matter Content Code</th>
<th>Admin. Unit</th>
<th>FICE Code</th>
</tr>
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Do not complete shaded area.

b) Changed to:

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<th>Course #</th>
<th>Title (exclude punctuation)</th>
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<thead>
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<td></td>
<td>0 1 0 3 6 6</td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:

[Signatures]

Head of Department Date

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

Dean of College Date

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 Change in Course
Undergraduate • Graduate • Professional

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

2. Course prefix, number and complete title of course: BICH 410 Comprehensive Biochemistry I

3. Change requested:
   a) Prerequisite(s): From ___________________________ To ___________________________
   b) Withdrawal (reason) ___________________________
   c) Cross-list with ___________________________
   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. Underline change(s). Attach a course syllabus.*

4. Complete current course title and current course description:

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

6. a) As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
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<tbody>
<tr>
<td>BICH</td>
<td>410</td>
<td>COMPREHENSIVE BIOCHEM I</td>
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</tbody>
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<th>Prefix</th>
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<th>Title (exclude punctuation)</th>
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<tr>
<td>BICH</td>
<td>410</td>
<td>COMPREHENSIVE BIOCHEM I</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Lec.</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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</tr>
</tbody>
</table>

   Approval recommended by:

   [Signature] 10/24/03 [Signature] 10/24/03

   Head of Department Date Chair, College Review Committee Date

   Head of Department (if cross-listed course) Date Dean of College Date

   Submitted to Coordinating Board by:

   Dean of College Date

   Director of Academic Support Services Date Effective Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/carns. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
BICH 410 (3-1) 3 SCH, Comprehensive Biochemistry I Fall Semester 2003

3 lecture periods and one evening recitation period per week
Lecture: MWF 1:50 - 2:40 Biochemistry room 108
Recitation: one 50 min evening class per week as scheduled

Dr. Leisha Mullins
office: 318 Biochemistry Building
phone: 458-2675
desk 9:00 AM - 5:00 PM
email: lmullins410@neo.tamu.edu
Class URL: http://www.tamu.edu/classes/bich/mullins/bich410/
WEBCT: http://webct.tamu.edu

Office Hours: Monday and Wednesday 2:40 – 3:30 PM; Friday 12:40 – 1:30 PM; other times available on request

Course Objectives: Biochemistry is the study of life on a molecular level. The general biochemistry curriculum at TAMU is divided into a two-semester sequence of material. Biochemistry 410 is the first half of the two-semester course in general biochemistry. The overall emphasis in general biochemistry is to give you the fundamental understanding of the principles and concepts of biochemistry as a scientific discipline with emphasis on the molecular and macromolecular design, conformation, function and dynamics of proteins, nucleic acids and carbohydrates. In Biochemistry 410 we will be covering the structure and function of biological molecules.

Prerequisites: Organic Chemistry 228 is a required prerequisite. The organic prerequisite is verified for each student enrolled in 410. You may be dropped from the course if it is not completed. Biochemistry is an advanced interdisciplinary subject requiring expertise in biology, chemistry and mathematics. You are expected to remember and be able to apply the general concepts of chemical equilibria, pH, pK and organic functional groups.

Textbook: Fundamentals of Biochemistry, by Voet, Voet and Pratt. This is the same textbook used in the Fall 2002 BICH 410. It will not be possible to cover all the important material in class, but you will be told what specific information you need to know (Chapter Objectives).

Examinations:
Three "hour" exams: all exams count toward the final grade (i.e. none are discarded)
Exam #1 Thursday, October 2, 7:30 – 9 PM 100 pts 101 in the Heep Center
Exam #2 Thursday, October 30, 7:30 – 9 PM 100 pts 101 in the Heep Center
Exam #3 Tuesday, November 25, 7:30 – 9 PM 100 pts 101 in the Heep Center

Recitation sections:
Section 513  M 0800PM - 0850PM WCBA134
Section 514  T 0700PM - 0750PM WCBA134
Section 515  W 0800PM - 0850PM WCBA134
Section 516  R 0700PM - 0750PM WCBA134

The recitation session are designed as small group sessions to discuss difficult concepts in more depth and as practice problem sessions. Quizzes and homework sets will be given during the recitation sessions. For this reason, you will be required to attend the section in which you are enrolled.

Quizzes and Homework: 7 quizzes/ homeworks (combination or either/or for a maximum of 20 points each) will be given with the 5 highest scores will contribute to the final grade (i.e. the lowest score will be dropped). There will be no make-ups for quizzes and/or homework!!

Week of 09/08: Homework 1 Due / Quiz 1 20 pts
Week of 09/15: Homework 2 Due / Quiz 2 20 pts
Week of 09/22: Homework 3 Due / Quiz 3 20 pts
Week of 10/13: Homework 4 due / Quiz 4 20 pts
Week of 10/20: Homework 5 due / Quiz 5 20 pts
Week of 11/10: Homework 6 due / Quiz 6 20 pts
Week of 11/17: Homework 7 due / Quiz 7 20 pts

Final exam Tuesday, Dec 16 3:30- 5:30 PM 200pts

Approximately 100 points will be material covered since Exam 3 and the remainder will be cumulative review.
Grading: The course grade will be determined solely from the total points accumulated from the exams and the quizzes (total possible points = 600). There will be no opportunity to earn extra credit by doing extra work. You must get at least 59% of the required points (357) to pass (D or above). At any time you can check the total number of points you have earned so far on the class web page. Grade breakdowns will be as follows:

<table>
<thead>
<tr>
<th>Quizzes / Homework</th>
<th>5 x 20 pts</th>
<th>100 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>3 x 100 points</td>
<td>300 points</td>
</tr>
<tr>
<td>Final Exam</td>
<td></td>
<td>200 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Final Point total</th>
<th>Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 - 100%</td>
<td>537 - 600</td>
<td>A</td>
</tr>
<tr>
<td>80 - 89%</td>
<td>477 - 536</td>
<td>B</td>
</tr>
<tr>
<td>70 - 79%</td>
<td>417 - 476</td>
<td>C</td>
</tr>
<tr>
<td>60 - 69%</td>
<td>357 - 416</td>
<td>D</td>
</tr>
<tr>
<td>0 - 59%</td>
<td>0 - 356</td>
<td>F</td>
</tr>
</tbody>
</table>

The final grades will be curved if exam scores are unusually low. THIS MEANS THAT THE ABOVE TABLE IS THE MAXIMUM NUMBER OF POINTS TO EARN A PARTICULAR GRADE. For example, if the final grade is curved, it may be possible to earn an "A" with 525 points rather than 537.

Regrades: *****Regrade requests must be made IN WRITING no later than ONE WEEK after the exam is handed back. The entire exam will be subject to regrade, not just a specific problem. NO REGRADES will be accepted after that time. *****

Examination and Quiz Information: The course is cumulative. Material learned at the beginning is relevant to your understanding of topics covered later. Therefore, the exams and final are comprehensive. The format for the exams will be multiple choice and write outs. The final will be all multiple choice.

Bring to every exam and quiz: photo I.D., scantron (gray & white, 6 x 11 in., 150 question, Form no 0-101607- TAMU), pencil(s) and non-programmable calculator (+, -, x, log x, 10^x, ln x and ex). Programmable calculators will not be allowed. Any student caught cheating on an exam will receive zero points on that quiz or exam and will be reported for scholastic dishonesty.

Attendance at exams is mandatory. If it becomes necessary to change the date of a regularly scheduled exam, all efforts will be made to avoid class conflicts. If a class conflicts remains, the student will be required to take the rescheduled exam within 1 day of the new exam schedule. Class and work conflicts for announced exams (regularly or rescheduled) do not constitute a university excused absence such that you take the makeup exam rather than the regular exam.

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Make-up for Exam #1 Monday, Oct 6. 9 - 11 AM
Make-up for Exam #2 Monday, Nov. 3 9 - 11 AM
Make-up for Exam #3 Monday, Dec 1 9 - 11 AM

Problems and Supplemental Material: Supplemental problem sets and old exams will be posted to the web.

Supplemental Material will be made available on the class web page as needed. THIS COURSE WILL BE EXTREMELY DIFFICULT IF YOU DO NOT WORK PROBLEMS! You are encouraged to work all problems and study exercises at the end of every chapter. All students are encouraged to use the interactive CD found in the textbook. The on-line quizzes available through Wiley press, the textbook publisher, are an excellent resource. For students wanting additional textbooks, I recommend Biochemical Strategies by Edward Harris (available at the MSC bookstore) or Lippincott's Illustrated Reviews: Biochemistry (available at Barnes and Nobel or Amazon.com).
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### Recitation Schedule
**Fall Semester 2003**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 09/01</td>
<td>Recitation Special Topic: Acid/ Base Chemistry</td>
</tr>
<tr>
<td>M 09/08</td>
<td>Recitation Special Topic: Titration Curves and Amino acid</td>
</tr>
<tr>
<td></td>
<td>Homework 1 Due / Quiz 1</td>
</tr>
<tr>
<td>M 09/15</td>
<td>Recitation Special Topic: 2nd structure and fibrous protein</td>
</tr>
<tr>
<td></td>
<td>Homework 2 due / Quiz 2</td>
</tr>
<tr>
<td>M 09/22</td>
<td>Recitation Special Topic: Protein Sequencing</td>
</tr>
<tr>
<td></td>
<td>Homework 3 due / Quiz 3</td>
</tr>
<tr>
<td>M 09/29</td>
<td>No Recitation</td>
</tr>
<tr>
<td>R 10/02</td>
<td>EXAM 1 (7:30 - 9 PM) Covering Chapters 2, 4, 5, 6</td>
</tr>
<tr>
<td>M 10/06</td>
<td>Recitation Special Topic: Hemoglobin</td>
</tr>
<tr>
<td>M 10/13</td>
<td>Recitation Special Topic: Structure Recognition of lipids and carbohydrates</td>
</tr>
<tr>
<td></td>
<td>Homework 4 due / Quiz 4</td>
</tr>
<tr>
<td>M 10/20</td>
<td>Recitation Special Topic: Membrane Transport</td>
</tr>
<tr>
<td></td>
<td>Homework 5 due / Quiz 5</td>
</tr>
<tr>
<td>M 10/27</td>
<td>No Recitation</td>
</tr>
<tr>
<td>R 10/30</td>
<td>EXAM 2 (7:30 - 9 PM) Chapter 7-10</td>
</tr>
<tr>
<td>M 11/03</td>
<td>Recitation Special Topic: Thermodynamics and Catalytic Mechanisms</td>
</tr>
<tr>
<td>M 11/10</td>
<td>Recitation Special Topic: Enzyme Kinetics and Digestion Maps</td>
</tr>
<tr>
<td></td>
<td>Homework 6 due / Quiz 6</td>
</tr>
<tr>
<td>M 11/17</td>
<td>Recitation Special Topic: Digestion Maps</td>
</tr>
<tr>
<td></td>
<td>Homework 7 due / Quiz 7</td>
</tr>
<tr>
<td>M 11/24</td>
<td>No Recitation</td>
</tr>
<tr>
<td>T 11/23</td>
<td>Exam 3 (7:30 - 9 PM) Chapter 10-12, 3, 23</td>
</tr>
<tr>
<td>F 11/28</td>
<td>NO CLASS</td>
</tr>
<tr>
<td>M 12/01</td>
<td>Recitation Special Topic: Directionality of Transcription and Translation</td>
</tr>
<tr>
<td>M 12/08</td>
<td>No Recitation</td>
</tr>
<tr>
<td>T 12/16</td>
<td>FINAL EXAM, 3:30 – 5:30 BUCH 108</td>
</tr>
<tr>
<td>Date</td>
<td>Lecture Topic</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>M 09/01</td>
<td>Introduction to Biochemistry / Water</td>
</tr>
<tr>
<td>W 09/03</td>
<td>Structure of amino acids</td>
</tr>
<tr>
<td>F 09/05</td>
<td>Acid / base properties of amino acids (includes weak acids)</td>
</tr>
<tr>
<td>M 09/08</td>
<td>Acid / base properties of amino acids</td>
</tr>
<tr>
<td>W 09/10</td>
<td>Proteins: Primary structure, Peptides, Proteins</td>
</tr>
<tr>
<td>F 09/12</td>
<td>Proteins: Secondary structure - alpha helix, beta sheets and beta turns</td>
</tr>
<tr>
<td>M 09/15</td>
<td>Proteins: Tertiary Structure, Quaternary Structure</td>
</tr>
<tr>
<td>W 09/17</td>
<td>Proteins: Protein Folding</td>
</tr>
<tr>
<td>F 09/19</td>
<td>Proteins: Protein Folding</td>
</tr>
<tr>
<td>M 09/22</td>
<td>Proteins: Primary structure; Techniques and Methods</td>
</tr>
<tr>
<td>W 09/24</td>
<td>Proteins: Primary structure; Techniques and Methods</td>
</tr>
<tr>
<td>F 09/26</td>
<td>Proteins: Structure Function</td>
</tr>
<tr>
<td>M 09/29</td>
<td>Proteins: Structure Function</td>
</tr>
<tr>
<td>W 10/01</td>
<td>Proteins: Structure Function</td>
</tr>
<tr>
<td>R 10/02</td>
<td>EXAM 1 (7:30 - 9 PM) Covering Chapters 2, 4, 5, 6</td>
</tr>
<tr>
<td>F 10/03</td>
<td>Catch up or Walk</td>
</tr>
<tr>
<td>M 10/06</td>
<td>Carbohydrates: Monosaccharides &amp; Disaccharides</td>
</tr>
<tr>
<td>W 10/08</td>
<td>Carbohydrates: Polysaccharides, Glycoproteins</td>
</tr>
<tr>
<td>F 10/10</td>
<td>Lipids</td>
</tr>
<tr>
<td>M 10/13</td>
<td>Lipids</td>
</tr>
<tr>
<td>W 10/15</td>
<td>Membranes</td>
</tr>
<tr>
<td>F 10/17</td>
<td>Membrane Proteins; Lipoproteins</td>
</tr>
<tr>
<td>M 10/20</td>
<td>Membrane Transport</td>
</tr>
<tr>
<td>W 10/22</td>
<td>Enzyme Catalysis</td>
</tr>
<tr>
<td>F 10/24</td>
<td>Enzyme Catalysis</td>
</tr>
<tr>
<td>M 10/27</td>
<td>Enzyme Catalysis</td>
</tr>
<tr>
<td>W 10/29</td>
<td>Enzyme Catalysis</td>
</tr>
<tr>
<td>R 10/30</td>
<td>EXAM 2 (7:30 - 9 PM) Chapter 7-10</td>
</tr>
<tr>
<td>F 10/31</td>
<td>Catch up or Walk</td>
</tr>
<tr>
<td>M 11/03</td>
<td>Enzyme Kinetics</td>
</tr>
<tr>
<td>W 11/05</td>
<td>Enzyme Kinetics</td>
</tr>
<tr>
<td>F 11/07</td>
<td>Enzyme Kinetics</td>
</tr>
<tr>
<td>M 11/10</td>
<td>DNA / Techniques involving nucleotides</td>
</tr>
<tr>
<td>W 11/12</td>
<td>Techniques involving nucleotides</td>
</tr>
<tr>
<td>F 11/14</td>
<td>DNA</td>
</tr>
<tr>
<td>M 11/17</td>
<td>DNA</td>
</tr>
<tr>
<td>W 11/19</td>
<td>Replication</td>
</tr>
<tr>
<td>F 11/21</td>
<td>Replication</td>
</tr>
<tr>
<td>M 11/24</td>
<td>Transcription</td>
</tr>
<tr>
<td>T 11/25</td>
<td>Exam 3 (7:30-9 PM) Chapter 10-12, 23</td>
</tr>
<tr>
<td>W 11/26</td>
<td>WALK</td>
</tr>
<tr>
<td>F 11/28</td>
<td>NO CLASS</td>
</tr>
<tr>
<td>M 12/01</td>
<td>Transcription</td>
</tr>
<tr>
<td>W 12/03</td>
<td>Translation</td>
</tr>
<tr>
<td>F 12/05</td>
<td>Translation</td>
</tr>
<tr>
<td>M 12/08</td>
<td>Translation</td>
</tr>
<tr>
<td>T 12/16</td>
<td>FINAL EXAM, 3:30 – 5:30 BICH 108</td>
</tr>
</tbody>
</table>

Dr. Ronnie Edwards
Associate Head,
Animal Science
MS#2471

Dear Dr. Edwards:

The Department of Biochemistry & Biophysics wishes to change the contact hours for BICH 410 and 411 from 3-0 to 3-1. The credit will remain at 3 SCH for the new course so there will be no increase in SCH associated with the degree plans of your undergraduate majors.

The reason for this change is so that we may schedule recitation or help sessions. A couple of years ago we ran TA-directed help sessions in one section of BICH 411 that were very successful at achieving our education goals of increasing student learning and understanding. This semester we have scheduled recitation sessions for each section of BICH 410. Again the feedback is very favorable both from the students and instructors. We now wish to institutionalize the recitation sections by scheduling them for every section of BICH 410 and 411 each semester and to do this we have to change the contact hours from 3-0 to 3-1. Let me emphasize once more that this will not increase the SCH for the courses.

If you approve of these changes please sign below and return this memo to my office.

Yours sincerely,

J. Martyn Gunn
Professor and Associate Head

Approved:

Ronnie L. Edwards

Date: 9/25/03

Dr. F. H. 'Skip' Landis
Director, Biomedical Science Program
Veterinary Medicine
MS#4461

Dear Dr. Landis:

The Department of Biochemistry & Biophysics wishes to change the contact hours for B1CH 410 and 411 from 3-0 to 3-1. The credit will remain at 3 SCH for the new course so there will be no increase in SCH associated with the degree plans of your undergraduate majors.

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If you approve of these changes please sign below and return this memo to my office.

Yours sincerely,

[Signature]

J. Martyn Gunn
Professor and Associate Head

Approved:

[Signature]

F. H. 'Skip' Landis

Date: 9/26/03

Dr. Vincent Cassone  
Professor and Head  
Biology Department  
Campus MS # 3258

Dear Dr. Cassone:

The Department of Biochemistry & Biophysics wishes to change the contact hours for BICH 410 and 411 from 3-0 to 3-1. The credit will remain at 3 SCH for the new course so there will be no increase in SCH associated with the degree plans of your undergraduate majors.

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Yours sincerely,

J. Martyn Guan  
Professor and Associate Head

Approved:  

Vincent M. Cassone  
Date: 9/25/03
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

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

2. Course prefix, number and complete title of course: BICH 411 Comprehensive Biochemistry II

3. Change requested:
   a) Prerequisite(s): From ____________________________ To ____________________________
   b) Withdrawal (reason) ____________________________
   c) Cross-list with
   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.*

4. Complete current course title and current course description:

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

6. a) As currently in course inventory:
   Prefix | Course # | Title (exclude punctuation) |
   BICH 411 | COMPREHENSIVE BIOCHEM II |
   Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | FICE Code |
   03 | 00 | 03 | 26 | 02 | 02 | 00 | 02 | 04 | 20 | 01 | 03 | 66 |

   b) Changed to:
   Prefix | Course # | Title (exclude punctuation) |
   BICH 411 | COMPREHENSIVE BIOCHEM II |
   Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code |
   03 | 01 | 03 | 26 | 02 | 02 | 00 | 02 | 04 | 20 | 04 | 05 | 01 | 03 | 66 |

   Approval recommended by:
   Head of Department ____________________________ Date ____________________________
   Chair, College Review Committee ____________________________ Date ____________________________
   Head of Department (if cross-listed course) ____________________________ Date ____________________________
   Dean of College ____________________________ Date ____________________________

   Submitted to Coordinating Board by:
   Dean of College ____________________________ Date ____________________________

   Director of Academic Support Services ____________________________ Date ____________________________ Effective Date ____________________________

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

OARS 10/15/99
BICH 411 (3-1) 3 SCH, Comprehensive Biochemistry II, Spring Semester 2004

3 lecture periods and one evening recitation period per week
Lecture: MWF 1:50 - 2:40 Biochemistry room 108
Recitation: one 50 min evening class per week as scheduled

Dr. Leisha Mullins
office: 318 Biochemistry Building
phone: 458-2675
e-mail: lmullins410@neo.tamu.edu
Class URL: http://www.tamu.edu/classes/bich/mullins/bich411/
WEBCT: http://webct.tamu.edu

Office Hours: Monday and Wednesday 2:40 – 3:30 PM; Friday 12:40 – 1:30 PM; other times available on request

Course Objectives: Biochemistry is the study of life on a molecular level. The general biochemistry curriculum at TAMU is divided into a two-semester sequence of material. Biochemistry 411 is the second half of the two-semester course in general biochemistry. The overall emphasis in general biochemistry is to give you the fundamental understanding of the principles and concepts of biochemistry as a scientific discipline with emphasis on the molecular and macromolecular design, conformation, function and dynamics of proteins, nucleic acids and carbohydrates. In Biochemistry 411 we will be covering metabolism.

Prerequisites: Biochemistry 410 is a required prerequisite. This prerequisite is verified for each student enrolled in 411. You may be dropped from the course if it is not completed. Biochemistry is an advanced interdisciplinary subject requiring expertise in biology, chemistry and mathematics.

Textbook: Fundamentals of Biochemistry, by Voet, Voet and Pratt. This is the same textbook used in the Fall 2000 BICH 410. To do well in this class, you should read the appropriate chapter(s) in the text PRIOR to the day(s) it will be discussed in class. IF YOU DO NOT READ THE TEXT, YOU WILL NOT DO WELL IN THIS CLASS. It will not be possible to cover all the important material in class, but you will be told what specific information you need to know (Chapter Objectives).

Examinations:
Three “hour” exams: all exams count toward the final grade (i.e. none are discarded)
Exam #1 Thursday, February 19, 7:30 – 9 PM 100 pts 101 in the Heep Center
Exam #2 Thursday, March 25, 7:30 – 9 PM 100 pts 101 in the Heep Center
Exam #3 Thursday, April 29, 7:30 – 9 PM 100 pts 101 in the Heep Center

Recitation sessions:
Section 513 M 0800PM - 0850PM WCBA134
Section 514 T 0700PM - 0750PM WCBA134
Section 515 W 0800PM - 0850PM WCBA134
Section 516 R 0700PM - 0750PM WCBA134

The recitation session are designed as small group sessions to discuss difficult concepts in more depth and as practice problem sessions. Quizzes and homework sets will be given during the recitation sessions. For this reason, you will be required to attend the section in which you are enrolled.

Quizzes and Homework: 10 quizzes/homeworks (combination of or either/or for a maximum of 11 points each). The 8 highest quiz scores will contribute to the final grade (i.e. the lowest score will be dropped). One additional mandatory (i.e. can not be dropped) homework set (worth 12 points) will be assigned. The combined quiz and homework score will equal 100 points. There will be no make-ups for quizzes and/or homework!!!!

Week of 1/26 Quiz 1 / Homework 1
Week of 2/02 Quiz 2 / Homework 2
Week of 2/9 Quiz 3 / Homework 3
Week of 2/23 Quiz 4 / Homework 4
Week of 3/01 Quiz 5 / Homework 5
Week of 3/08 Quiz 6 / Homework 6
Week of 3/29 Quiz 7/ Mandatory Homework Due
Week of 4/05 Quiz 8 / Homework 8
Week of 4/12 Quiz 9 / Homework 9
Week of 4/19 Quiz 10 / Homework 10

Final exam: Tuesday, May 11 3:30- 5:30 PM 200pts
Examination and Quiz information: The course is cumulative. Material learned at the beginning is relevant to your understanding of topics covered later. Therefore, the exams and final are comprehensive. The format for the exams will be multiple choice and write outs. The quizzes and final will be all multiple choice.

The multiple choice questions will be of the following format:
1. choose the one correct answer from a menu,
2. choose the one incorrect answer from a menu,
3. choose the best answer from a menu of correct answers,
4. match statements to answers.

Bring to every exam and quiz: photo I.D., scantron (gray & white, 8_ x 11 in., 150 question, Form no 0-101607-TAMU), pencil(s) and non-programmable calculator ( ±, , x, log x, 10x, ln x and ex). Programmable calculators will not be allowed. Any student caught cheating on an exam will receive zero points on that quiz or exam and will be reported for scholastic dishonesty.

Attendance at exams is mandatory. If it becomes necessary to change the date of a regularly scheduled exam, all efforts will be made to avoid class conflicts. If a class conflicts remains, the student will be required to take the rescheduled exam within 1 day of the new exam schedule. Class conflicts for announced exams (regularly or rescheduled) do not constitute a university excused absence such that you take the makeup exam rather than the regular exam.

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Make-up for Exam #1 Tuesday, Feb. 24 10 - 12 PM
Make-up for Exam #2 Tuesday, March 30 10 - 12 PM
Make-up for Exam #3 Tuesday, May 4 10 - 12 PM

Grading: The course grade will be determined solely from the total points accumulated from the exams, quizzes and homework (total possible points = 600). There will be no opportunity to earn extra credit by doing extra work. You must get at least 50% of the required points (297) to pass (D or above). At any time you can check the total number of points you have earned so far on the class web page. Grade breakdowns will be as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Final Point total</th>
<th>Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>88-100%</td>
<td>525 - 600</td>
<td>A</td>
</tr>
<tr>
<td>76-87%</td>
<td>453 - 524</td>
<td>B</td>
</tr>
<tr>
<td>64-75%</td>
<td>381 - 452</td>
<td>C</td>
</tr>
<tr>
<td>50-63%</td>
<td>287 - 380</td>
<td>D</td>
</tr>
<tr>
<td>0-49%</td>
<td>0 - 296</td>
<td>F</td>
</tr>
</tbody>
</table>

The final grades will be curved if exam scores are unusually low. THIS MEANS THAT THE Above TABLE IS THE MAXIMUM NUMBER OF POINTS TO EARN A PARTICULAR GRADE. For example, if the final grade is curved, it may be possible to earn an "A" with 510 points rather than 525. Note that your quizzes add up to one exam score.

Regrades: ****Regrade requests must be made IN WRITING no later than ONE WEEK after the exam is handed back. The entire exam will be subject to regrade, not just a specific problem. NO REGRADES will be accepted after that time. ****

Policies: It is YOUR responsibility to be here for lectures, quizzes, and exams. It is to your advantage to attend lectures, as most (but not all) of the exam material will be covered during lecture. You must have a university-excused absence to make up exams. I must be notified that you will be missing an exam that needs to be made up by NOON the day of the exam to be missed. An email or a phone message on my answering machine is sufficient. If you are absent from class for any reason you are responsible for getting class notes from a colleague. No make-up quizzes will be given nor will late homework be accepted.

Problems and Supplemental Material: Old homework sets and old exams will be posted to the web. The answer keys will be placed on reserve in the West Campus Library. This will be the only location the answer keys will be available. I will NOT post keys for the old homework sets and old exams outside my office.
Supplemental Material will be made available on the class web page as needed. **THIS COURSE WILL BE EXTREMELY DIFFICULT IF YOU DO NOT WORK PROBLEMS!** You are encouraged to work all problems and study exercises at the end of every chapter. All students are encouraged to use the interactive CD found in the textbook. The online quizzes available through Wiley press, the textbook publisher, are an excellent resource. For students wanting additional textbooks, I recommend *Biochemical Strategies* by Edward Harris (available at the MSC bookstore) or *Lippincott's Illustrated Reviews: Biochemistry* (available at Barnes and Noble or Amazon.com).

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**Spring Semester 2004**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 1/19</td>
<td>No Recitation</td>
<td></td>
</tr>
<tr>
<td>M 1/26</td>
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<td>M 3/01</td>
<td>Electron Transport</td>
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<td>Photosynthesis</td>
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<td>Pentose phosphate pathway</td>
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<td>Photosynthesis: Light and Dark reactions</td>
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<td>Urea Cycle</td>
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<td>F 4/15</td>
<td>Breakdown of Amino Acids</td>
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<td>T 4/4</td>
<td>Mechanism of hormonal action</td>
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Dr. Ronnie Edwards  
Associate Head,  
Animal Science  
MS#2471

Dear Dr. Edwards:

The Department of Biochemistry & Biophysics wishes to change the contact hours for BICH 410 and 411 from 3-0 to 3-1. The credit will remain at 3 SCH for the new course so there will be no increase in SCH associated with the degree plans of your undergraduate majors.

The reason for this change is so that we may schedule recitation or help sessions. A couple of years ago we ran TA-directed help sessions in one section of BICH 411 that were very successful at achieving our education goals of increasing student learning and understanding. This semester we have scheduled recitation sessions for each section of BICH 410. Again the feedback is very favorable both from the students and instructors. We now wish to institutionalize the recitation sections by scheduling them for every section of BICH 410 and 411 each semester and to do this we have to change the contact hours from 3-0 to 3-1. Let me emphasize once more that this will not increase the SCH for the courses.

If you approve of these changes please sign below and return this memo to my office.

Yours sincerely,

[Signature]

J. Martyn Glenn  
Professor and Associate Head

Approved:

[Signature]  
Ronnie L. Edwards  
Date: 9/25/03

A member of The Texas A&M University System and its statewide Agriculture Program

Dr. F. H. 'Skip' Landis
Director, Biomedical Science Program
Veterinary Medicine
MS#4461

Dear Dr. Landis:

The Department of Biochemistry & Biophysics wishes to change the contact hours for BICH 410 and 411 from 3-0 to 3-1. The credit will remain at 3 SCH for the new course so there will be no increase in SCH associated with the degree plans of your undergraduate majors.

The reason for this change is so that we may schedule recitation or help sessions. A couple of years ago we ran TA-directed help sessions in one section of BICH 411 that were very successful at achieving our education goals of increasing student learning and understanding. This semester we have scheduled recitation sessions for each section of BICH 410. Again the feedback is very favorable both from the students and instructors. We now wish to institutionalize the recitation sections by scheduling them for every section of BICH 410 and 411 each semester and to do this we have to change the contact hours from 3-0 to 3-1. Let me emphasize once more that this will not increase the SCH for the courses.

If you approve of these changes please sign below and return this memo to my office.

Yours sincerely,

[Signature]

J. Martyn Gunn
Professor and Associate Head

Approved:

[Signature]

F. H. 'Skip' Landis

Date: 9/26/03

Dr. Vincent Cassone  
Professor and Head  
Biology Department  
Campus MS # 3258

Dear Dr. Cassone:

The Department of Biochemistry & Biophysics wishes to change the contact hours for BICH 410 and 411 from 3-0 to 3-1. The credit will remain at 3 SCH for the new course so there will be no increase in SCH associated with the degree plans of your undergraduate majors.

The reason for this change is so that we may schedule recitation or help sessions. A couple of years ago we ran TA-directed help sessions in one section of BICH 411 that were very successful at achieving our education goals of increasing student learning and understanding. This semester we have scheduled recitation sessions for each section of BICH 410. Again the feedback is very favorable both from the students and instructors. We now wish to institutionalize the recitation sections by scheduling them for every section of BICH 410 and 411 each semester and to do this we have to change the contact hours from 3-0 to 3-1. Let me emphasize once more that this will not increase the SCH for the courses.

If you approve of these changes please sign below and return this memo to my office.

Yours sincerely,

J. Martyn Guarnieri  
Professor and Associate Head

Approved: Vincent M. Cassone  

Date:
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Horticultural Sciences

2. Course prefix, number and complete title of course: HORT 301, Horticultural Techniques

3. Change requested:
   a) Prerequisite(s): From ___________________________ To ___________________________
   b) Withdrawal (reason)
   c) Cross-list with ___________________________

   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.*

4. Complete current course title and current course description: HORT 301, Horticultural Techniques. (see current
catalog for class description)

5. Complete proposed course title and proposed course description (not to exceed 50 words): HORT 301. Garden
Science. (see current catalog for class description)

6. a) As currently in course inventory:

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Approval recommended by:

Head of Department  Date

Chair, College Review Committee  Date

Dean of College  Date

Submitted to Coordinating Board by:

Dean of College  Date

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 Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Horticultural Sciences

2. Course prefix, number and complete title of course: HORT 302, Horticultural Techniques Lab

3. Change requested:
a) Prerequisite(s): From ____________________________ To ____________________________
b) Withdrawal (reason) ____________________________
c) Cross-list with ____________________________

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.*


6. a) As currently in course inventory:

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Approval recommended by:

[Signature]

Head of Department Date

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

Dean of College Date

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.

OARAS-1097
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Horticultural Sciences

2. Course prefix, number and complete title of course: HORT 335, Sociohorticulture

3. Change requested:
   a) Prerequisite(s): From ___________________________ To ___________________________
   b) Withdrawal (reason) __________________________
   c) Cross-list with __________________________ 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.*

4. Complete current course title and current course description:

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

6. a) As currently in course inventory:

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Approval recommended by:

* 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.
HORT 335  SOCIOHORTICULTURE (3-0)
(3 credit lecture course, meeting on T and R)  INSTRUCTOR: Joe Novak
Prerequisites: none

NO. LECTURE TOPICS
1. Introduction to course; What is sociohorticulture?
2. What is a garden? Who gardens? and Why do we garden?
3. Introduction to horticultural therapy, its history, role of AHTA
4. Task analysis; Horticultural calendar
5. Horticulture and older adults
6. Horticulture and persons who have physical disabilities
7. Exam 1
8. Horticulture and persons who have mental retardation
9. Horticulture and persons who have a mental illness
10. Horticulture and persons with a substance abuse problem
11. Horticultural programs for persons who are incarcerated
12. ADA and the enabling garden
13. Adaptive tools and techniques
14. Exam 2
15. The Restorative Value of Nature and the Biophilia Hypothesis
16. Urban horticulture, definition and importance
17. Plants and flowers and the healing process
18. Contemplative gardens for health care facilities
19. Children and gardens
20. School gardens and garden programs for youth at risk
21. Exam 3
22. Hunger in America and the importance of gardening
23. Community gardens and neighborhood garden programs; ACGA
24. Garden projects as tools in neighborhood rejuvenation
25. Companion animals and the Delta Society
26. The urban forest and quality of life
27. Public gardens and sociohorticulture
28. How you and the community in which you live can get involved
29. Final exam

TEXT: Instructor’s Lecture Supplement and selected papers

The grade in this course would come from four exams, quizzes prior to discussion of certain topics, and attendance and participation in two of the garden demonstration activities. These would include propagation; planting shrubs and trees; composting, nature in the garden; organic gardening practices and other topics to be led by the instructor in the Holistic Garden.

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<td>Garden demonstrations / activities</td>
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BONUS CREDIT: There will be opportunities to earn bonus credit throughout the semester. These opportunities will involve working in various community garden projects and volunteering to assist groups in executing their projects.
CONTACTS:  Joe Novak
OFFICE:  HFSB RM 212 (also check in RM 110)
OFFICE PHONE:  845-3915  HOME PHONE:  846-8351
E-MAIL:  j-novak@tamu.edu
OFFICE HOURS:  MTWR 10-11AM (call or e-mail in advance if possible)

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Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Horticultural Sciences

2. Course prefix, number and complete title of course: HORT 418, Nut Culture

3. Change requested:
   a) Prerequisite(s): From __________________ To __________________
   b) Withdrawal (reason) __________________
   c) Cross-list with __________________

   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.*

4. Complete current course title and current course description:

   ________________________________________________________________

   ________________________________________________________________

   ________________________________________________________________

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

   ________________________________________________________________

   ________________________________________________________________

   ________________________________________________________________

6. a) As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>Subject Matter Content Code</th>
<th>Admin. Unit</th>
<th>FICE Code</th>
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   Do not complete shaded area.

   b) Changed to:

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<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
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<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
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<td>NUT CULTURE</td>
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<td>03 00 03 02 04 03 00 05 15 20 04 05 01 03 6 6</td>
<td></td>
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</tr>
</tbody>
</table>

   Approval recommended by:

   [Signatures]

   Head of Department | Date
   Head of Department (if cross-listed course) | Date
   Chair, College Review Committee | Date
   Dean of College | Date

   Submitted to Coordinating Board by:

   Date

   Date

   Date

   Director of Academic Support Services | Date | Effective Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/ouras. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1263 or fax to 847-8737.
# Horticulture 418
## Nut Culture

### Spring Semester 2005

#### Syllabus

<table>
<thead>
<tr>
<th>Credits:</th>
<th>3.0 (three hour lectures)</th>
</tr>
</thead>
</table>
| Instructor: | Leonardo Lombardini  
Department of Horticultural Sciences  
426 HFSB  
Office phone: 458-8079  
E-mail: l-lombardini@tamu.edu  
Office hours: anytime, by appointment |
| Prerequisites: | HORT 319 or approval of instructor |
| Course topics: | The course covers the ecology, cultivation, processing, marketing, and consumption of pecans, walnuts, almonds, hazelnuts, pistachios, and chestnuts. In addition, the course includes sections covering up-to-date information on health benefits and nutrition facts of nut consumption. |
| Lecture time: | Tuesday and Thursday, hours TBA |
Both publications are available at the Cooperative Extension Office, Room 225, HFSB. |
| Assigned Readings: | Thematic articles will be provided electronically or on hardcopy |
| Assignments and Grading: | Five 1-page double spaced article critiques 10%  
Three multiple choice/essay exams 60%  
One 10-page double spaced review article 25%  
Attendance and participation 5%  
Total 100% |
| Late assignments: | Late assignments/term papers are penalized at a rate of 10% loss in points per day late including weekends. University Excuses as defined in Student Rules (http://student-rules.tamu.edu) must be made up within the time frame defined in Student Rules. |
| Attendance: | Students are expected to attend all classes and labs, complete assignments on time, and participate fully in class discussions. HORT 418 has large practical and visual components which cannot be substituted by handouts or reading material. |
| Examination policy: | If an exam is not taken at the assigned time, an oral or written (at the instructor’s discretion) make-up exam must be taken within one week of the original exam date. If the make-up exam has not been preapproved and scheduled, the student will receive a “0” grade for that exam. University Excuses as defined in Student Rules (http://student-rules.tamu.edu) must be made up within the time frame defined in Student Rules. If a student is caught cheating on an exam, the student will be given a “0” grade for that exam. Violations will be handled in accordance with the Texas A&M Student Rules (http://student-rules.tamu.edu) governing academic integrity. |
| 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 126 of the Koldus Building, or call 845-1637. |
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Texas A&M University
Departmental Request for a Change in Course
Undergraduate  Graduate  Professional

1. This request is submitted by the Department of Horticultural Sciences

2. Course prefix, number and complete title of course: HORT 428, Greenhouse Management

3. Change requested:
   a) Prerequisite(s): From ________________________ To ________________________
   b) Withdrawal (reason) ________________________
   c) Cross-list with ________________________

   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. Underline change(s). Attach a course syllabus.

4. Complete current course title and current course description: Greenhouse Management. Understanding and management of greenhouse operations, history, structures, heating and cooling systems, media, irrigation, fertilizers, computerization and other requirements leading to efficient greenhouse production of flowers and vegetables.

5. Complete proposed course title and proposed course description (not to exceed 50 words): Commercial Greenhouse Management. Principles of greenhouse management for commercial production of floral crops; greenhouse construction and operation; regulating and controlling the environment; applying cultural practices as they affect plant processes and influence growth and development; management and marketing of high quality floriculture crops.

6. a) As currently in course inventory:

   Prefix  Course #    Title (exclude punctuation)
   HORT 428 GREENHOUSE MANAGEMENT

   Lect.  Lab  SCH  Subject Matter Content Code  Admin. Unit  FICE Code
   0203  0330  1604  0005  1520  010366
   Level 4

   b) Changed to:

   Prefix  Course #    Title (exclude punctuation)
   HORT 428 COMMERCIAL GREENHOUSE MGMT

   Lect.  Lab  SCH  Subject Matter Content Code  Admin. Unit  Acad. Year  FICE Code
   0300  0330  1604  0005  1520  0405  010366
   Level 4

   Approval recommended by:

   Head of Department  10/15/03
   Chair, College Review Committee  10/21/03
   Dean of College  10/24/03

   Submitted to Coordinating Board by:
   Dean of College

   Director of Academic Support Services
   Date
   Effective Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/curis. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
HORT 428 Commercial Greenhouse Management

Course Syllabus

Instructor: Dr. Terri W. Starman, PhD
Office: HFSB 424
Office Hours: by appointment
Office Phone: 979-862-2910
email: tstarman@tamu.edu

Course Introduction: Greenhouse production of floricultural and other crops is a major segment of U.S. as well as Texas agriculture. The greenhouse industry is one of the most highly technical segments of agricultural production because concepts of environmental control are utilized that are not possible in other areas of agriculture. HORT 428 deals with the environmental factors regulated in a greenhouse and marketing and management of a greenhouse business, not so much with the actual crops to be grown (floriculture crop production is covered in HORT 429). This course helps to prepare students for a career in management of commercial greenhouses.

Description: Principles of greenhouse operation and management for commercial production of floral crops. Greenhouse construction and operation. Regulating and controlling the environment and applying cultural practices as they affect plant processes and influence plant growth and development. Management and marketing of high quality floriculture crops. Prerequisite: HORT 201.

Course Objectives: Upon the satisfactory completion of class assignments and the classroom experiences provided in the course, the student should expect to be able to:

1. Develop a perspective of worldwide floricultural production.
2. Engineer heating, cooling, ventilation, benching, lighting, irrigation and fertilization systems for a greenhouse.
3. Control greenhouse environmental and cultural inputs for optimum crop growth.
4. Apply business management and marketing principles to produce high-quality and long-lasting floral products.
**Required text:** Nelson, P.V., 2003, *Greenhouse Operation and Management*, 6th edition, Prentice-Hall. *Please read the current topic chapter(s) listed on the Lecture Syllabus each week in order to participate in class discussion throughout the week.

**Other References Used:** No laboratory manual is required. However, you will receive handouts throughout the semester.

**Scholarship Opportunities:**
- American Floral Endowment
- Floriculture Industry Research and Scholarship Trust
- Southern Nursery Association

**Grades**

**Examinations:** There will be two hourly examinations and a final examination. Exam questions will be a mix of objective, short and long answer type questions. Exams are not cumulative with respect to course material. The final exam will be given during the university regulated time.

**Quizzes:** Problems and pop quizzes will be given throughout the semester. Quizzes will be objective and short answer questions covering material presented in the book, lecture, websites, and lab. Problems will be take-home.

**Field Trips:** Field trips are an essential part of the student's floriculture experience. We will take two field trips. Participation in the field trips is required. The dates of the field trip will be announced during the first week(s) of class. Transportation will be provided.

**Grade Components:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (3 at 100 points)</td>
<td>300</td>
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<tr>
<td>Quizzes and problems</td>
<td>100</td>
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<td>Field Trips (2 at 50 points)</td>
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<td><strong>Total Points Possible</strong></td>
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Grading Scale:

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<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
<td>excellent work throughout the semester</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
<td>above average work</td>
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<tr>
<td>70-79</td>
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<td>60-69</td>
<td>D</td>
<td>below average work</td>
</tr>
<tr>
<td>&lt;60</td>
<td>F</td>
<td>failure to do much of the work</td>
</tr>
</tbody>
</table>

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Course Schedule

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<thead>
<tr>
<th>Date</th>
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<tr>
<td>September 1</td>
<td>Introduction to HORT 428</td>
</tr>
<tr>
<td>3</td>
<td>The Floriculture Industry</td>
</tr>
<tr>
<td>8</td>
<td>The Floriculture Industry</td>
</tr>
<tr>
<td>10</td>
<td>Greenhouse Construction</td>
</tr>
<tr>
<td>15</td>
<td>Greenhouse Construction</td>
</tr>
<tr>
<td>17</td>
<td>Greenhouse Heating</td>
</tr>
<tr>
<td>22</td>
<td>Greenhouse Heating</td>
</tr>
<tr>
<td>24</td>
<td>Greenhouse Cooling</td>
</tr>
<tr>
<td>29</td>
<td>Greenhouse Cooling</td>
</tr>
<tr>
<td>October 1</td>
<td>Exam 1</td>
</tr>
<tr>
<td>6</td>
<td>Root Substrate</td>
</tr>
<tr>
<td>8</td>
<td>Root Substrate</td>
</tr>
<tr>
<td>13</td>
<td>Watering</td>
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<tr>
<td>15</td>
<td>Field Trip</td>
</tr>
<tr>
<td>20</td>
<td>Watering</td>
</tr>
<tr>
<td>22</td>
<td>Fertilization</td>
</tr>
<tr>
<td>27</td>
<td>Fertilization</td>
</tr>
<tr>
<td>29</td>
<td>Light, Temperature, CO2</td>
</tr>
<tr>
<td>November 3</td>
<td>Light, Temperature, CO2</td>
</tr>
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<td>5</td>
<td>Exam</td>
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<tr>
<td>10</td>
<td>Chemical Growth Regulation</td>
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<td>12</td>
<td>Chemical Growth Regulation</td>
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<td>17</td>
<td>Postharvest</td>
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<td>Postharvest</td>
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<td>Management and Marketing</td>
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<td>26</td>
<td>Management and Marketing</td>
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<td>December 1</td>
<td>Insects</td>
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<td>3</td>
<td>Diseases</td>
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Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and 25 copies •

1. This request is submitted by the Department of Horticultural Sciences

2. Course prefix, number and complete title of course: HORT 429. Greenhouse Crop Production

3. Change requested:
   a) Prerequisite(s): From __________________________ To __________________________
   b) Withdrawal (reason) __________________________
   c) Cross-list with __________________________ 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. Underline change(s). Attach a course syllabus.

4. Complete current course title and current course description: Greenhouse Crop Production. Application of basic plant sciences to principles and practices involved in commercial production of floricultural crops; hands-on greenhouse production of bulbs, cut flowers, foliage, flowering potted plants, bedding plants, and perennials.

5. Complete proposed course title and proposed course description (not to exceed 50 words): Floriculture Crop Production. Production of floriculture crops in the greenhouse environment; scheduling and controlling crop growth for target market periods; specific flowering crops will be used as models to demonstrate potted flowering plant, cut flower, and garden plant production systems; hands-on crop production experience in lab.

6. a) As currently in course inventory:

<table>
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<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
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<td>GREENHOUSE CROP PRODUCTION</td>
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<th>Admin. Unit</th>
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b) Changed to:

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<th>SCH</th>
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<th>Acad. Year</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>Level 4</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Approval Recommended by:

Head of Department: [Signature] 10/25/23
Head of Department (if cross-listed course): [Signature] 10/25/23
Chair, College Review Committee: [Signature] 10/21/03
Dean of College: [Signature] 10/21/03

Submitted to Coordinating Board by:

Director of Academic Support Services: [Signature] Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/oars. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 845-8737.
HORT 429 Floriculture Crop Production

Course Syllabus

Instructor: Terri W. Starman, PhD
Office: HFSB 424
Office Hours: open door policy but appointments are encouraged
Office Phone: 979-862-2910
email: tstarman@tamu.edu

Course Introduction: HORT 429 is a three credit hour course about floriculture crop production in the greenhouse. The course consists of two lecture/discussions and one laboratory per week that will be utilized for hands-on learning in the greenhouse. By learning to schedule, grow and evaluate various floriculture greenhouse crops, you will practice some of the latest technologies utilized in commercial greenhouse production. One semester is not adequate for you to get all the experience you need to be a “finished” floriculturist, but you will get initiated into traditional crop production practices and should develop an appreciation for the challenges of commercial flower production.

Description: Production of floriculture crops in the greenhouse environment. Scheduling and controlling crop growth for target market periods. Specific flowering crops will be used as models to demonstrate potted flowering plant, cut flower, and garden plant production systems. Hands-on crop production experience in lab. Prerequisite: HORT 201.

Course Objectives: Upon the satisfactory completion of class assignments and the classroom experiences provided in the course, you should expect to be able to:

1. Describe procedural steps involved in floriculture crop production from propagation to marketing.
2. Identify major environmental factors that regulate growth and flowering of floriculture crops.
3. Develop production schedules for floriculture crops.
4. Grow several crops in the greenhouse.
5. Name floriculture crops and classify them as potted, cut and/or garden crops.


*Please read the current topic chapter(s) listed on the Lecture Syllabus each week in order to participate in class discussion throughout the week.
Other References Used: No laboratory manual is required. However, you will receive handouts throughout the semester.

Scholarship Opportunities:
American Floral Endowment
Floriculture Industry Research and Scholarship Trust
Southern Nursery Association

Grades
Examinations:
There will be three hourly examinations. Exam questions will be a mix of objective, short and long answer type questions. Exams are cumulative with respect to course material however, the major emphasis on Exams II and III will be placed on material covered since the last exam.

Lab:
Each student will be assigned bench space in the greenhouse to grow crops throughout the semester. It is a requirement of the course for each student to grow their own crops correctly so they flower/mature for a given target date. Your bench space will be graded when announced four times during the semester. You will be responsible for:

1) Doing and recording watering, fertilizing, spacing, pruning, removing debris, measuring, pinching, applying growth retardants, and scouting for pests and requesting pest control.

2) Incorporating information into your records from the greenhouse bulletin board and the class webpage those cultural inputs provided for you by the greenhouse staff. Note: You should not plan to water your crops during lab time. Please have all plants turgid at lab time.

Crop Production Portfolio:
Each student is responsible for putting together a portfolio to include the following records for the crops grown in lab. The Crop Production Portfolio must be your own original work to get credit.

Records:
(1) Cultural Record
(2) Environmental Record
(3) Production Record
(4) Financial Record
(5) Photographic Record

* See Lab web page for details of each type of record.
Fact Sheets and Quizzes:
For each crop studied during lecture, each student will be responsible for reading the chapter in the book and filling out a fact sheet. The fact sheets will be brought to lecture. During lecture, there will be quizzes on crops covering material from the book, the fact sheet, and lab experiences. After the quiz, we will go over the information so everyone has it correct on their fact sheet. The fact sheets will then become a part of your Crop Production Portfolio.

Field Trip:
We will take two 1-day field trips. Your participation in the field trips is required. Transportation and entrance fees will be provided.

Attendance:
Students turn in their Lab Assignment at the end of lab to get credit for attending lab. This involves checking with the instructor to see if you have completed the lab assignments and have cleaned on and around your greenhouse bench. This will give the instructor the opportunity to visit with you about the quality of your crops. You may have to wait your turn to check out, so be prepared to stay the entire time period allotted for the lab. Your patience will be necessary in this matter. Students are encouraged to contribute to the learning experience in the lecture and lab by asking questions and joining in discussions.

Components of Your Grade:

Exams (3 at 100 points) 300 points
Lab Assignments (14 at 10 points) 140 points
Bench Grade (4 at 25 points) 100 points
Crop Production Portfolio 100 points
Quizzes (6 at 10 points) 60 points
Field Trips 100 points

Total Points Possible = 800 points
Grading Scale:

<table>
<thead>
<tr>
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<th>Grade</th>
<th>Comment</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>60-69</td>
<td>D</td>
<td>below average work</td>
</tr>
<tr>
<td>&lt;60</td>
<td>F</td>
<td>failure to do work</td>
</tr>
</tbody>
</table>

Missed Labs:
If a student has to miss a lab, communicate with the lab instructor, within 24 hours of the lab, to obtain a copy of the Lab Assignment. If the Lab Assignment is completed by the end of the week of that lab, the student will get full credit. Otherwise, the student will receive a zero grade for that Lab Assignment. Every student will be able to drop one Lab Assignment grade from their total Lab Assignment score at the end of the semester.

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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 126 of the Koldus Building, or call 845-1637.

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SCHOLASTIC DISHONESTY
As commonly defined, plagiarism consists of passing off as one’s own ideas, work, 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 should 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 questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section “Scholastic Dishonesty.”
# Course Schedule

**Date** | **Topic**  
--- | ---  
January 13 | Introduction to HORT 429  
15 | *Euphorbia*  
20 | *Martin Luther King, Jr. Day*  
22 | *Euphorbia*  
27 | *Dendranthema*  
29 | *Dendranthema*  
February 3 | *Dendranthema*  
5 | *Lilium, Easter*  
10 | *Lilium, Easter*  
12 | *Lilium, Easter*  
17 | **Exam 1**  
19 | *Spring Bulbs*  
24 | *Heimalis Begonia*  
26 | *Kalanchoe*  
March 3 | *Miscellaneous Pot Crops (Hibiscus, Ornamental Peppers)*  
5 | *Cut Rosa*  
10 | **Spring Break**  
12 | **Spring Break**  
17 | *Cut Rosa*  
19 | *Cut Rosa*  
24 | *Specialty Cut Flowers*  
26 | **Exam 2**  
31 | *Antirrhinum*  
April 2 | **Plug Production**  
7 | *Pelargonium*  
9 | *Impatiens*  
14 | *Vegetative Annuals*  
16 | *Pansies*  
21 | *Container Gardens and Hanging Baskets*  
23 | **Exam 3**  
28 | *Crop Production Portfolio Due*
September 24, 2003

TO: University Curriculum Committee

Through: Dr. Karen Kubena, Associate Dean
         College of Agriculture and Life Sciences

FROM: Dr. Tim Davis, Head
       Department of Horticultural Sciences

The Department of Horticultural Sciences respectfully requests that the Bachelors Degree on Horticulture and Floriculture requirement for graduation be reduced from 132 to 128 semester credit hours. We would accomplish this goal by eliminating a three-hour “Horticultural Science Core Course”, HORT 315 (Component Analysis of Horticultural Systems) and one hour from our “Study Emphasis Electives”.

We have attached a copy of requirements from the 126th edition of the catalog along with the proposed changes. Thanks you for your consideration of this matter.
## University Core Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>(Th-Pr)</th>
<th>Credit</th>
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<tbody>
<tr>
<td>BIDS 113 and 123 Introductory Biology and Lab</td>
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</tr>
<tr>
<td>or BOTN 101 Botany</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 101 Fundamentals of Chemistry I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENGL 104 Composition and Rhetoric</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>POLS 206 American National Government</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>POLS 207 State and Local Government</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Communication elective¹</td>
<td></td>
<td>3</td>
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<tr>
<td>History electives¹</td>
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<td>6</td>
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<tr>
<td>Humanities elective¹</td>
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<tr>
<td>Mathematics electives¹</td>
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<tr>
<td>Social and behavioral sciences elective</td>
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<tr>
<td>Visual and performing arts elective¹</td>
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</tr>
<tr>
<td>* KINE 198 Health and Fitness Activity</td>
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<tr>
<td>* KINE 199 Required Physical Activity</td>
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<td><strong>Total Credit</strong></td>
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## Horticultural Sciences Core Courses

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<tr>
<td>HORT 201 General Horticulture</td>
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<tr>
<td>HORT 203 General Horticulture Laboratory</td>
<td>(0-3)</td>
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<tr>
<td>HORT 315 Component Analysis of Horticultural Systems</td>
<td>(3-0)</td>
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<tr>
<td>HORT 316 Plant Propagation</td>
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<tr>
<td>HORT 481 Seminar</td>
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<tr>
<td>Horticulture electives¹</td>
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<td><strong>Total Credit</strong></td>
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## Support Courses

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<tbody>
<tr>
<td>AGRO 301 Soil Science</td>
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<tr>
<td>CHEM 222 Elements of Organic and Biological Chemistry</td>
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<tr>
<td>or CHEM 227 Organic Chemistry I and CHEM 237 Organic Chemistry Laboratory</td>
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<td>3.4</td>
</tr>
<tr>
<td>ENTO 201 General Entomology</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GENE 310 Principles of Heredity</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>or GENE 313 Genetics of Plants</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>or GENE 320 Biomedical Genetics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MEPS 313 Introduction to Plant Physiology</td>
<td></td>
<td>3</td>
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<tr>
<td>PLPA 401 Plant Pathology</td>
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<tr>
<td>PLPA 403 Plant Pathology Laboratory</td>
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<tr>
<td>Computer science/statistics elective *</td>
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<td>Study Emphasis electives²</td>
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<td>Free electives</td>
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<td><strong>Total Credit</strong></td>
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<td><strong>61</strong></td>
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</tbody>
</table>

**NOTES:**

1. To be selected from the University Core Curriculum. The University Core Curriculum includes a requirement for 6 hours of international and cultural diversity courses. Refer to page 18 for a list of acceptable courses. A course satisfying another Core category, a college/department requirement, or as a free elective can be used to satisfy these requirements. See academic advisor.

2. At least two subdiscipline areas must be represented by 3-hour courses.

3. Hours to be selected with approval by the student’s faculty advisor and the associate department head from 200-, 300-, and 400-level courses in: ACCT, AGEC, AGED, AGRO, AGSM, BESC, BICH, BIOL, BOTN, CHEM, COSC, ECON, EDCI, ENTO, EPSY, FINC, FRSC, GENE, HLTH, HORT, INST, JOUR, LAND, MEPS, MGMT, MKTG, NUTR, ODED, PHYS, PLPA, PSYC, RENR, RLEM, RPTS, SOCI, SPAN, SPED, STAT, WFSC. No more than 15 hours can be used from HORT.

4. Hours to be selected with approval by the student’s faculty advisor and the associate department head.

*See page 19.
MEMORANDUM

TO: University Curriculum Committee
FROM: Dr. Vatche P. Tchakerian
       Acting Associate Dean for Academic Affairs

SUBJECT: Change in Curriculum of Geography GIS (Geographic Information Sciences) Option

Attached are changes to the Geography GIS option curriculum for catalog 127 proposed by the Department of Geography.
COLLEGE OF GEO SCIENCES
Curriculum in Geography – Geographic Information Science Option
Catalog 126

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
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<th>Cr</th>
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<tbody>
<tr>
<td>ENGL 104 Comp. and Rhetoric</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 201 Human Geography</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 101 Physical Geology</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 141 Business Math. I</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>U.S. history</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>KINE 199 Required Physical Activity</td>
<td>(0-2)</td>
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Second Semester

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>GEOG 202 Geog. of the Global Village</td>
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<tr>
<td>GEOG 203 Planet Earth System Science</td>
<td>(3-0)</td>
</tr>
<tr>
<td>MATH 142 Business Math. II</td>
<td>(3-0)</td>
</tr>
<tr>
<td>POLS 206 American Natl. Govt.</td>
<td>(3-0)</td>
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<tr>
<td>U.S. history</td>
<td>(3-0)</td>
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<tr>
<td>KINE 198 Health and Fitness Activity</td>
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SOPHOMORE YEAR

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<tr>
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<tbody>
<tr>
<td>ECON 202 Principles of Economics</td>
<td>(3-0)</td>
<td>3</td>
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<tr>
<td>GEOG 204 Economic Geography</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 332 Cartography</td>
<td>(3-0)</td>
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<tr>
<td>POLS 207 State and Local Govt.</td>
<td>(3-0)</td>
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<tr>
<td>Science</td>
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Second Semester

<table>
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<tbody>
<tr>
<td>ECON 203 Principles of Economics</td>
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<tr>
<td>RENR 375 Conserv. of Natural Resources</td>
<td>(3-0)</td>
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<td>Topical systematic</td>
<td>(3-0)</td>
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<tr>
<td>Visual and performing arts elective</td>
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JUNIOR YEAR

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<tr>
<th>First Semester</th>
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<tbody>
<tr>
<td>STAT 302 Statistical Methods or STAT 303 Statistical Methods</td>
<td>(2-2)</td>
<td>3</td>
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<tr>
<td>English</td>
<td>(3-0)</td>
<td>3</td>
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<tr>
<td>Science</td>
<td>(3-0)</td>
<td>4</td>
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<tr>
<td>Topical systematic</td>
<td>(3-0)</td>
<td>3</td>
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<tr>
<td>Track elective</td>
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Second Semester

<table>
<thead>
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<tbody>
<tr>
<td>GEOG 390 Principles of GIS</td>
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<tr>
<td>PLAN 365 Land Use Planning</td>
<td>(3-0)</td>
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<tr>
<td>Advanced topical</td>
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<tr>
<td>Humanities elective</td>
<td>(3-0)</td>
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<tr>
<td>Track elective</td>
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SENIOR YEAR

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<tr>
<td>GEOG 450 Field Geography</td>
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<td>Advanced Topical</td>
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<td>Track electives</td>
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Second Semester

<table>
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<tr>
<td>GEOG 440 Nature of Geography</td>
<td>(3-0)</td>
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<td>GEOG 475 Adv. Topics in GIS</td>
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<tr>
<td>Track electives</td>
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</table>

Total Hours 128

NOTES:

1. The U.S. history requirement may be satisfied by:
   a. HIST 105 and 106, or
   b. HIST 105 and one of the following: HIST 226, 359, 372, 373, 451, 455, 457, 460, 463, or
   c. HIST 106 and one of the following: HIST 226, 359, 367, 368, 369, 416, 450, 457, 459, 462.
2. To be chosen from CHEM 101, 102 or BIOL 113, 114, 123, 124 or PHYS 201, 202.
3. Visual and performing arts elective to be chosen from the University Core Curriculum.
5. To be chosen from ENGL 203, 210, 235, 236, 241, 301.
6. Take one of the following: AGRO 301, BOTN 101, GEOL 106, ATMO 201 and 202, ZOOL 107.
7. Students must see departmental advisor for applicable classes.
9. Humanities electives to be chosen from the University Core Curriculum, but must not include courses in geography.
## Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Hours</th>
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<tr>
<td>ENGL 104 Comp. and Rhetoric</td>
<td>(3-0)</td>
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<tr>
<td>GEOG 201 Human Geography</td>
<td>(3-0)</td>
<td>3</td>
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<tr>
<td>GEOL 101 Physical Geology</td>
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<td>4</td>
</tr>
<tr>
<td>MATH 141 Business Math. I</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>POLS 206 American Natl. Gov't</td>
<td>(3-0)</td>
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<tr>
<td>U.S. history†</td>
<td>(0-2)</td>
<td>1</td>
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## Sophomore Year

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<td>ECON 202 Principles of Economics</td>
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<td>GEOG 204 Economic Geography</td>
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<td>GEOG 232 Cartography</td>
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<tr>
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## Junior Year

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<td>STAT 302 Statistical Methods or STAT 303 Statistical Methods</td>
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<tr>
<td>Science†</td>
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<tr>
<td>Topical systematik†</td>
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<tr>
<td>Track-elective†</td>
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<td>GEOG 475 Adv. Topics in GIS</td>
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<tr>
<td>CPSC 111 Intro. to Computer Science</td>
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<tr>
<td>Geographic Specialization†</td>
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## Senior Year

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<td>Advanced Topical†</td>
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<tr>
<td>Elective†</td>
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### Notes
1. The U.S. history requirement may be satisfied by:
   a. HIST 105 and 106, or
   b. HIST 105 and one of the following: HIST 226, 368, 372, 373, 455, 457, 459, 460, 462, or
   c. HIST 105 and one of the following: HIST 226, 368, 372, 373, 455, 457, 459, 460, 462.
2. Humanities electives to be chosen from the University Core Curriculum, but must not include courses in geography.
3. To be chosen from CHEM 101, 102 or BIOL 113, 114, 123, 124 or PHYS 201, 202 or BOTN 101, ZOOL 107.
4. Visual and performing arts elective to be chosen from the University Core Curriculum.
5. To be chosen from ENGL 203, 210, 235, 236, 241, 301.
6. Social and behavioral sciences elective to be chosen from the University Core Curriculum.
7. To be chosen from the following: AGRO 301, BOTN 101, GEOG 106, ATMOS 201 and 202, ZOOL 107.
8. These courses must be chosen in consultation with the student's advisor.
October 30, 2003

MEMORANDUM

TO: Jeanette Phariss, Assistant Provost
    Linda Lacey, Director, Academic Support Services
    Robert Knight, Chair, University Curriculum Committee

FROM: A. Gene Nelson, Professor and Head
      M. Edward Rister, Professor and Associate Head for Undergraduate Programs

PC: Karen Kubena, Associate Dean, COALS
    David Appel, Chair, COALS Undergraduate Program Committee
    Curtis Lard, Chair, Ag Caucus, Faculty Senate
    Rudy Nayga, Chair, AGEC Undergraduate Advisory Committee
    Pam Vernon, AGEC Counselor
    Kathy Williams, AGEC Counselor

SUBJECT: Proposed B.S. Degree in Agricultural Economics Nonsubstantive Change – Submission for Proposed Changes for TAMU Catalog #127

Enclosed are the revised editions of our materials for the proposed nonsubstantive change in the B.S. degree in Agricultural Economics program. The materials include (a) the proposal and (b) several ‘New’ and ‘Revised’ Course Forms and the associated syllabi to support this change in our curriculum. These materials are submitted for distribution to the University Curriculum Committee for its consideration at the November 14 meeting.

The revisions incorporated into these materials are consistent with comments and observations made during the October COALS Undergraduate Program Committee meeting and discussions with Ms. Phariss, Ms. Lacey, Dr. Knight, Dr. Kubena, and Dr. Lard. The revisions incorporated into this version of the materials are editorial in substance in comparison to earlier drafts, adding clarity and background in several areas. That is, the proposed direction of changes in the B.S. degree in Agricultural Economics curriculum remain as originally presented to the COALS Undergraduate Program Committee.

Enclosures
Nonsubstantive Degree Program Proposal

Bachelor of Science in Agricultural Economics

with options in:

Finance and Real Estate,
Food Marketing Systems,
Policy and Economic Analysis,
and
Rural Entrepreneurship

October 30, 2003
Nonsubstantive Degree Program Proposal
Title Page

NAME OF INSTITUTION: Texas A&M University

NAME OF PROPOSED PROGRAM: Bachelor of Science in Agricultural Economics

Display how proposed program(s) would appear on the Coordinating Board program inventory; include Texas CIP code designations.

B.S. Degree in Agricultural Economics 01.0103.00
Finance and Real Estate Option 01.0102.00
Food Marketing Systems Option 01.0102.00
Policy and Economic Analysis Option 03.0201.00
Rural Entrepreneurship Option 01.0102.00

How would name(s) of program appear on student diplomas?
Bachelor of Science in Agricultural Economics

How would name(s) of program appear on student transcripts?

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<th>CIP code</th>
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<tr>
<td>B.S. in Agricultural Economics</td>
<td>Food Marketing Systems</td>
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<td>Policy and Economic Analysis</td>
<td>03.0201.00</td>
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<tr>
<td>B.S. in Agricultural Economics</td>
<td>Rural Entrepreneurship</td>
<td>01.0102.00</td>
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</table>

Administrative unit(s) responsible for the program(s):
Department of Agricultural Economics in the College of Agriculture and Life Sciences

Proposed date for implementation of the program(s): Fall 2004

Persons to be contacted for further information about the proposed program(s):

Name: Dr. A. Gene Nelson  Title: Department Head and Professor
Phone: 979/862-2117  Department of Agricultural Economics
Fax: 979/845-1563  E-Mail: nelsong@tamu.edu

Name: Dr. M. Edward Rister  Title: Associate Department Head and Professor
Phone: 979/845-4911  Department of Agricultural Economics
Fax: 979/458-1755  E-Mail: e-rister@tamu.edu

Signatures:

________________________  __________________________
Campus Chief Executive Office  Date

________________________  __________________________
System Chief Executive Office  Date
Nonsubstantive Degree Program Proposal
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</table>
I. PROGRAM DESCRIPTION

The Department of Agricultural Economics was established in 1920. The Department has a total of 726 students, making it one of the largest departments across the U.S. in this discipline. The students are enrolled in five different degree programs, including 590 in the undergraduate program (with 271 pursuing a B.S. degree in Agribusiness and 319 seeking a B.S. degree in Agricultural Economics), 42 are enrolled in the Masters of Agribusiness degree program, 37 are M.S. students, 56 are in the Ph.D. program (where three fields of study are emphasized - Agribusiness and Managerial Economics; Markets and Information Economics; and Resource and Environmental Economics.), and 1 is non-degree seeking.

The curriculum in the B.S. degree in Agricultural Economics is designed to prepare graduates for a wide variety of jobs in agriculturally-oriented business firms and agencies. The existing curriculum has three options to facilitate choices in course work according to students' personal career objectives: (a) Farm and Ranch Management, (b) Food and Fiber Marketing, and (c) Resource Economics. The course requirements are the same during the freshman and sophomore years for all options. Students may select an option at any time, but must do so prior to registering for their junior year. The 319 students currently pursuing a degree in Agricultural Economics are heavily concentrated in the Food and Fiber Marketing option, with 232 (72.7%) having identified that option. The other two options each have 36 students (11.3 % each), and there are another 15 (4.7%) students who have not declared an option.

This nonsubstantive proposal seeks to replace the above three options with four options designed to respond to students' demand and to provide increased flexibility in course selection and to more closely correspond with career choices available to Agricultural Economics graduates. The four options being proposed in the B.S. degree in Agricultural Economics are:

- Finance and Real Estate;
- Food Marketing Systems;
- Policy and Economic Analysis; and
- Rural Entrepreneurship.

The added flexibility in course selection and the accompanying proposed changes in Agricultural Economics courses should enable students to conclude their degree in a more efficient and timely manner and to simultaneously realize an enriched educational experience that better prepares them for post-college life. The reduced number of specific courses allows for more free and directed electives in the proposed curriculum. As a consequence, there are improved opportunities for sequencing prerequisite courses and those courses that may be offered only once per year. Similarly, there are increased possibilities of taking a broader set of courses, contributing to a more robust, eclectic academic program.

The Department of Agricultural Economics also jointly administers the interdisciplinary B.S. degree in Agribusiness with the Mays Business School. The B.S. degree in Agribusiness prepares students for careers in the nation's growing agribusiness sector which provides the products and services for the production, processing and distribution of food and fiber. With the potential for expanded export opportunities, the need for graduates for agribusiness positions is increasing. The agribusiness program combines the Common Body of Knowledge requirements of a degree in business with course work emphasizing the understanding of the unique
institutional and managerial challenges facing agribusiness firms. Students integrate business management principles with technical knowledge to develop practical decision-making skills. The effect of the proposed nonsubstantive change in the B.S. degree in Agricultural Economics on the B.S. degree in Agribusiness is limited to the proposed new AGEC 217 course replacing AGEC 221 in the Common Body of Knowledge requirements.

II. THE REQUEST FOR OPTIONS

This proposal is in response to an internal review of the B.S. degree in Agricultural Economics curricula by the Department’s Undergraduate Advisory Committee in conjunction with discussions among the total faculty, former students, employers, and potential employers of our students. The Department is requesting that the B.S. degree in Agricultural Economics be maintained as a placeholder degree with four proposed options, one in “Finance and Real Estate” (proposed new option separated from existing Food and Fiber Marketing Option), one in “Food Marketing Systems” (revised and title change for the current Food and Fiber Marketing Option), one in “Policy and Economic Analysis” (revised and title change for the current Resource Economics Option), and one in “Rural Entrepreneurship” (revised and title change for the current Farm and Ranch Management Option). These proposed four options are intended to complement the Department, College, and University objectives of providing an enriched educational experience for students seeking careers in the agricultural and related industries.

A. CLARITY AND INTEGRITY OF THE DEGREE

The proposed curriculum in Agricultural Economics is designed to provide both the traditional and contemporary dimensions of academic instruction essential for motivated and intellectually-capable students to assimilate and be proficient in a broad array of skills and competencies valuable to professionals in the agricultural and related industries. The proposed Options will create greater clarity and integrity within the proposed Agricultural Economics degree, serving as recognizable landmarks corresponding to students’ interest areas and identifiable career-preparation curricula tracks. The University Core Curriculum and the Agricultural Economics core courses will continue to provide a basic foundation in general learning, along with the essential principles and concepts required to succeed in the upper-level courses comprising the proposed Options. The clarity of the published degree plans and the integrated course work encompassed in the proposed Options’ respective curricula will be beneficial to students, faculty, academic advisors, departmental advisors, and prospective employers.

B. VISION 2020 AND THE AGRICULTURAL ECONOMICS OFFERINGS

The Department of Agricultural Economics embraces Texas A&M University’s internal strategic plan, Vision 2020. Paraphrasing from the Vision 2020 Executive Summary, this long-term plan seeks to identify mechanisms to distinguish Texas A&M University from other universities, guide its decision-making, and empower the administration, faculty, and staff to continue to improve the University. It reflects a steadfast determination to build on strengths of existing programs. Among the objectives is a culture of excellence that fulfills the need for an institution with quality of the first order.

This nonsubstantive proposal to improve the curriculum in the B.S. degree in Agricultural Economics is directed specifically toward the following five selected Vision 2020 imperatives
among the twelve specified in the total plan: (1) elevate our faculty and their teaching, research, and scholarship; (3) enhance the undergraduate academic experience; (5) build on the tradition of professional education; (6) diversify and globalize the A&M community; and (12) meet our commitment to Texas. Our expectations are that the revised curriculum will (a) facilitate improved reflection of the Department’s faculty talents; (b) extend and better integrate students’ academic instruction; (c) respond to the marketplace’s need and demand for intensified economic, business, analytical, and communication skills; (d) appeal to an all-embracing prospective student population; and (e) make available a contemporary education in which students are well prepared to continue to learn during their post-college days. As a consequence, students graduating with a B.S. degree in Agricultural Economics will be more competitive in the job market and/or in securing admission to graduate or professional schools.

III. THE PROPOSED CURRICULUM

The changes to the curriculum presented in this proposal represent efforts by the Department of Agricultural Economics to provide a broader, more diversified set of Options and course offerings in the B.S. degree in Agricultural Economics. These proposed enhancements are intended to improve the job-readiness of Agricultural Economics graduates for a wider array of careers and professional opportunities. The faculty, students, former students, college administration, and prospective employers have provided support and input to this proposal.

A. EXISTING OPTIONS TO PROPOSED OPTIONS

The four proposed Options are descendants of the three existing Options in the B.S. degree in Agricultural Economics. The proposed changes build on the strengths of the current Options, adding increased flexibility to better prepare students for a broader potential set of professional careers and/or post-graduate experiences. Each proposed Option is intended to prepare students for specific sub-sectors of the agricultural industry and related professions. Both major and non-major directed electives are incorporated to strengthen the foundation of the B.S. degree in Agricultural Economics for the targeted professional careers and/or post-graduate educational programs.

B. ENROLLMENT MANAGEMENT

The proposed curriculum maintains and extends the availability of undergraduate academic programs in the Department of Agricultural Economics. Although no exceptional growth in enrollment is expected, an increased balance in enrollment across the four proposed Options is anticipated relative to the disproportionate enrollment in the three current Options. Consequently, an improved utilization of the Department’s faculty resources is anticipated, translating into a superior capability to direct students through the B.S. degree in Agricultural Economics. No enrollment caps are planned for each proposed Option, although such caps may be reconsidered at a later date if excessive uneven enrollment in one or more proposed Options contributes to unmanageable demands on faculty resources.
C. INTERNSHIPS
Internships are an important element of the learning experiences in the Department of Agricultural Economics undergraduate program. Surveys of recent graduates indicate more than 30% of the program’s graduates are completing an internship experience as part of their academic instruction. The broader focus and increase in the number of elective hours encompassed in the four proposed Options should allow for an augmentation of such internships to or above 50% of the graduates within five years of the implementation of the proposed program.

D. COMMON FIRST TWO YEARS
All course work during the first two years of the B.S. degree in Agricultural Economics is common across all four of the proposed Options. Although there is no formal gateway into the third and fourth year “Upper-Level” courses, several of the courses identified as constituting the first two years’ course work are prerequisites for specific courses during the third and fourth years. That is, successful, efficient, and timely progress through the curriculum in all four proposed Options are contingent on students sequencing their semester schedules, in particular during the first two years, according to the flow identified in the suggested curriculums.

IV. RELATIONSHIP TO EXISTING AUTHORIZED PROGRAMS
Adoption of this proposal will modify the existing authorized undergraduate degree program in Agricultural Economics, from three to four Options. If approved, the proposed new curriculum and the associated Options will be published in the 2004-2005 catalog and required of students entering in and after the 2004 Fall semester. Current students in the Department may continue in the existing authorized B.S. degree in Agricultural Economics program at least through August 2008, enabling students to graduate under the degree curriculum with which they began their program. As stated in the University Catalog, edition #126, on p. 20, “In meeting the requirements for a baccalaureate degree, a student is normally expected to complete the course and hour requirements as outlined in the catalog in effect at the time of his or her declaration of a major or change in major, or those of any latter catalog of the student’s choice.” That is, current students would be allowed to change to the proposed new curriculum and select one of the newly authorized four Options, subject to other provisions associated with the 2004-2005 catalog.

The proposed curriculum has been reviewed by the faculty of the Department of Agricultural Economics, the Undergraduate Program Committee of the College of Agriculture and Life Sciences, the Dean of the Mays Business School, the Department Head of Economics in the College of Liberal Arts, the Interim Dean of Libraries, and the Associate Dean of the College of Agriculture and Life Sciences. The Associate Head for Undergraduate Programs has reviewed the proposal with students in the Department.

V. EXPECTED ENROLLMENT
The enrollment of 319 students in the B.S. degree in Agricultural Economics is expected to be maintained at a similar level in the future. Current enrollment in the B.S. degree in Agricultural Economics is skewed toward upper-level junior and senior years, with only 18.8% (60 students)
Nonsubstantive Degree Program Proposal, Agricultural Economics

classified as freshmen and sophomores. This frame of composition stems from the numerous students who enter this program either as on- or off-campus transfers after having taken the introductory AGEC 105 “Introduction to Agricultural Economics” principles course and/or otherwise learning more about the degree and career possibilities. Little, if any, impact on enrollment in the Agribusiness degree program is expected in association with this proposal.

The proposed changes in Options and the noted proposed course work are intended to enhance the flexibility of the B.S. degree in Agricultural Economics, providing an improved match for students’ interests and preparing them better for careers in the agricultural industry and related professions. Students will have more hours of free and directed electives under the proposed curriculum, providing more opportunities for them to distinguish themselves and prepare for careers of their choice than are possible today. Current and anticipated faculty and other Department, College, and University resources are adequate for maintaining the B.S. degree in Agricultural Economics program at its current enrollment.

VI. RESOURCES

A. NEW RESOURCES
No additional resources will be needed to implement the changes associated with this nonsubstantive proposal for the B.S. degree in Agricultural Economics. Faculty and classroom space is deemed adequate within the Department, College, and University to accommodate the projected maintenance of current student numbers.

B. CURRENT FACULTY IN THE DEPARTMENT
The Department of Agricultural Economics is currently seeking to fill one tenure-track and one non-tenure track faculty position in Agribusiness Management and Marketing. These positions will replace vacancies brought about by recent resignations within the Department. The Department is seeking to fill these positions with faculty that are well suited to the proposed structure of the B.S. degree in Agricultural Economics and the complementary B.S. degree in Agribusiness. Two additional faculty positions associated with Texas A&M University’s faculty reinvestment program are also anticipated within the next two years, one in ‘Water Resources Policy & Economics’ and the other in ‘Risk Assessment & Management – Biosecurity.’ Both of these new positions should provide complementary support for the proposed four Options.

Current faculty in the Department are (figures in parentheses indicate date of first appointment on the University staff and date of appointment to present position, respectively; bold-faced italics denote Summer 2003, Fall 2003 and/or Spring 2004 teaching responsibilities.):


Nonsubstantive Degree Program Proposal, Agricultural Economics


Capps, Oral, Jr., Professor of Agricultural Economics and holder of the Southwest Dairy Marketing Chair. (1986, 1989) B.S., Virginia Polytechnic Institute and State University, 1975; M.S., Virginia Polytechnic Institute and State University, 1977; M.S., Virginia Polytechnic Institute and State University, 1979; Ph.D., Virginia Polytechnic Institute and State University, 1979. *AGEC 105, 661, 671.*


Davis, George C., Associate Professor of Agricultural Economics. (1995, 1999) B.S., Clemson University, 1983; M.S., Clemson University, 1986; Ph.D., North Carolina State University, 1991. *AGEC 447, 635.*

Fuller, Stephen W., Professor of Agricultural Economics. (1974, 1983) B.S., Kansas State University, 1964; M.S., Kansas State University, 1966; Ph.D., Kansas State University, 1971. *AGEC 447, 448.*


Griffin, Wade L., Professor of Agricultural Economics. (1972, 1984) B.S., Texas Tech University, 1967; M.S., Texas Tech University, 1968; Ph.D., Oregon State University, 1972.

Jones, Eluned, Associate Professor of Agricultural Economics and Director, Master of Agribusiness Program. (2002) B.S., University of Bath (United Kingdom), 1977; M.S., North Carolina State University, 1979; Ph.D., Texas A&M University, 1987. *AGEC 625, 629.*

Jones, Lonnie L., Professor of Agricultural Economics. (1967, 1979) B.S., Stephen F. Austin State University, 1961; M.S., Louisiana State University, 1965; Ph.D., Ohio State University, 1967. *AGEC 105, 603.*

Lacewell, Ronald D., Professor of Agricultural Economics; Assistant Vice Chancellor, College of Agriculture and Life Sciences; and Associate Director, Texas Agricultural Experiment Station. (1970, 1978) B.S., Texas Tech University, 1963; M.S., Texas Tech University, 1967; Ph.D., Oklahoma State University, 1970. *AGEC 105, 422, 432.*

Lard, Curtis F., Professor of Agricultural Economics. (1967, 1997) B.S., University of Tennessee, 1957; M.S., Michigan State University, 1959; Ph.D., Michigan State University, 1963. *AGEC 330.*

Leatham, David J., Professor, and Associate Head for Graduate Programs, Department of Agricultural Economics. (1983, 1996, 2001) B.S., Brigham Young University, 1977; M.S., Brigham Young University, 1978; Ph.D., Purdue University, 1983. *AGEC 315, 440.*

Litzenberg, Kerry K., Professor of Agricultural Economics. (1978, 1990) B.S., Purdue University, 1971; M.S., Purdue University, 1972; Ph.D., Purdue University, 1979. *AGEC 315, 440.*


Mjelde, James W., Professor of Agricultural Economics. (1985, 1995) B.S., Montana State University, 1979; B.S., Montana State University, 1980; M.S., Montana State University, 1982; Ph.D., University of Illinois, 1985. *AGEC 317, 604.*


Nelson, A. Gene, Professor and Head, Department of Agricultural Economics. (1990) B.S., Western Illinois University, 1964; M.S., Purdue University, 1967; Ph.D., Purdue University, 1969.

Nichols, John P., Professor of Agricultural Economics and of Food Science and Technology. (1968, 1979) B.S., Cornell University, 1963; M.S., Michigan State University, 1965; Ph.D., Cornell University, 1968. *AGEC 414.*
Nonsubstantive Degree Program Proposal, Agricultural Economics

Park, John L., Associate Professor and Extension Economist, Department of Agricultural Economics. (2001, 2003) B.S., Brigham Young University, 1991; M.S., Utah State University, 1992; Ph.D., Texas A&M University, 1996. AGEC 314, 413.


Richardson, James W., Professor of Agricultural Economics. (1978, 1986) B.S., New Mexico State University, 1971; M.S., Oklahoma State University, 1973; Ph.D., Oklahoma State University, 1978. AGEC 429, 622, 643.

Rister, M. Edward, Professor, and Associate Head for Undergraduate Programs, Department of Agricultural Economics. (1981, 1993, 2002) B.S., Texas A&M University, 1974; M.S., Texas A&M University, 1976; Ph.D., Michigan State University, 1981. AGEC 217 (289), 424 (489), 425.

Rosson, C. Parr III, Professor and Extension Economist, Department of Agricultural Economics. (1989) B.S., Texas A&M University, 1971; M.S., Texas A&M University, 1978; Ph.D., Texas A&M University, 1982. AGEC 452, 453 (489).

Salin, Victoria, Associate Professor of Agricultural Economics. (1996, 2003) B.A., Miami University (Ohio), 1982; M.A., University of Virginia, 1984; Ph.D., Purdue University, 1996. AGEC 431, 630, 695.


Williams, Gary W., Professor of Agricultural Economics and Director, Texas Agricultural Market Research Center. (1988) B.S., Brigham Young University, 1974; M.S., Purdue University, 1977; Ph.D., Purdue University, 1981. AGEC 652.


Zey, Mary, Professor of Agricultural Economics. (1982, 1999) B.S., Louisiana Polytechnic Institute, 1964; M.S., Florida State University, 1965; Ph.D., Louisiana State University, 1972; Post Doctorate, Wisconsin-Madison, 1978.

C. EQUIPMENT
All of the equipment needs for the undergraduate program can be met with funds available through the Board of Regents-approved Equipment Access Funds and/or Instructional Enhancement Fees generated via student fees for lecture and laboratory classes.
D. LABORATORIES
The principal laboratory space required for Department of Agricultural Economics courses is computer lab space. The computer labs maintained by Computing and Information Services are adequate for the Department’s needs for this proposal. Agricultural Economics students’ enrollment in other Department’s courses is anticipated to be similarly supported by adequate laboratory space for those classes.

E. LIBRARY RESOURCES
No additional library resources will be needed to support the proposed four Options in the B.S. degree in Agricultural Economics outlined in this request.
F. OTHER INFORMATION
Shown below is the current and proposed Degree Program Inventory.

**DEGREE PROGRAM INVENTORY**

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<thead>
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<th>CURRENT</th>
<th>Degree Level</th>
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**PROPOSED**

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VII. CURRICULUM
The current B.S. degree in Agricultural Economics requires 132 hours of course work. The requirements associated with this nonsubstantive proposal are the same. The following sections detail the University Core Curriculum, the Agricultural Economics core, and the Agricultural Economics Options components of these 132 hours.

A. University Core Curriculum
The University Core Curriculum assures a breadth of understanding and a comprehensive process of learning within the Agricultural Economics program. The specific requirements are for courses in communications, mathematics, the natural sciences, the humanities, social and behavioral sciences, the visual and performing arts, U.S. history, political science, and kinesiology. A total of forty-three (43) credit hours are required for the University Core Curriculum for all four proposed Options in the B.S. degree in Agricultural Economics:

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<td>6 AMERICAN HISTORY ELECTIVES</td>
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<td>3 COMMUNICATIONS (COMM 203 - Public Speaking)</td>
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<td>1 KINESIOLOGY (KINE 198 - Health and Fitness Activity)</td>
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<tr>
<td>3 HUMANITIES ELECTIVE **</td>
<td>3</td>
</tr>
<tr>
<td>3 VISUAL &amp; PERFORMING ARTS ELECTIVE **</td>
<td>3</td>
</tr>
</tbody>
</table>

Sub-Total 43**

* The B.S. degree in Agricultural Economics requires a total of 15 hours of courses that are included in the approved list of Social and Behavioral Science requirements (University Catalog, Edition #126): AGEC 105, AGEC 429, ECON 202, ECON 203, and ECON 322 or 323. By incorporating AGEC 105 into the degree plan as a required course in the University Core Curriculum, 3 hours can be added to “Free Electives” in the Agricultural Economics Curriculum. Doing so provides increased flexibility for students in selecting courses to meet career goals, minor and/or certificate requirements, etc.

** Six (6) hours of International and Cultural Diversity requirements are handled either with Humanities and/or Visual Performing Arts course work taken to satisfy University Core Curriculum and/or using elective hours in the Agricultural Economics degree core.
The two three-hour communication requirements are satisfied with ENGL 104, “Composition and Rhetoric,” and COMM 203, “Public Speaking.” The two three-hour mathematics requirements are satisfied by MATH 141, “Business Math I,” and MATH 142, “Business Math II.” The three-hour social and behavioral science requirement is satisfied with AGEC 105, “Introduction to Agricultural Economics” (refer to the first footnote on the prior page). The remaining University Core Curriculum courses are either as specified (i.e., KINE 198, KINE 199, POLS 206, and POLS 207) or disciplinary-specified electives to be selected from among courses explicitly identified in the University Catalog (i.e., the two three-hour American history electives, the three-hour humanities elective, the two four-hour natural science electives, the three-hour visual & performing arts elective, and the 6 hours of international and cultural diversity electives.

Students are encouraged to complete the University Core Curriculum during the first two years of the B.S. degree in Agricultural Economics program. The first two years of college are an important time for students to determine the direction and degree of emphasis they are interested in when pursuing subsequent course work. Concentrating on the University Core Curriculum during the first two years provides for a basic foundation which can be easily transferred to other majors without loss of course credit in the event students decide other programs are more complementary to their interests. Doing so also allows for efficient, timely progression into subsequent courses which serve as prerequisites for upper-level course work in the Department. Delaying of this course work, most notably AGEC 105 and the mathematics courses, can lengthen the time required to complete a degree from one to three semesters.

B. Agricultural Economics Core Curriculum

The proposed Agricultural Economics Core Curriculum is designed to provide students with basic instruction for a vast array of professional careers and/or post-graduate education. The more targeted course work incorporated into the four respective proposed Options allows for more specialization and greater depth of preparation according to more definitive post-college plans of individual students. There are a total of sixty-two (62) hours of course work specified in the proposed Agricultural Economics Core Curriculum.

Forty-four (44) of the sixty-two (62) hours in the proposed Agricultural Economics Core Curriculum are course specific, to be taken by all Agricultural Economics majors. The majority of these hours are taught within the Department of Agricultural Economics, with some reliance on the Mays Business School, the Department of Economics, and the Department of English. The non-Agricultural Economics course work included in the proposed forty-four specified hours already are included in the B.S. degree in Agricultural Economics; therefore, limited impact on these Departments is anticipated as a result of the approval of this nonsubstantive proposal.

The six (6) hours of technical agriculture electives may be satisfied by any non-Agricultural Economics courses in the College of Agriculture and Life Sciences. The Associate Dean in the College of Agriculture and Life Sciences has provided a letter indicating that resources in the College of Agriculture and Life sciences are adequate to service the proposed curriculum.

The proposed twelve hours of free electives provide flexibility for students in their course selection. There is a requirement, however, that nine (9) of the twelve (12) hours be at the 300 or 400 level. These free electives, in conjunction with the proposed nine (9) hours of ‘directed electives outside of the Department of Agricultural Economics’ incorporated into each proposed
Nonsubstantive Degree Program Proposal, Agricultural Economics

Option, provide substantial opportunities for students to seek out advanced exposure and/or instruction in one or more emphasis areas.

<table>
<thead>
<tr>
<th>Proposed Agricultural Economics Core Curriculum</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AGLS 101 (Mod. Ag. Syst. &amp; Ren. Nat. Res.)</td>
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<tr>
<td>AGEC 217 (Fundamentals of Ag Economic Analysis)(^1)</td>
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<tr>
<td>AGEC 314 (Marketing Ag. and Food Products)(^2)</td>
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<tr>
<td>AGEC 317 (Economic Analysis for Agribus. Management.)(^2,3)</td>
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<tr>
<td>AGEC 330 (Financial Mgmt. in Ag.)</td>
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<tr>
<td>AGEC 340 (Agribus. Management)(^2)</td>
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<td>AGEC 429 (Ag. Policy)</td>
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<td>AGEC 430 (Macroeconomics of Ag.) or ECON 311 (Money and Banking)</td>
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<td>AGEC 481 (Seminar)</td>
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<tr>
<td>ACCT 209 (Survey of Accounting Principles)</td>
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<td>ACCT 210 (Survey of Managerial and Cost Accounting)</td>
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<td>ECON 202 (Principles of Economics)</td>
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<td>ECON 203 (Principles of Economics)</td>
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<td>ECON 323 (Microeconomic Theory)</td>
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<td>ENGL 301 (Technical Writing)</td>
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<tr>
<td>STAT 303 (Statistical Methods)</td>
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<td>TECH. AG. ELECT. (any non-AGEC College of Agriculture and Life Sciences courses)</td>
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<tr>
<td>FREE ELECTIVES (9 of 12 hours must be at 300 or 400 level)(^*)</td>
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Sub-Total \(62^*\)

\(^1\) New Course.
\(^2\) Title Change.
\(^3\) Course content/description change.

* If students do not satisfy the six (6) hours of International and Cultural Diversity requirements with their Humanities and/or Visual Performing Arts course work taken in the University Core Curriculum, then 3 or 6 of the noted elective hours in the Agricultural Economics degree core may be used to do so.
C. Option Curriculum
There are twenty-seven (27) hours of course work required in each of the four Options proposed in this document for the B.S. degree in Agricultural Economics. Nine (9) of those hours are identified in the Department of Agricultural Economics specific to each Option. An additional nine (9) hours must be taken in the Department of Agricultural Economics, selected from a set of Option-specific courses.

The remaining nine (9) hours are termed "Directed Electives Outside the Department." These nine (9) hours are to be selected in one or more departments outside the Department of Agricultural Economics. A minimum of six (6) of these nine (9) hours must be at the 300 or 400 level, of which at least 3 hours must be at the 400 level. These courses should be selected with the objective of supporting a focused career interest consistent with the respective Option. Students will be encouraged to contact the Department of Agricultural Economics undergraduate advisors for additional information regarding potential career emphasis areas and related course work for each Option.

D. Semester-by-Semester Degree Plans for Each Option
Accompanying the description and Option-specific course work for each proposed Option is a semester-by-semester degree plan for that Option. Once again, note that the first two years of course work is identical across all Options.

VIII. UNIVERSITY CATALOG MATERIALS
The proposed four Options in the B.S. degree in Agricultural Economics curriculum as it will appear in the 2004-2005 University Catalog if it is approved is presented next. The listing of Department of Agricultural Economics undergraduate courses as it will appear in the 2004-2005 University Catalog also is presented.

IX. LETTERS OF ENDORSEMENT
Letters of endorsement of the proposed nonsubstantive degree countersigned by Clair Nixon, Associate Dean of the Mays Business School; Leonardo Auernheimer, Head of the Department of Economics, College of Liberal Arts; Colleen Cook, Interim Dean of Libraries; and Karen Kubena, Associate Dean, College of Agriculture and Life Sciences are included.
1. Proposed Finance and Real Estate Option
This proposed Option is designed to provide a well-founded basis in principles, concepts, and methods for students interested in professional careers in finance and/or real estate in the agricultural and/or related industries. The proposed twenty-seven hours of Option-specific course work are intended to provide a balance among specified courses in the Department which offer in-depth, targeted instruction, directed opportunities to select among additional courses in the Department to realize a more diversified scope of expertise according to students' individual interests, and directed opportunities outside the Department. This should allow individual students to chart their own programs within terms of reference provided by the Department's undergraduate advisors. The proposed requirement of a majority of the directed electives outside the Department being of an upper-level nature is intended to encourage advanced preparation and skill development.

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<th>Proposed Finance and Real Estate Option</th>
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<tr>
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<td>Directed Electives Required in the Department of Agricultural Economics, Option-Specific Choices (9 hrs)</td>
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<tr>
<td>Directed Electives Required Outside the Department of Agricultural Economics (9 hrs)</td>
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<td><strong>Sub-Total</strong></td>
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\(^1\) New Course.
\(^2\) Title Change.
\(^3\) Course content/description change.
\(^*\) A minimum of 6 of these hours must be at the 300 or 400 level, of which at least 3 hours must be at the 400 level. These courses should be selected with the objective of supporting a focused career interest consistent with the respective Option. Students are encouraged to contact the Department of Agricultural Economics undergraduate advisors for additional information regarding potential career emphasis areas and related course work for this option.
### FRESHMAN YEAR

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### JUNIOR YEAR

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<td>AGEC 430 Macroeconomics of Ag. or ECON 311 Money and Banking</td>
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</table>

Notes:
1. To be selected from the University Core Curriculum.
2. Any course offered by the College of Ag & Life Sciences EXCEPT AGEC courses.
3. The 6 hours of international and cultural diversity courses, as required for graduation, may be met in the curriculum. Students may select humanities and visual and performing arts electives that also meet the international and cultural diversity requirement.
4. Select 3 courses from AGEC 344, 350, 425, 447, 448, and [452 or 453].
5. Nine of the 12 hours must be at the 300 or 400 level.
6. Nine hours to be selected in one or more departments outside the Dept. of Ag Economics. A minimum of 6 of these hours must be at the 300 or 400 level, of which at least 3 hours must be at the 400 level. These courses should be selected with the objective of supporting a focused career interest consistent with the Finance and Real Estate Option. Contact the Dept. of Agricultural Economics undergraduate advisors for additional information regarding potential career emphasis areas for this option.
2. **Proposed Food Marketing Systems Option**

This proposed Option is designed to provide a well-founded basis in principles, concepts, and methods for students interested in management, marketing, sales, and related professional careers in the agricultural and/or related industries. The proposed twenty-seven hours of Option-specific course work are intended to provide a balance among specified courses in the Department which offer in-depth, targeted instruction, directed opportunities to select among additional courses in the Department to realize a more diversified scope of expertise according to students' individual interests, and directed opportunities outside the Department. This should allow individual students to chart their own programs within terms of reference provided by the Department's undergraduate advisors. The proposed requirement of a majority of the directed electives outside the Department being of an upper-level nature is intended to encourage advanced preparation and skill development.

<table>
<thead>
<tr>
<th>Area</th>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Required in the Department of Agricultural Economics (9 hrs)</td>
<td>AGEC 315 (Food and Agricultural Sales)</td>
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<tr>
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<td>AGEC 447 (Food and Agricultural Price Analysis)¹,² or 448 (Ag Commodity Futures)</td>
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<td>AGEC 452 (Int. Trade and Ag.) or 453 (Int. Agribus. Mkt.)³</td>
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<td>Directed Electives Required in the Department of Agricultural Economics, Option-Specific Choices (9 hrs)</td>
<td>Select three of AGEC 413, 422, 424, ⁴ 425, ¹² 432, ¹² and [452 or 453³]</td>
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Sub-Total 27

¹ Title Change.
² Course content/description change.
³ New Course.
⁴ A minimum of 6 of these hours must be at the 300 or 400 level, of which at least 3 hours must be at the 400 level. These courses should be selected with the objective of supporting a focused career interest consistent with the respective Option. Students are encouraged to contact the Department of Agricultural Economics undergraduate advisors for additional information regarding potential career emphasis areas and related course work for this option.
**Nonsubstantive Degree Program Proposal, Agricultural Economics**

**B.S. degree in Agricultural Economics – Proposed Food Marketing Systems Option**

**Catalog 127**

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
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<th>Cr</th>
<th>Second Semester</th>
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<td>AGEC 105 Intro. To Ag Economics</td>
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### JUNIOR YEAR

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5. Nine of the 12 hours must be at the 300 or 400 level.
6. Select 3 courses from AGEC 413, 422, 424, 425, 432, and [452 or 453].
3. Proposed Policy and Economic Analysis Option

This proposed Option is designed to provide a well-founded basis in principles, concepts, and methods for students interested in pursuing graduate and/or law school. The proposed twenty-seven hours of Option-specific course work are intended to provide a balance among specified courses in the Department which offer in-depth, targeted instruction, directed opportunities to select among additional courses in the Department to realize a more diversified scope of expertise according to students’ individual interests, and directed opportunities outside the Department. This should allow individual students to chart their own programs within terms of reference provided by the Department’s undergraduate advisors. The proposed requirement of a majority of the directed electives outside the Department being of an upper-level nature is intended to encourage advanced preparation and skill development.

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\(^1\) Title Change.
\(^2\) Course content/description change.
\(^3\) New Course.

* A minimum of 6 of these hours must be at the 300 or 400 level, of which at least 3 hours must be at the 400 level. These courses should be selected with the objective of supporting a focused career interest consistent with the respective Option. Students are encouraged to contact the Department of Agricultural Economics undergraduate advisors for additional information regarding potential career emphasis areas and related course work for this option.
Nonsubstantive Degree Program Proposal, Agricultural Economics

B.S. degree in Agricultural Economics — Proposed Policy and Economic Analysis Option

Catalog 127

**FRESHMAN YEAR**

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4. **Proposed Rural Entrepreneurship Option**

This proposed Option is designed to provide a well-founded basis in principles, concepts, and methods for students interested in owning and/or managing or otherwise being engaged in working with a rural business. The proposed twenty-seven hours of Option-specific course work are intended to provide a balance among specified courses in the Department which offer in-depth, targeted instruction, directed opportunities to select among additional courses in the Department to realize a more diversified scope of expertise according to students’ individual interests, and directed opportunities outside the Department. This should allow individual students to chart their own programs within terms of reference provided by the Department’s undergraduate advisors. The proposed requirement of a majority of the directed electives outside the Department being of an upper-level nature is intended to encourage advanced preparation and skill development.

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## SOPHOMORE YEAR

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4. Select 3 courses from AGEC 315, 413, 422, 432, 448, and [452 or 453].
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6. Nine of the 12 hours must be at the 300 or 400 level.
Proposed Curricula in Agricultural Economics

The Department of Agricultural Economics offers a Bachelor of Science degree in Agricultural Economics. The B.S. degree in Agricultural Economics offers students four options: Finance and Real Estate, Food Marketing Systems, Policy and Economic Analysis, and Rural Entrepreneurship. In addition, in conjunction with the Mays Business School, the department also offers a B.S. in agribusiness.

Requirements for Graduation

Requirements for graduation are listed in the Texas A&M University Student Rules and this catalog. With the exception of physical activity and general elective requirements, courses taken to satisfy degree requirements must be taken for letter grades.

Proposed Curriculum in Agricultural Economics — Bachelor of Science

The curricula in Agricultural Economics are designed to train graduates for a wide variety of jobs in agriculturally-oriented business firms and agencies. Flexibility is included in the curricula so that a student, in consultation with a faculty advisor, can develop a degree program which best fits personal career objectives. Options available in agricultural economics are finance and real estate, food marketing systems, policy and economic analysis, and rural entrepreneurship. The course requirements are the same during the freshman and sophomore years for all options. Students may select an option at any time, but must do so prior to registering for their junior year.

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<tr>
<td>ECON 202 Prin. of Economics</td>
<td>(3-0)</td>
<td>3</td>
<td>POLS 207 State and Local Govt.</td>
<td>(3-0)</td>
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<tr>
<td>POLS 206 American Natl. Govt.</td>
<td>(3-0)</td>
<td>3</td>
<td>Visual and performing arts elective a</td>
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<td>Natural science elective b</td>
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<td></td>
<td>COMM 203 Publ. Speaking</td>
<td>(3-0)</td>
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<td>KINE 199 Required Physical Act.</td>
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</tbody>
</table>

NOTES:  1. To be selected from the University Core Curriculum.
        2. Any course offered by the College of Ag & Life Sciences EXCEPT AGEC courses.
        3. The 6 hours of international and cultural diversity courses, as required for graduation, may be met in the curriculum. Students may select humanities and visual and performing arts electives that also meet the international and cultural diversity requirement.
Proposed Finance and Real Estate Option

The Finance and Real Estate option is designed to provide a well-founded basis in principles, concepts, and methods for students interested in finance and/or real estate professional careers in the agricultural industry and/or related professions.

(See Freshman and Sophomore Years)

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGEC 314 Mkt Ag. Food Products</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 340 Agribusiness Management</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 422 Land Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 323 Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>STAT 303 Statistical Methods</td>
<td>3</td>
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<tr>
<td>Directed AGEC Elective^1</td>
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18

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>AGEC 424 Rural Entrepreneurship I</td>
<td>3</td>
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<tr>
<td>AGEC 429 Agricultural Policy</td>
<td>3</td>
</tr>
<tr>
<td>Directed Non AGEC Elective^3</td>
<td>3</td>
</tr>
<tr>
<td>Free Electives^1</td>
<td>3</td>
</tr>
</tbody>
</table>

15

NOTE: 1. Select 3 courses from AGEC 344, 350, 425, 447, 448, and (452 or 453).
2. Nine of the 12 hours must be at the 300 or 400 level.
3. Nine hours to be selected in one or more departments outside the Dept. of Ag Economics. A minimum of 6 of these hours must be at the 300 or 400 level, of which at least 3 hours must be at the 400 level. These courses should be selected with the objective of supporting a focused career interest consistent with the Finance and Real Estate Option. Contact the Dept. of Agricultural Economics undergraduate advisors for additional information regarding potential career emphasis areas for this option.
Proposed Food Marketing Systems Option

The Food Marketing Systems Option is designed to provide a well-founded basis in principles, concepts, and methods for students interested in management, marketing, sales, and related professional careers in the agricultural industry and/or related professions.

(See Freshman and Sophomore Years)

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AGEC 314</td>
<td>Mkt Ag. Food Products</td>
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<tr>
<td>AGEC 315</td>
<td>Food and Ag. Sales</td>
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<td>ECON 323</td>
<td>Microeconomic Theory</td>
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<td>STAT 303</td>
<td>Statistical Methods</td>
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<td>Directed Non AGEC Elective*</td>
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AGEC 317 Econ Anal Agbu Mgmt (3-0) 3
AGEC 330 Fin Management in Ag. (3-0) 3
AGEC 340 Agribusiness Management (3-0) 3
AGEC 481 Seminar (1-0) 1
Free Elective^                        3
Directed AGEC Elective^              3

16

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AGEC 429</td>
<td>Agricultural Policy</td>
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<td>AGEC 452</td>
<td>International Trade in Ag.</td>
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<tr>
<td>AGEC 453</td>
<td>Int Agbu Marketing</td>
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<tr>
<td>AGEC 430</td>
<td>Macroeconomics of Ag.</td>
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<tr>
<td>AGEC 447</td>
<td>Food Ag. Price Analysis</td>
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<tr>
<td>AGEC 448</td>
<td>Ag. Commodity Futures</td>
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<tr>
<td>ENGL 301</td>
<td>Technical Writing</td>
<td>3</td>
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<td>Free Elective^</td>
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</table>

NOTE: 1. Nine hours to be selected in one or more departments outside the Dept. of Ag Economics.
       A minimum of 6 of these hours must be at the 300 or 400 level, of which at least 3 hours must be at the 400 level. These courses should be selected with the objective of supporting a focused career interest consistent with the Food Marketing Systems Option. Contact the Dept. of Agricultural Economics undergraduate advisors for additional information regarding potential career emphasis areas for this option.

2. Nine of the 12 hours must be at the 300 or 400 level.

3. Select 3 courses from AGEC 413, 422, 424, 425, 432, and (452 or 453).
Proposed Policy and Economic Analysis Option

The Policy and Economic Analysis Option is designed to provide a well-founded basis in principles, concepts, and methods for students interested in pursuing graduate and/or law school following their graduation with a B.S. degree.

(See Freshman and Sophomore Years)

JUNIOR YEAR

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<tr>
<th>Course</th>
<th>Credits</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGEC 314 Mkt Ag, Food Products</td>
<td>(3-0)</td>
<td>3</td>
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<tr>
<td>AGEC 340 Agm Business Management</td>
<td>(3-0)</td>
<td>3</td>
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<tr>
<td>ECON 323 Microeconomic Theory</td>
<td>(3-0)</td>
<td>3</td>
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<tr>
<td>STAT 303 Statistical Methods</td>
<td>(3-0)</td>
<td>3</td>
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<tr>
<td>Directed AGEC Elective¥</td>
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SENIOR YEAR

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<tr>
<td>AGEC 350 Environ Nat Res Econ</td>
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<tr>
<td>AGEC 344 Food and Ag Law</td>
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<tr>
<td>AGEC 452 International Trade in Ag.</td>
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<tr>
<td>ENGL 301 Technical Writing</td>
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<tr>
<td>Free Electives¥</td>
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<td>3</td>
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</table>

NOTE: 1. Select 3 courses from AGEC 422, 432, 448, and (452 or 453).
2. Nine of the 12 hours must be at the 300 or 400 level.
3. Nine hours to be selected in one or more departments outside the Dept. of Ag Economics. A minimum of 6 of these hours must be at the 300 or 400 level, of which at least 3 hours must be at the 400 level. These courses should be selected with the objective to support a focused career interest consistent with the Policy and Economic Analysis Option. Contact the Dept. of Agricultural Economics undergraduate advisors for additional information regarding potential career emphasis areas for this option.
**Proposed Rural Entrepreneurship Option**

The Rural Entrepreneurship Option is designed to provide a well-founded basis in principles, concepts, and methods for students interested in owning and/or managing or otherwise being engaged in working with a rural business.

*(See Freshman and Sophomore Years)*

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGEC 314 Mkt Ag. Food Products</td>
<td>(3-0)</td>
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<tr>
<td>AGEC 340 Agribusiness Management</td>
<td>(3-0)</td>
</tr>
<tr>
<td>ECON 321 Microeconomic Theory</td>
<td>(3-0)</td>
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<tr>
<td>STAT 303 Statistical Methods</td>
<td>(3-0)</td>
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<td>Directed Non AGEC Elective$^1$</td>
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**Total:** 18

### SENIOR YEAR

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<tbody>
<tr>
<td>AGEC 344 Food and Ag Law</td>
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<td>AGEC 424 Rural Entrepreneurship I</td>
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<tr>
<td>AGEC 425 Rural Entrepreneurship II</td>
<td>(2-2)</td>
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<tr>
<td>AGEC 430 Macroeconomics of Ag</td>
<td>(3-0)</td>
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<td>or</td>
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<tr>
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<td>Free Elective$^1$</td>
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**Total:** 15

**NOTE:**
1. Select 3 courses from AGEC 315, 413, 422, 432, 448, and [452 or 453].
2. Nine hours to be selected in one or more departments outside the Dept. of Ag Economics. A minimum of 6 of these hours must be at the 300 or 400 level, of which at least 3 hours must be at the 400 level. These courses should be selected with the objective of supporting a focused career interest consistent with the Rural Entrepreneurship Option. Contact the Dept. of Agricultural Economics undergraduate advisors for additional information regarding potential career emphasis areas for this option.
3. Nine of the 12 hours must be at the 300 or 400 level.
Department of Agricultural Economics  
(AGEC)

Professors D. A. Bessler, O. Capps, J. R. Conner, S. W. Fuller, R. C. Griffin, W. L. Griffin, L. L. Jones,  
D. A. Klinefelter, R. D. Lacewell, C. F. Lard, D. J. Leatham, K. K. Litzsinger, H. A. Love, B. A. McCad,  
J. M. McGrann, J. W. Mjelde, R. M. Nagy, A. G. Nelson (Head), J. P. Nichols, J. B. Person, Jr.,  

Associate Professors D. P. Anderson, F. O. Roacha, G. C. Davis, E. Jones, J. L. Park, V. Salin, R. Woodward;

Assistant Professors P. D. Mitchell

Lecturer T. A. Butt

105. Introduction to Agricultural Economics. (3-0). Credit 3. I, II, S Characteristics of our economic  
system and basic economic concepts; survey of the farm and ranch firm and its organization and management;  
structure and operation of the marketing system; functional and institutional aspects of agricultural finance;  
government farm programs. Prerequisite: Freshman or Sophomore classification.

agribusiness issues to economic and financial management concepts, principles, and tools, illustrating and  
enhancing their integration toward pragmatic applications in the agricultural industry; labs are focused on the  
integration of mathematics and economics with computer skills, with particular attention directed toward  
spreadsheets, databases, web pages, and communications software. Prerequisites: AGEC 105; MATH 141 &  
142; sophomore or junior AGEC, AGBL, BUAG major; or approval of Dept. Head.

Prerequisites: AGEC 105; freshman or sophomore classification in agricultural economics or approval of  
instructor; 2.25 GPR in major, overall and CBK courses, if applicable.

289. Special Topics in… Credit 1 to 4. I, II, S Selected topics in an identified area of agricultural  
economics. May be repeated for credit. Prerequisite: Freshman or sophomore classification and approval of  
Dept. Head.

314. Marketing Agricultural and Food Products. (3-0). Credit 3. I, II General introductory course  
covering operations involved in movement of agricultural commodities from farm to consumer; essential  
marketing functions of buying, selling, transportation, storage, financing, standardization, pricing and risk  
bearing. Prerequisite: AGEC 105 or 3 hours of economics and junior or senior classification.

315. Food and Agricultural Sales. (3-0). Credit 3. I, II Principles of professional sales techniques used  
in food and agricultural firms; develop a professional sales presentation; study current agribusiness industry  
professional salespersons. Prerequisites: Junior or senior classification.
317. **Economic Analysis for Agribusiness Management.** (3-0). Credit 3. I, II Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis is placed on theoretical aspects and applied analysis of managerial problems faced by agricultural firms. Prerequisites: ECON 323/322; STAT 303/302 or INFO 303; AGEC 217, and junior or senior classification.

325. **Principles of Farm and Ranch Management.** (2-2). Credit 3. II Agribusiness managerial decision-making and analysis in different market environments; emphasis is on profit maximization; labs are focused on using computerized methods for evaluating management alternatives for farming and ranching problem situations. Prerequisites: AGEC 105 or ECON 202; for junior or senior non-AGEC and non-AGBU majors only; knowledge of Excel is expected.

330. **Financial Management in Agriculture.** (3-0). Credit 3. I, II Principles of financial management of farms, ranches, livestock operations and other agribusiness firms; financial statement analysis, investment analysis, firm growth, risk management, cost of capital, income taxes, business organization, estate planning, legal aspects of borrowing and sources and terms of agricultural loans. Prerequisites: AGEC 105 or 3 hours of economics; ACCT 209 or 229; junior or senior classification.

340. **Agribusiness Management.** (3-0). Credit 3. I, II, S Systematic analysis of agribusiness firm-level decision-making using a broad array of management concepts, managing agribusiness firms and their unique problems and opportunities, exposure to decision-making in agribusiness environment. Prerequisite: AGEC 105 or 3 hours of economics; junior or senior classification.

344. **Food and Agricultural Law.** (3-0). Credit 3. I, II Legal problems relevant to agribusiness; torts, fencing laws, liability for agricultural pollution, irrigation water rights, corporations and partnerships. Prerequisite: Junior or senior classification or approval of instructor.

350. **Environmental and Natural Resource Economics.** (3-0). Credit 3. I, II Inspection of issues such as environmental degradation, population growth, recycling, water use and depletion, natural habitat protection, water and air pollution, acid deposition, fishery management, and global warming using economically derived principles and tools. Prerequisite: Junior or senior classification or approval of instructor.

400. **Field Studies in Agricultural Economics.** Credit 1 to 2. II Arranged during spring break or between semesters; field trip to observe operations of agricultural business firms, state and federal agencies and farms and ranches; test on field studies required; additional expenses to be borne by students. Prerequisite: AGEC 105 or 3 hours of economics and junior or senior classification.
413. Agricultural Cooperatives. (3-0). Credit 3. I Historical development and principles of cooperative associations in our economic system; organizational and operational aspects of cooperatives: legal considerations, financing, management and member relations; future role of cooperatives. Prerequisite: AGEC 105 or ECON 202 and junior or senior classification.

414. Agribusiness and Food Market Analysis. (3-0). Credit 3. I, II Application of economic and marketing principles to contemporary food and agribusiness marketing; practical marketing management for agribusiness firms; market analysis; marketing strategy, and planning as related to the emerging trends in global food and agribusiness sector of the economy. Prerequisites: AGEC 317; FINC 341; MKTG 321; junior or senior; AGBU majors only.

422. Land Economics. (3-0). Credit 3. I, II Economic, institutional, and physical factors involved in the use and control of natural resources; it includes elements of introductory land economics as a discipline, economic foundations of land economics, institutional influences on land use, and the effects of public policy on land use. Prerequisite: AGEC 105 or 3 hours economics and junior or senior classification.

424. Rural Entrepreneurship I. (2-2). Credit 3. I Strategic planning regarding economic and financial feasibility of rural business ventures; emphasis on processes for developing a comprehensive enterprise analysis; including management information system components; production, marketing, and financial plans; enterprise budget(s); and evaluation of risk management alternatives; exchanges with “real-world” lenders and other agribusiness management personnel are included. Prerequisites: AGEC 217, AGEC 330, ACCT 209/210, and junior or senior classification; or approval of instructor.

425. Rural Entrepreneurship II. (2-2). Credit 3. II Strategic planning regarding feasibility of rural business ventures; emphasis on processes for developing comprehensive economic and financial prospectuses, including enterprise budgets, risk management planning, cash flow budgeting, net worth statements, income budgets, reconciliation statements and shock analysis; exchanges with “real-world” lenders and other agribusiness management personnel are included. Prerequisites: AGEC 424 and junior or senior classification.

429. Agricultural Policy. (3-0). Credit 3. I, II, S Analysis of the causes, nature and effects of government participation in agriculture; interrelationship of the American agriculture and agribusiness sector with the political and economic system, public administration and interest group representation. Prerequisite: AGEC 105 or 3 hours of economics and junior or senior classification.
430. **Macroeconomics of Agriculture.** (3-0). Credit 3. I, II Physical and financial linkages between agriculture and the rest of the economy; agriculture's importance to the economy, the determinants of aggregate supply of agricultural products, the organization and performance of financial intermediaries serving agriculture, and the differential effects of national economic policies on agriculture. Prerequisites: AGEC 105 or 3 hours of economics; AGEC 429 and junior or senior classification.

431. **Cases in Agribusiness Finance.** (3-0). Credit 3. I, II Financial management of agribusiness firms. Advanced topics in financial statement analysis, liquidity management, investment analysis, and capital structure illustrated through examination of agribusiness cases. Prerequisites: AGEC 317 & 340; FINC 341; junior or senior AGBU majors only.

432. **Rural Real Estate and Financial Analysis.** (3-0). Credit 3. II Advanced topics in investment analysis; financial intermediation in agriculture; real estate markets and market analysis; and appraisal valuation. Prerequisite: AGEC 330 & 422; ACCT 210 or 230, and junior or senior classification.

440. **Agribusiness Strategic Analysis.** (3-0). Credit 3. I, II Economic features of the agribusiness system and related management problems; problem recognition and economic decision-making in marketing, production and finance for agribusiness firms. Prerequisites: AGEC 317 & 340; FINC 341; MGMT 363; MKTG 321; junior or senior AGBU majors only.

447. **Food and Agricultural Price Analysis.** (3-0). Credit 3. I, II Factors influencing the level of food and agricultural prices; price trends and seasonal variation methods of forecasting demands and prices and futures trading. Prerequisite: AGEC 314 & 317, and junior or senior classification.

448. **Agricultural Commodity Futures.** (3-0). Credit 3. II Activities of commodity futures exchanges, the mechanics of trading futures contracts and the use of futures trading for hedging and forward pricing; options, basis behavior and hedging strategies for selected commodities. Prerequisite: AGEC 105 or 3 hours of economics and junior or senior classification.

452. **International Trade and Agriculture.** (3-0). Credit 3. I Changing role of U.S. agriculture in a dynamic world economy; national and international policies and institutions affecting agriculture; exchange rates, tariffs, and non-tariff barriers. Prerequisite: AGEC 105 or 3 hours of economics and junior or senior classification.

453. **International Agribusiness Marketing.** (3-0). Credit 3. I Basic competencies in international marketing of agri-foods; market entry, pricing, payment, finance, and promotion are emphasized. Prerequisites: AGEC 105 or 3 hours of economics, and junior or senior classification.

481. **Seminar.** (1-0). Credit 1. I, II Role of social scientist in agricultural industry; professional opportunities and responsibilities; individual investigations and reports; discussions with prominent leaders in the field. Prerequisite: AGEC 217; and junior or senior classification in agricultural economics or agribusiness.
484. Internship. Credit 1 to 3. I, II, S Supervised experience program conducted in the area of the student's interest in agricultural economics and agribusiness. May be taken two times. Prerequisites: AGEC 105 or 3 hours of economics; 2.25 GPR in major, overall and CBK courses, if applicable; junior or senior classification; approval of department head and supervising professor.

485. Directed Studies. Credit 1 to 3 each semester. I, II, S Special problems not covered by other courses. Content will depend upon problem studied. Prerequisites: AGEC 105 or ECON 202; 3 additional hours of agricultural economics; junior or senior classification; approval of department head and supervising professor; 2.25 GPR in major, overall and CBK courses, if applicable.

489. Special Topics in... Credit 1 to 4. I, II, S Selected topics in an identified area of agricultural economics. May be repeated for credit. Prerequisite: Junior or senior classification and approval of Dept. Head.

*Field trips may be required for which departmental fees may be assessed to cover costs.
October 6, 2003

Dr. Clair Nixon
Associate Dean, Mays Business School
Texas A&M University
CAMPUS Mail Stop 4113

Dear Dr. Nixon:

We are proposing a nonsubstantive revision in the curriculum for the Agricultural Economics B.S. degree. This proposal has been developed over the past three years. No curriculum changes are proposed for the Agribusiness B.S. degree except for the AGEC 217 course change mentioned below. The Agricultural Economics B.S. curriculum involves a restructuring of the degree from three options to four options, with the intent of providing greater flexibility and broader appeal to students according to their diversified professional career and/or graduate or law school interests. As far as course requirements in the Mays Business School are concerned, this curriculum mirrors that of the current Agricultural Economics except for one course. AGEC 217 is a new course intended to replace the existing requirement of either AGEC 221 or INFO 209. That is, all Agricultural Economics majors will be required to take AGEC 217 and none will be enrolled in INFO 209. Similarly, all Agribusiness majors will be required to take AGEC 217 and none will be enrolled in INFO 210.

I would appreciate your reviewing the curriculum and providing me with an acknowledgment of having been notified of our intent. We anticipate the impacts of the proposed changes will be minimal on our enrollment in this degree program, with the current 319 students enrollment level expected to remain relatively constant. Consequently, the impact of this nonsubstantive proposal should also be minimal with respect to the demand for Mays Business School courses.

This nonsubstantive proposal is consistent with the materials we discussed with Peter Drysdale, Linda Windle, and you on June 5. We are submitting this proposal to the College of Agriculture and Life Sciences Undergraduate Program Committee on Thursday, October 9. Subsequently, we anticipate it moving forward to the University Curriculum Committee for its early November meeting. Thank you in advance for allowing us to expedite this process. We look forward to working with you and your faculty on what we believe will be an excellent educational opportunity for our students. Should you have any questions concerning the curriculum, please do not hesitate to call me. Again, thanks for the assistance.

Sincerely,

A. Gene Nelson
Professor and Head

Acknowledgment of receipt: Dr. Clair Nixon
Associate Dean, Mays Business School

pc: Dr. Fuller Bazer, Exec. Associate Dean
College of Agriculture and Life Sciences

A Member of the Texas A&M University System and Its statewide Agriculture Program

Blocker Building • 2124 TAMU • College Station, Texas 77843-2124 • (979) 845-2116; FAX (979) 862-1563 • e-mail: agecon@tamu.edu
October 6, 2003

Dr. Leonardo Auernheimer
Head, Department of Economics, College of Liberal Arts
Texas A&M University
CAMPUS Mail Stop 4228

Dear Dr. Auernheimer:

We are proposing a nonsubstantive revision in the curriculum for the Agricultural Economics B.S. degree. This proposal has been developed over the past three years. This curriculum involves a restructuring of the degree from three options to four options, with the intent of providing greater flexibility and broader appeal to students according to their diversified professional career and/or graduate or law school interests. As far as course requirements in the Department of Economics are concerned, this curriculum mirrors that of the current Agricultural Economics except for one course. We have excluded ECON 410 as one of the possibilities for fulfilling the advanced macroeconomics training, constraining the choices to AGEC 430 or ECON 311. We have retained the basic requirements of ECON 202, 203, and ECON 322/323 in the curriculum.

I would appreciate your reviewing the curriculum and providing me with an acknowledgment of having been notified of our intent. We anticipate the impacts of the proposed changes will be minimal on our enrollment in this degree program, with the current 319 students enrollment level expected to remain relatively constant. Consequently, the impact of this nonsubstantive proposal should also be minimal with respect to the demand for Department of Economics courses.

This nonsubstantive proposal is consistent with the materials we discussed with Richard Anderson and you during the Spring. We are submitting this proposal to the College of Agriculture and Life Sciences Undergraduate Program Committee on Thursday, October 9. Subsequently, we anticipate it moving forward to the University Curriculum Committee for its early November meeting. Thank you in advance for allowing us to expedite this process. We look forward to working with you and your faculty on what we believe will be an excellent educational opportunity for our students. Should you have any questions concerning the curriculum, please do not hesitate to call me. Again, thanks for the assistance.

Sincerely,

A. Gene Nelson
Professor and Head

Acknowledgment of receipt:

Dr. Leonardo Auernheimer
Head, Department of Economics

pc: Dr. Fuller Bazer, Exec. Associate Dean
College of Agriculture and Life Sciences

Dr. Julia Kirk Blackwelder, Associate Dean
College of Liberal Arts

A Member of the Texas A&M University System and its statewide Agriculture Program

Blocker Building • 2124 TAMU • College Station, Texas 77843-2124 • (979) 845-2116; FAX (979) 862-1563 • e-mail: agecon@tamu.edu
October 31, 2003

Dr. Edward Rister  
Professor, Rural Entrepreneurship, and  
Associate Head, Undergraduate Program  
Department of Agricultural Economics  
Texas A&M University  
2124 TAMUS  
College Station, TX 77843-2124

Dear Dr. Rister:

The Texas A&M University Libraries strongly supports the restructuring of the curriculum course requirements in the Department of Agricultural Economics. Current library resources remain more than adequate to back any curriculum change, or any new degree program in agricultural economics. The library is on the verge of acquiring its three millionth volume and at last count was among the nation's leaders in the amount of funds expended on electronic materials.

Besides the resources in our library, the expansion of the Greater Western Library Alliance (GWLA) allows us ready access to the holdings of libraries in Arizona, California, Oregon, and Washington besides the traditional Big 12 schools. This type of resource sharing greatly expands the availability of information to agricultural economics faculty, graduate students, and undergraduates.

The library has always had a cordial relationship with the Department of Agricultural Economics and we stand ready to assist you in the future, in whatever way we can.

Sincerely,

Colleen Cook  
Dr. Colleen Cook  
Interim Dean
October 23, 2003

Dr. Karen Kubena
Associate Dean, College of Agriculture and Life Sciences
Texas A&M University
CAMPUS Mail Stop 2402

Dear Dr. Kubena:

We are proposing a nonsubstantive revision in the curriculum for the Agricultural Economics B.S. degree. This proposal has been developed with input from faculty and students over the past three years. The degree will be structured from three options to four options, with the intent of providing greater flexibility and broader appeal to students according to their professional career goals. The course requirements in the College of Agriculture and Life Sciences for this new curriculum are similar to our current Agricultural Economics degree, but with greater flexibility in course selection. Our appraisal is that the impact on other departments in the College of Agriculture and Life Sciences is negligible and we are requesting that you concur with that analysis.

I would appreciate your review of the curriculum and your acknowledgment of such. We anticipate the impacts of the proposed changes will be minimal on our enrollment in this degree program, with the current 319 students enrollment level expected to remain relatively constant. Consequently, the impact of this nonsubstantive proposal also should be minimal with respect to the demand for College of Agriculture and Life Sciences courses.

This nonsubstantive proposal is consistent with the materials we discussed at the College of Agriculture and Life Sciences Undergraduate Program Committee on Thursday, October 9. We anticipate it moving forward to the University Curriculum Committee for its early November meeting. Thank you in advance for allowing us to expedite this process. We look forward to working with you on what we believe will be an excellent educational opportunity for our students. Should you have any questions concerning the curriculum, please do not hesitate to call me. Again, thanks for the assistance.

Sincerely,

A. Gene Nelson
Professor and Head

Acknowledgment of receipt: Dr. Karen Kubena
Associate Dean, College of Agriculture and Life Sciences

pc: Dr. Fuller Bazer, Exec. Associate Dean
College of Agriculture and Life Sciences
New Courses and Course Revisions

Department of Agricultural Economics

October 30, 2003
## New Courses and Course Revisions

**Department of Agricultural Economics**  
**October 30, 2003**

<table>
<thead>
<tr>
<th>New Courses</th>
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<tbody>
<tr>
<td>AGEC 217</td>
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<td>AGEC 424</td>
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<td>AGEC 453</td>
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<tr>
<th>Revised Courses Requiring Syllabus</th>
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<tr>
<td>AGEC 317</td>
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<td>AGEC 432</td>
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<td>AGEC 447</td>
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<table>
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<tr>
<th>Revised Courses Requiring Form, but No Syllabus</th>
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<tbody>
<tr>
<td>AGEC 314</td>
<td>59</td>
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<td>AGEC 340</td>
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<td>AGEC 344</td>
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<td>AGEC 414</td>
<td>62</td>
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<td>AGEC 440</td>
<td>63</td>
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</table>

### Minor, Editorial Changes — No Form nor Syllabus Required

| AGEC 105 | AGEC 289 | AGEC 315 | AGEC 330 | AGEC 350 | AGEC 400 | AGEC 413 | AGEC 422 | AGEC 429 | AGEC 430 | AGEC 431 | AGEC 448 | AGEC 452 | AGEC 481 | AGEC 484 | AGEC 485 | AGEC 489 |

* Per Ms. Linda Lacey's office, these changes are incorporated into the 'Course Description' item contained in the nonsubstantive degree program materials. These changes will be discussed in further detail with Ms. Linda Lacey and Dr. Robert Knight.

### Course Deletions

| AGEC 221 |
| AGEC 454 |
The basis for preparing these submissions are the rules for what is required for different types of changes according to Ms. Linda Lacey in the Department of Academic Support Services:

- If the title, course number, and/or lecture/lab credit hours currently specified in the University Undergraduate Catalog's AGEC course listing section are changed, it is necessary to include a Change of Course form detailing those changes and submit the materials to the COALS Undergraduate Program Committee and subsequently send it to the University Curriculum Committee;

- If the title AND description are changed, it is necessary to include the Change of Course form and a syllabus;

- If the course description is changed and nothing else, it is necessary to send a request to Dr. Robert Knight (Chair of the University Curriculum Committee), requesting permission to make the change editorially. For such requests, it is necessary to identify
  FROM: (type in description that is in the current catalog)
  TO: (type in new description);

- If the prerequisites are changed and there is no effect on other departments, editorial changes are made in catalog proofs by working with Linda Lacey's office. If the changes involve coursework in other departments, however, a letter(s) of agreement from the affected department(s) and a Change of Course form are required, with these materials being submitted to the COALS Undergraduate Program Committee and University Curriculum Committee; and

- If the semesters during which a course is taught are changed, editorial changes are made in catalog proofs by working with Linda Lacey's office.

Two tables follow, providing documentation of these course changes. Subsequently, the appropriate forms and, if required, course syllabi are presented.
<table>
<thead>
<tr>
<th>Course # and Catalog Title</th>
<th>Bold Item in Catalog</th>
<th>Bold Item in Catalog</th>
<th>Bold Item in Catalog</th>
<th>Change in Course Title Proposed</th>
<th>Change in Semester(s) Taught</th>
<th>Change in Course Description Proposed</th>
<th>Change in Course Prerequisites Proposed</th>
<th>Changes Proposed are Editorial in Substance</th>
<th>Letter Required from Another Department</th>
<th>New Course Being Submitted for Course Number; New Course Form Required</th>
<th>Change Course Form Required</th>
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<td>AGEC 105 – Introduction to Agricultural Economics</td>
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<td>Richardson, Outlaw, D. Anderson, &amp; Klose</td>
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Table 2. Explanation of AGEC Course Requests (designated titles are new/revised titles).

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<tr>
<th>New Courses</th>
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<tr>
<td>AGEC 217</td>
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<td>AGEC 424</td>
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<td>AGEC 453</td>
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Changes in Existing Courses Requiring Syllabus

<p>| AGEC 317 | Economic Analysis for Agribusiness Management | Changes to this course include (a) title, (b) semesters taught (not in the summer), (c) minor editing of the course description, and (d) change in the prerequisites. This course is a gateway course for upper-level coursework in the Department. The changes are intended to improve communications to students regarding the importance of sequencing their related coursework and also identify the applied, pragmatic orientation of the course. Either Junior or Senior classification is required. |
| AGEC 325 | Principles of Farm and Ranch Management | Changes in this course are because it is no longer required for Agricultural Economics majors. It will be a non-major only course, taught only in the Spring. The course description is altered slightly and the prerequisites are modified (i.e., accounting is dropped) to make it available to more students. Either Junior or Senior classification is required. |</p>
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Changes</th>
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</thead>
<tbody>
<tr>
<td>AGEC 425</td>
<td>Rural Entrepreneurship II</td>
<td>Changes in this course include (a) title, (b) description, and (c) prerequisites. The content and structure of this capstone course are largely unchanged, except that the course is linked to the first capstone course in the Rural Entrepreneurship option, AGEC 424. Either Junior or Senior classification is required.</td>
</tr>
<tr>
<td>AGEC 432</td>
<td>Rural Real Estate and Finance Analysis</td>
<td>Changes in this course include (a) title, (b) description, and (c) prerequisites. This course is the capstone course in the Finance and Real Estate option of the Agricultural Economics degree. The course modifications include a slightly increased emphasis on the financial underpinnings of the rural real estate sector. Either Junior or Senior classification is required.</td>
</tr>
<tr>
<td>AGEC 447</td>
<td>Food and Agricultural Price Analysis</td>
<td>A change in title and a slight editing of the course description are intended to better describe the broad orientation of this course beyond simple commodity marketing. Either Junior or Senior classification is required.</td>
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<tr>
<td>AGEC 314</td>
<td>Marketing Agricultural and Food Products</td>
<td>The title is changed from “Marketing Agricultural Products” to recognize the course’s broader attention to food products as well. Either Junior or Senior classification is required.</td>
</tr>
<tr>
<td>AGEC 340</td>
<td>Agribusiness Management</td>
<td>The title is changed from “Environment of Agribusiness” to acknowledge the management content of the course and the contributions of ‘real-world’ management personnel acting as “profs-for-a-day.” Either Junior or Senior classification is required.</td>
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<tr>
<td>AGEC 344</td>
<td>Food and Agricultural Law</td>
<td>The title is changed from “Agricultural Law” to recognize the course’s broader attention to food products as well. Either Junior or Senior classification is required.</td>
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</table>
Table 2. Explanation of AGEC Course Requests (designated titles are new/revised titles).

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<th>Changes in Existing Courses Requiring Form Only, continued</th>
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<td>AGEC 440</td>
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<th>Changes in Existing Courses Involving Minor Edits</th>
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### Table 2. Explanation of AGEC Course Requests (designated titles are new/revised titles).

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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>AGEC 429</td>
<td>Agricultural Policy</td>
<td>The ‘semesters taught’ for this course are amended to include Summer as well as Fall and Spring, increasing the accessibility of this course to Junior or Senior students.</td>
</tr>
<tr>
<td>AGEC 430</td>
<td>Macroeconomics of Agriculture</td>
<td>The ‘semesters taught’ for this course are amended to include Fall as well as Spring, increasing the accessibility of this course to Junior or Senior students.</td>
</tr>
<tr>
<td>AGEC 431</td>
<td>Cases in Agribusiness Finance</td>
<td>The prerequisites for this are changed, reflecting the need for AGEC 317 in order to understand and perform the analytical aspects of the case analyses and to also specify Junior or Senior AGBU only.</td>
</tr>
<tr>
<td>AGEC 448</td>
<td>Agricultural Commodity Futures</td>
<td>The prerequisites for this course are changed to include restrictions to either Junior or Senior classification.</td>
</tr>
<tr>
<td>AGEC 452</td>
<td>International Trade and Agriculture</td>
<td>The prerequisites for this course are changed to include restrictions to either Junior or Senior classification.</td>
</tr>
<tr>
<td>AGEC 481</td>
<td>Seminar</td>
<td>The prerequisites for this course are changed, encouraging students to take it at the end of their junior year so as to better facilitate their senior coursework.</td>
</tr>
<tr>
<td>AGEC 484</td>
<td>Internship</td>
<td>The prerequisites for this course are changed to include restrictions to either Junior or Senior classification.</td>
</tr>
<tr>
<td>AGEC 485</td>
<td>Directed Studies.</td>
<td>The prerequisites for this course are changed to include restrictions to either Junior or Senior classification.</td>
</tr>
<tr>
<td>AGEC 489</td>
<td>Special Topics in ...</td>
<td>The prerequisites for this course are changed to include restrictions to either Junior or Senior classification.</td>
</tr>
</tbody>
</table>

### Deleted Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 221</td>
<td>Computer Applications in Agriculture</td>
<td>This course is no longer a part of the Agricultural Economics curriculum and is therefore deleted from the Department’s offerings.</td>
</tr>
<tr>
<td>AGEC 454</td>
<td>Land-Oil and Gas Law</td>
<td>This course is no longer a part of the Agricultural Economics curriculum and is therefore deleted from the Department’s offerings.</td>
</tr>
</tbody>
</table>
New Courses
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 Economics

2. Course prefix, number and complete title AGEC 217 "Fundamentals Of Ag Economics Analysis"

3. Course description (not more than 50 words) Relates contemporary agribusiness issues to economic and financial management concepts, principles, and tools, illustrating and enhancing their integration toward pragmatic applications in the agricultural industry; lab focuses on the integration of mathematics and economics with computer skills, with particular attention directed toward spreadsheets, databases, web pages, and communications software.

4. Prerequisite(s) AGEC 108, MATH 141 & 142, sophomore or junior AGEC, AGS3, PHM 158, or approval of Dean, Head

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 as AGEC 269 Indicate the number of students enrolled for each academic period it was taught. 03C = 53

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in History)
      BS in Agricultural Economics & BS in Agribusiness
   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) AGEC 217 Fund Of Ag Econ Analysis

<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>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>0</td>
<td>1, 02, 00, 05</td>
<td>01</td>
<td>0</td>
<td>03, 63, 2</td>
</tr>
</tbody>
</table>

Do not complete shaded area.

Approval recommended by:

Head of Department Date

Chair, College Review Committee Date

Head of Department (if cross-listed course) Date

Dean of College Date

Submitted to Coordinating Board by:

Dean of College Date

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.
SYLLABUS

1. Course Specifics
   a. Number and Title: AGEC 217, "Fundamentals of Ag Economics Analysis"
   b. Course Credit: (1-4)-3
   c. Catalog Description:
      Relates contemporary agribusiness issues to economic and financial management concepts, principles, and tools, illustrating and enhancing their integration toward pragmatic applications in the agricultural industry; lab focuses on the integration of mathematics and economics with computer skills, with particular attention directed toward spreadsheets, databases, web pages, and communications software.
   d. Extended Description and Objectives:
      The 21st century contains many new challenges and opportunities for the agricultural industry, both domestically and internationally. The industry is multifaceted, including various segments extending from research and development, input supply, production, processing, wholesaling, and retailing to, ultimately, the consumers. Numerous contemporary issues are emerging, affecting the necessary skills of participants in this segment of the national and global economy. This course relates those issues to economic and financial management concepts, principles, and tools, illustrating and enhancing the integration of such education toward pragmatic applications in the agricultural industry workplace. As an applied economist and/or agribusiness manager, your greatest challenge would be the integration of knowledge and computer skills that you acquired while at school. With this challenge in sight, we will use two labs each week to focus on the integration of mathematics and economics with computer skills to prepare students for upper-level courses and for challenges that they may face during their professional careers.

2. Instructor Information
   NOTE: AGEC 217 is comprised of a 50-minute lecture and two, two-hour lab meetings each week. Dr. Rister teaches the lectures and Dr. Butt teaches the labs.

   a. Instructors: Dr. M. Edward Rister Room 3311, Blocker Building
      Telephone: Office -- 979/845-3801; Home -- 979/690-0180 (after 7:00 a.m. and before 10:30 p.m.); Cell -- 979/255-5211; FAX -- 979/458-1755
      E-mail: c-rister@tamu.edu
      Homepage: http://agecon.tamu.edu/faculty/rister

      Dr. Tanveer Butt Room 305, Blocker Building
      Telephone: 979/845-6968 during morning and 979/845-3153 during afternoon
      E-mail: tanveer@tamu.edu
      Homepage: //agecon.tamu.edu/faculty/tbutt/

   b. Office Hours: Rister – T&F: 9:00-11:45 a.m. or by appointment
      Butt - MWF: 8:00-11:00 a.m. or by appointment

3. Prerequisites: AGEC 105; MATH 141 and 142; Sophomore or Junior AGEC, AGBL, or BUAG major; or approval of Department Head.

Additional readings may be handed out in class, placed on reserve in the Ag. Eco Reference Room (room 303 Blocker) and/or campus library(ies), or provided via the internet homepage.

5. Course topics and weekly calendars:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>LECTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Agribusiness Careers and Challenges</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Agribusiness Competencies – Necessary Economic, Business, and Computer Skills</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Food Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Rural Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Resource and Policy Analyses</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Rural Finance and Real Estate Markets</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>International Dimensions of Agriculture</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Integrating Mathematics</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Application of Quantitative Methods to Support Economic Analysis and Decision-Making – Spreadsheets</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Application of Quantitative Methods to Support Economic Analysis and Decision-Making – Databases</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Application of Quantitative Methods to Support Economic Analysis and Decision-Making – Web Pages</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Application of Quantitative Methods to Support Economic Analysis and Decision-Making – Communication Software</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Final Exam Days</td>
<td>Final Exam</td>
</tr>
</tbody>
</table>


Course topics and weekly calendars, continued:

<table>
<thead>
<tr>
<th>LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
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<tr>
<td>3</td>
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<tr>
<td>12</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>14</td>
</tr>
</tbody>
</table>

\(^1\) MS Access, MS Excel, MS PowerPoint, and MS Word are all commercial software produced and registered by Microsoft Corporation.

\(^2\) DreamWeaver is commercial software produced and registered by MacroMedia, Inc.

6. Course Grading Criteria

a. Individual components of course

<table>
<thead>
<tr>
<th>LECTURE</th>
<th>LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
<td><strong>% of Grade</strong></td>
</tr>
<tr>
<td>Class Citizenship (^1)</td>
<td>50 %</td>
</tr>
<tr>
<td>Final Exam (^2)</td>
<td>10 %</td>
</tr>
<tr>
<td>Homework (^3)</td>
<td>40 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

\(^1\) Includes attendance, quizzes, class participation, promptness in turning in homework assignments, etc.

\(^2\) Will consist of an in-class portion, plus possibly a take-home part.

\(^3\) A few short essays on guest speaker presentations, etc.
b. **Overall course grade** – 1/3 from lecture and 2/3 from lab.

c. **Grading scale**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90+</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
</tr>
</tbody>
</table>

d. **Miscellaneous comments on grading structure**

**Lecture:** In case of illness or other maladies, call 845-3801, if able, **before class time** and either inform me directly or leave a message on my voice mail. Class attendance and participation is a vital component of this course – you are expected to be in class everyday, **ON TIME**. Only University-excused absences are recognized as cause for allowing missed assignments to be submitted late.

**Lab:** Exam dates are available in the class calendar. Students should note these dates. In case a student misses an exam without a university excuse, no makeup exam will be administered.

7. **The Americans with Disabilities Act**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 126 of the Koldus Building so your professor can best accommodate your needs. The phone number is 845-1637.

8. **Copyrights Statement**

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.
9. Scholastic Honesty and Classroom “Rules.”

A note on cheating. **It is not tolerated!** If caught in the act, you automatically receive a zero on the paper in question (the grade for that paper will not, under any circumstances, be dropped from final grade calculations) and be reported to your academic advisor, Department Head, and College Dean. As noted and copied explicitly from TAMU student rules on the Internet (http://student-rules.tamu.edu), remember the Aggie Code of Honor:

For many years Aggies have followed a Code of Honor, which is stated in this very simple statement:

\[
\text{An Aggie does not lie, cheat or steal}
\]
\[
\text{or tolerate those who do.}
\]

The Aggie Code of Honor is an effort to unify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. It only calls for honesty and integrity, characteristics that Aggies have always exemplified.

The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other.
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 ________________

2. Course prefix, number and complete title AGEC 424 "Rural Entrepreneurship I"

3. Course description (not more than 50 words) Strategic planning regarding economic and financial feasibility of rural business ventures; emphasis on processes for developing a comprehensive enterprise analysis, including management information system components; production, marketing, and financing plans; enterprise budget(s); and evaluation of risk management alternatives; exchanges with "real-world" lenders and other agribusiness management personnel.

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 01C - 15, 02C - 17, 03C - 12

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   BS in Agricultural Economics - Rural Entrepreneurship Option & Finance and Real Estate Option
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
   BS in Agricultural Economics - Food Marketing Systems Option

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)

   Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
   0 2 0 2 0 3 5 2 0 7 0 1 0 0 1 6 0 1 4 0 0 4 - 0 5 0 0 3 6 3 2

   Approval recommended by: ____________________________
   Head of Department Date Chair, College Review Committee Date
   Head of Department (if cross-listed course) Date Dean of College Date
   Submitted to Coordinating Board by: ________________
   Dean of College Date
   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.

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SYLLABUS

1. Course Specifics

   a. Number and Title: AGEC 424, “Rural Entrepreneurship I”

   b. Course Credit: (2-2-3)

   c. Catalog Description:

       Strategic planning regarding economic and financial feasibility of rural business ventures; emphasis on processes for developing a comprehensive enterprise analysis, including management information system components; production, marketing, and financing plans; enterprise budget(s); and evaluation of risk management alternatives; exchanges with ‘real-world’ lenders and other agribusiness management personnel.

   d. Extended Description and Objectives:

       General appreciation for challenges confronting entrepreneurs and usefulness of economic and financial planning for avoiding pitfalls and identifying potentially successful ventures; awareness of alternative types of insurance and potential benefits of each; introduction to business organization forms and relationships to income tax management; understanding of fixed and overhead expenses and how to allocate among enterprises; appreciation for the opportunity costs of own capital, labor, and management; ability to develop an enterprise budget using own numbers, based on own production, marketing, and financing plans; understanding of family living budgeting and before-tax dependency on business; awareness of management information system requirements for business decisionmaking; conceptualization of yield, price, and cost risks affecting projected enterprise profitability.

2. Instructor Information

   a. Instructor: Dr. M. Edward Rister

      Room 3311, Blocker Building

      Telephone: Office -- 979/845-3801; Home -- 979/690-0180 (after 7:00 a.m. and before 10:30 p.m.); Cell -- 979/255-5211; FAX -- 979/458-1755

      E-mail: e-rister@tamu.edu

      Homepage: http://agecon.tamu.edu/faculty/rister

   b. Office Hours: T&F: 9:00-11:45 a.m. or by appointment.

3. Prerequisites: AGEC 217, AGEC 330, ACCT 209 or 229, and junior or senior classification; or approval of instructor.
4. Texts:


c. Additional readings may be handed out in class, placed on reserve in the Ag. Eco Reference Room (room 303, Blocker) and/or University library(ies), or provided via the internet homepage.

5. Course topics/calendar:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction and Identifying Entrepreneurial Ventures</td>
</tr>
<tr>
<td>2</td>
<td>Capital Asset Features of an Entrepreneurial Business</td>
</tr>
<tr>
<td>3</td>
<td>Cash Flow Needs for Family Living and Owner's Opportunity Costs</td>
</tr>
<tr>
<td>4</td>
<td>Financing Plan</td>
</tr>
<tr>
<td>5</td>
<td>Marketing Plan</td>
</tr>
<tr>
<td>6</td>
<td>Production Plan</td>
</tr>
<tr>
<td>7</td>
<td>Fixed and Overhead Expenses</td>
</tr>
<tr>
<td>8</td>
<td>Enterprise budgeting</td>
</tr>
<tr>
<td>9</td>
<td>Enterprise budgeting</td>
</tr>
<tr>
<td>10</td>
<td>Sensitivity Analyses</td>
</tr>
<tr>
<td>11</td>
<td>Sources of Physical and Financial Risk</td>
</tr>
<tr>
<td>12</td>
<td>Risk Management</td>
</tr>
<tr>
<td>13</td>
<td>Management Information System</td>
</tr>
<tr>
<td>14</td>
<td>Student Presentations</td>
</tr>
<tr>
<td></td>
<td>Final Exam Days</td>
</tr>
</tbody>
</table>

Final Exam Days Final Exam
**Course topics and weekly calendar, continued:**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction and Selecting Individuals' Businesses*</td>
</tr>
<tr>
<td>2</td>
<td>Identify Required Capital Assets</td>
</tr>
<tr>
<td>3</td>
<td>Evaluating Size of Business Required to Support Family Living and Meet Owners' Opportunity Costs</td>
</tr>
<tr>
<td>4</td>
<td>Developing Financing Plans</td>
</tr>
<tr>
<td>5</td>
<td>Developing Marketing Plans</td>
</tr>
<tr>
<td>6</td>
<td>Developing Production Plans</td>
</tr>
<tr>
<td>7</td>
<td>Calculating Fixed and Overhead Expenses</td>
</tr>
<tr>
<td>8</td>
<td>Preparing Enterprise Budgets</td>
</tr>
<tr>
<td>9</td>
<td>Refining Enterprise Budgets</td>
</tr>
<tr>
<td>10</td>
<td>Conducting Sensitivity Analyses with Enterprise Budgets</td>
</tr>
<tr>
<td>11</td>
<td>Identifying Sources and Dimensions of Physical and Financial Risks</td>
</tr>
<tr>
<td>12</td>
<td>Identifying Risk Management Alternatives</td>
</tr>
<tr>
<td>13</td>
<td>Developing a Management Information System</td>
</tr>
<tr>
<td>14</td>
<td>Student Presentations</td>
</tr>
</tbody>
</table>

* Lab activities are directed toward individual students developing the designated materials for their specific businesses.
6. Course Grading Criteria

a. Relative weight for different components of course

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Citizenship</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Project</td>
<td>.40%</td>
</tr>
</tbody>
</table>

b. Grading scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90+</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
</tr>
</tbody>
</table>

c. Miscellaneous comments on grading structure

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---

1 Includes attendance, daily quizzes, class participation, etc.

2 Will consist of an in-class portion, plus possibly a take-home part.

3 A few problems [written and/or computer], short essays on guest speaker presentations, etc.

4 Professional caliber, ready-to-take-to-the-bank, quality is the standard against which you will be graded. **Do not procrastinate on getting started on class assignments -- they can overwhelm you if you do not spread the work out over the semester.**
9. **Scholastic Honesty and Classroom “Rules.”**

A note on cheating. **It is not tolerated!** If caught in the act, you automatically receive a zero on the paper in question (the grade for that paper will not, under any circumstances, be dropped from final grade calculations) and be reported to your academic advisor, Department Head, and College Dean. As noted and copied explicitly from TAMU student rules on the Internet (http://student-rules.tamu.edu/), remember the Aggie Code of Honor:

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The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other.
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 Economics

2. Course prefix, number and complete title AGEC 453 "International Agribusiness Marketing"

3. Course description (not more than 50 words) Basic competencies in international marketing of agri-foods; market entry, pricing, payment, finance, and promotion.

4. Prerequisite(s) AGEC 105 or 3 hours of economics; junior or senior 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. 01C - 45; 02C - 51; 03C - 46

8. This course will be:
a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
BS in Agricultural Economics - Food Marketing Systems Option

b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
BS in Agricultural Economics - Rural Entrepreneurship Option; Policy and Economic Analysis Option; and Finance and Real Estate Option; and undergraduate general academics

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)
AGEC 453 | INTERNATIONAL AGBU MKTG

<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>
<th>FICE Code</th>
</tr>
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<tr>
<td>0</td>
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<td>0300301.01020005014004 - 05</td>
<td>00 0 36 3 2</td>
<td>Level 4</td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:

Head of Department / 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

* 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.
SYLLABUS

1. Course Specifics
   a. Number and Title: AGEC 453, "International Agribusiness Marketing"
   b. Course Credit: (3-0)-3
   b. Catalog Description:

      Basic competencies in international marketing of agri-foods; market entry, pricing, payment, finance, and promotion.
   c. Extended Description and Objectives:

      This course is designed to develop basic competencies in international marketing of agri-food products. Impacts of U.S. agricultural trade policies and exchange rates on agriculture and intra-firm decision making are discussed. Major topics include market entry strategies, business ethics and corruption, pricing and terms of sale, methods of payment, trade finance, cultural analysis, the use of Foreign Trade Zones and Export Tax Programs, and the formation of international strategic alliances. Objectives include: (a) develop students’ ability to employ critical thought and analysis to international marketing; (b) have students learn basic international marketing principles and practices; (c) have students understand the role of international institutions and their importance to U.S. agribusiness; (d) improve students’ understanding of the importance of globalization and its relationship to intra-firm decisionmaking; (e) familiarize students with the Internet and the World Wide Web as a tool in international agribusiness marketing; and (f) improve students’ communications ability and interpersonal skills.

2. Instructor Information
   a. Instructor: Dr. Parr Rosson
      Telephone: (979) 845-3070; Fax: (979) 847-9378;
      E-mail: prusson@tamu.edu
      Home Page: http://intlagmtg.tamu.edu/ (for leaflets, review materials)
   b. Office Hours: Office Hours: MWF: 8:30-10:30 a.m., TR: 1:30-4:00 p.m., or any other time I am in the office.

3. Prerequisites: AGEC 105 or 3 hours of economics and junior or senior classification.


5. Course topics and weekly calendars:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use of Trans-Texas Videoconference Network (TTVN) and Etiquette; Syllabus, Introductions, Class Handouts; International Marketing Practices, Chapter 1 (pp. 14-15), Class Notes</td>
</tr>
<tr>
<td></td>
<td>Overview of US Agricultural Trade, Chapter 1 &amp; Glossary, Class Notes</td>
</tr>
<tr>
<td>2</td>
<td>Protectionism, Class Notes</td>
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<tr>
<td></td>
<td>Business Ethics, Class Notes</td>
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<tr>
<td>3</td>
<td>International Institutions, Class Notes</td>
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<tr>
<td></td>
<td>Agricultural Trade Policies of the United States, Class Notes;</td>
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<tr>
<td></td>
<td>U.S. Trade Remedy Law and Implications for Trade Relations, Class Notes</td>
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<td>4</td>
<td>Market Entry &amp; International Distribution, Class Notes, Chapter 7</td>
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<td></td>
<td>Exam I, Room 457 Blocker</td>
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<tr>
<td>5</td>
<td>Exchange Rates, Agricultural Trade, and the Macroeconomy, Class Notes, Leaflet 5, &quot;Macroeconomic Policies and U.S. Agriculture&quot; Class Notes</td>
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<tr>
<td></td>
<td>Mad Cows, GMOs, and the Biosafety Protocol, Class Notes</td>
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<td>6</td>
<td>The Uruguay Round Agreement on Agriculture and the Doha Development Agenda, Class Notes</td>
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<td></td>
<td>Bio-terrorism and Potentials for Trade Disruption: Potential Threats and the U.S. Response, Class Notes</td>
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<td></td>
<td>Preferential Trading Arrangements Class Notes, Leaflet 8 &quot;Preferential Trading Arrangements&quot;</td>
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<td>7</td>
<td>Central America Free Trade Area (CAFTA) and Free Trade Area of the Americas (FTAA): Trade Creation or Trade Diversion? Class Notes</td>
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<tr>
<td>8</td>
<td>Freight Forwarders, Documentation and Customs Brokers, Chapter 14 and Class Notes</td>
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<tr>
<td></td>
<td>Price Quotes and Terms of Sale, Class Notes, Chapter 8 (pp.94-96) and Chapter 12</td>
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<td>International Strategic Alliances &amp; Marketing Management, Class Notes</td>
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<td></td>
<td>Case Analysis: Protexa Burlington International, PBI Video</td>
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<td>Exam II, Room 457 Blocker</td>
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6. Course Grading Criteria

a. Individual components of course:

<table>
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<tr>
<th>Item</th>
<th>Points</th>
<th>% of Course Grade</th>
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<tbody>
<tr>
<td>Quizzes (3@50 points each)</td>
<td>150</td>
<td>30%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>100</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>100</td>
<td>20%</td>
</tr>
<tr>
<td>Participation</td>
<td>50</td>
<td>10%</td>
</tr>
<tr>
<td>(Final-Optional)</td>
<td>(100)</td>
<td>(20%)</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>100%</td>
</tr>
</tbody>
</table>

b. Quizzes: A total of 3 *unannounced* quizzes will be given. Short answer and discussion questions will be used. Each quiz will be worth 50 points, resulting in 150 maximum possible quiz points. The three quizzes represent 30 percent of your total grade for the course.

c. Exams: Each exam will be worth 100 points and together the exams will represent 60 percent of your grade. Exam 1 is tentatively scheduled for September 25, Exam 2 is tentatively scheduled for October 28, and Exam 3 is scheduled for December 4. The exams are comprehensive. The final exam is scheduled for Friday, December 12, 12:30-2:30 p.m. and will be worth 100 points. The final exam will be optional and comprehensive. If you decide to take the final exam, the grade you make on the final will be substituted for your lowest exam grade.
d. Participation and Attendance Policy:

Participation means you are present in class, you have read the assigned material, you are alert and responsive when questioned about concepts, and you are respectful of others when they are answering questions. There is a strong positive correlation between class attendance and grades. As an incentive, a maximum of 50 points will be provided to those students who do not miss more than three classes and who comply with the policies noted above.

e. Miscellaneous comments on grading structure:

Makeup work will be given to students with absences considered excused under University Regulations. No regularly scheduled make-up quizzes or exams will be given unless you have a written, documented excuse. Job interviews, while important, are not excused absences. It is a good idea to inform me of any anticipated absence in advance, rather than after the fact. DO NOT wait until the end of the semester to submit excuses for being absent since it may be too late to make up the work that has been missed.

f. Grading scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90+</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
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<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
</tr>
</tbody>
</table>

7. The Americans with Disabilities Act

The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 126 of the Koldus Building so your professor can best accommodate your needs. The phone number is 845-1637.

8. Copyrights Statement

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.
9. **Scholastic Honesty and Classroom “Rules.”**

A note on cheating. **It is not tolerated!** If caught in the act, you automatically receive a zero on the paper in question (the grade for that paper will not, under any circumstances, be dropped from final grade calculations) and be reported to your academic advisor, Department Head, and College Dean. As noted and copied explicitly from TAMU student rules on the Internet (http://student-rules.tamu.edu/), remember the Aggie Code of Honor:

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The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other.
Revised Courses Requiring Syllabus
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Agricultural Economics.

2. Course prefix, number and complete title of course: AGEC 317, "Quantitative Analysis in Agricultural Economics.

3. Change requested:
   a) Prerequisite(s): From ECON 323, MATH 142; STAT 303; or equivalents To AGEC 217, ECON 321/323, STAT 363/363 or INFO 363, junior or senior classification
   b) Withdrawal (reason)
   c) Cross-list with
   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.*

4. Complete current course title and current course description: "Quantitative Analysis in Agricultural Economics"
Econometric methods used to solve problems in agricultural economics relating to marginal analysis;
production and consumption functions; maximization and minimization principles; elasticity; agricultural firm and
market equilibrium; the cobweb model; uncertainty; and static and dynamic models.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Economic Analysis
for Agribusiness Management" Quantitative methods used to address managerial problems, specifically
calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming,
and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms.

6. a) As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 317</td>
<td>QUANT ANALYS IN AGECON</td>
<td></td>
</tr>
<tr>
<td>Lect. Lab SCH</td>
<td>Subject Matter Content Code</td>
<td>Admin. Unit FICE Code</td>
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<tr>
<td>0 3 0 0 0</td>
<td>0 3 0 1 0</td>
<td>1 0 3 0 0 0 5 0 1 4 0</td>
</tr>
</tbody>
</table>

b) Changed to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 317</td>
<td>ECON ANLYS FOR AGBU MGMT</td>
<td></td>
</tr>
<tr>
<td>Lect. Lab SCH</td>
<td>Subject Matter Content Code</td>
<td>Admin. Unit Acad. Year FICE Code</td>
</tr>
<tr>
<td>0 3 0 0 0</td>
<td>0 3 0 1 0</td>
<td>1 0 3 0 0 0 5 0 1 4 0 0 4 - 0</td>
</tr>
</tbody>
</table>

Approval recommended by:

Head of Department Date

Head of Department (if cross-listed course) Date

Submitted to Coordinating Board by:

Dean of College Date

Director of Academic Support Services Date Effective Date

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

1. Course Specifics
   a. Number and Title: AGEC 317, “Economic Analysis for Agribusiness Management”
   b. Course Credit: (3-0)-3
   c. Catalog Description:
      Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms.
   d. Extended Description and Objectives:
      The objectives of AGEC 317 are for students to gain conceptual understanding and technical proficiency in the application of the following quantitative methods for solving managerial problems:
      • Calculus of Optimization
      • Regression Analysis
      • Forecasting
      • Linear Programming
      • Risk Analysis

2. Instructor Information
   a. Instructor: Dr. Paul D. Mitchell
      Telephone: 979/845-6322
      E-Mail: p-mitchell@tamu.edu
      Homepage: agecon.tamu.edu/faculty/mitchell/agec317/agec317.htm
   b. Office Hours: T&R: 2:00-4:00p.m. or by appointment

3. Prerequisites: ECON 323/322, STAT 303/302 or INFO 303, AGEC 217; and junior or senior classification.

4. Texts:
   b. Useful Supplements: On the web page is another text with two useful “Web Chapters.”
5. Course topics/calendar:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction (Ch. 1) &amp; Calculus of Optimization (Ch. 2 and Web Ch. A)</td>
</tr>
<tr>
<td>2</td>
<td>Calculus of Optimization (Ch. 2 and Web Ch. A)</td>
</tr>
<tr>
<td>3</td>
<td>Demand Analysis: Introduction (Ch. 3) &amp; Demand Analysis: Elasticities (Ch. 4)</td>
</tr>
<tr>
<td>4</td>
<td>Demand Analysis: Elasticities (Ch. 4)</td>
</tr>
<tr>
<td>5</td>
<td>Demand Analysis: Elasticities (Ch. 4) &amp; Demand Estimation (Ch. 5)</td>
</tr>
<tr>
<td>6</td>
<td>Exam 1 &amp; Demand Estimation (Ch. 5)</td>
</tr>
<tr>
<td>7</td>
<td>Demand Estimation (Ch. 5)</td>
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<tr>
<td>8</td>
<td>Forecasting (Ch 6)</td>
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<td>9</td>
<td>Forecasting (Ch 6) &amp; Exam 2, Part 1</td>
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<tr>
<td>10</td>
<td>Forecasting (Ch 6) &amp; Exam 2, Part 2 (Take Home)</td>
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<tr>
<td>11</td>
<td>Production Theory (Ch. 7)</td>
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<td>12</td>
<td>Cost Theory (Ch. 8) &amp; Linear Programming (Ch. 9)</td>
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<td>13</td>
<td>Linear Programming (Ch. 9) &amp; Exam 3</td>
</tr>
<tr>
<td>14</td>
<td>Risk Analysis (Ch. 14)</td>
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<td><strong>Final Exam Days</strong> Final Exam</td>
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6. Course Grading Criteria

a. Relative weight for different components of course

<table>
<thead>
<tr>
<th>Item</th>
<th>% of Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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<tr>
<td>Problem Sets</td>
<td>20%</td>
</tr>
<tr>
<td>Class Participation/Think Breaks</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

b. Grading scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
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</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
</tr>
</tbody>
</table>

c. Miscellaneous comments on grading structure

1) Classroom Activities. An active classroom environment will be used that includes both traditional lecture and group work that consists of problem solving with a group, then presenting and/or discussing the results with the class. Class participation is a key part of the learning process, so it is important that you be in class regularly and on time. Class participation is 10% of your course grade and is determined by actively participating in group work and regular class attendance and promptness on assignments. To ensure that learning is occurring, during most classes I will have one or more “Think Breaks” during which you will be asked to work a problem using material taught in class that day. These will be collected and graded as a 0 or 1 to ensure that you are trying to work the problems.

2) Valid Excused Absences. For an excuse to be valid:
   a) Your reason must conform to university regulations.
   b) You must bring written verification if you miss an exam (e.g., from physician, student health center, dean of student life, etc.).
   c) Within 48 hours, you must notify me or my secretary: Dee Cochran, 340 Blocker, 845-4445.

7. The Americans with Disabilities Act

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Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Agricultural Economics

2. Course prefix, number and complete title of course: AGEC 325, "Principles of Farm and Ranch Management"

3. Change requested:
   a) Prerequisite(s): From AGEC 105 or 3 hours of economics; for non-majors only. To AGEC 105 or ECON 122, junior or senior non-AGEC & non-ALAB majors only; knowledge of Excel is expected.
   b) Withdrawal (reason)
   c) Cross-list with
   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.*

4. Complete current course title and current course description: "Principles of Farm and Ranch Management"
   Economic and business principles applied to the organization of farms and ranches for more profitable operation; laboratory work uses data from actual farms and ranches.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Principles of Farm and Ranch Management"
   Agribusiness managerial decision-making and analysis in different market environments; emphasis on profit maximization; lab focuses on using computerized methods for evaluating management alternatives for farming and ranching problem situations.

6. a) As currently in course inventory:

<table>
<thead>
<tr>
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<th>Lab</th>
<th>SCH</th>
<th>Subject Matter</th>
<th>Content Code</th>
<th>Admin. Unit</th>
<th>FICE Code</th>
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<td>0140</td>
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</tbody>
</table>

Do not complete shaded area.

b) Changed to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC</td>
<td>325</td>
<td>PRIN FARM &amp; RANCH MGMT</td>
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</table>

<table>
<thead>
<tr>
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<th>Lab</th>
<th>SCH</th>
<th>Subject Matter</th>
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<td>04 - 05</td>
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</tr>
</tbody>
</table>

Level

Approval recommended by:

Head of Department
Date

Chair, College Review Committee
Date

Head of Department (if cross-listed course)
Date

Dean of College
Date

Submitted to Coordinating Board by:

Dean of College
Date

Director of Academic Support Services
Date

Effective Date

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OAR/AS-10/99

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SYLLABUS

1. Course Specifics

   a. Number and Title: AGEC 325, “Principles of Farm and Ranch Management”

   b. Course Credit: (2-2)-3

   c. Catalog Description:

      Agribusiness managerial decisionmaking and analysis in different market environments; emphasis on profit maximization; lab focuses on using computerized methods for evaluating management alternatives for farming and ranching problem situations.

   d. Extended Description and Objectives:

      The objectives of this course are to introduce you to principles of management and decision making that are applicable to farm and ranch firms and other agricultural businesses, and to develop skills in applying these principles to realistic management situations. Specific topics covered in the course include:

      • Role of Management
      • Tools of Financial Management
      • Application of Economic Principles in Management
      • Planning
        • Enterprise budgets
        • Partial budgets
        • Cash flow budgets
        • Whole farm planning
        • Investment analysis
      • Business Organization
      • Control
      • Decision making under uncertainty

2. Instructor Information

   a. Instructor: Dr. Richard Conner
      Room 308E, Blocker Bldg.
      Telephone: 979/845-7456
      E-mail: JRC@tamu.edu
      Homepage: http://agecon.tamu.edu/faculty/conner/agec325.htm

   b. Office Hours: T&R: 11:00 - 12:00 p.m. and W: 1:00 - 3:00 p.m., or by appointment

3. Prerequisites: AGEC 105 or ECON 202; for junior and senior non-AGEC and non-AGBU majors only. Knowledge of Excel is expected.

5. **Course topics/calendar:**

<table>
<thead>
<tr>
<th>Week</th>
<th>DAY 1 of the WEEK</th>
<th>DAY 2 of the WEEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lecture Lab</td>
<td>Course Orientation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No lab</td>
</tr>
<tr>
<td>2</td>
<td>Lecture Lab</td>
<td>Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduction to Lab</td>
</tr>
<tr>
<td>3</td>
<td>Lecture Lab</td>
<td>Balance Sheet (5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lotus 123 &amp; Balance Sheet</td>
</tr>
<tr>
<td>4</td>
<td>Lecture Lab</td>
<td>Income Statement (6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Income Statement</td>
</tr>
<tr>
<td>5</td>
<td>Lecture Lab</td>
<td>Marginal Analysis (7,8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marginal Analysis &amp; Cost Concepts</td>
</tr>
<tr>
<td>6</td>
<td>Lecture Lab</td>
<td>Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Open</td>
</tr>
<tr>
<td>7</td>
<td>Lecture Lab</td>
<td>Enterprise Budgets (10)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enterprise Budgeting</td>
</tr>
<tr>
<td>8</td>
<td>Lecture Lab</td>
<td>Partial Budgets (11)</td>
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<tr>
<td></td>
<td></td>
<td>Partial Budgeting</td>
</tr>
<tr>
<td>9</td>
<td>Lecture Lab</td>
<td>Cash Flow Budgeting (13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enterprise Budgets</td>
</tr>
<tr>
<td>10</td>
<td>Lecture Lab</td>
<td>Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enterprise Budgets</td>
</tr>
<tr>
<td>11</td>
<td>Lecture Lab</td>
<td>Investment Analysis (17)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TAMWFARM - Whole Farm Analysis</td>
</tr>
<tr>
<td>12</td>
<td>Lecture Lab</td>
<td>Land Use and Control (20)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Whole Farm Analysis</td>
</tr>
<tr>
<td>13</td>
<td>Lecture Lab</td>
<td>Decisionmaking Under Uncertainty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No lab</td>
</tr>
<tr>
<td>14</td>
<td>Lecture Lab</td>
<td>Decisionmaking Under Uncertainty Lab Exam</td>
</tr>
</tbody>
</table>

*Text chapters denoted in ().
6. Course Grading Criteria

a. Relative weight for different components of course

Your Course grade will be determined by your performance on two regular exams, a comprehensive final exam, one laboratory exam, and a number of laboratory assignments, exercises and quizzes. The points and weights given to each component are given below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
<th>% of Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>100</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>100</td>
<td>25%</td>
</tr>
<tr>
<td>Lab Exam</td>
<td>100</td>
<td>10%</td>
</tr>
<tr>
<td>Lab assignments, exercises and quizzes</td>
<td>100</td>
<td>25%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>500</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

b. Grading scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90+</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
</tr>
</tbody>
</table>

c. Attendance

If you are unable to attend lecture or lab due to (a) participation in an activity appearing on the University authorized activity list, (b) death or major illness in your immediate family, (c) participation in legal proceedings that require your presence, (d) religious holy day, or (e) confinement because of illness, you must, if able, notify the instructor prior to the session(s) you will miss.

d. Miscellaneous comments on grading structure

Exam scores may be curved upward if the grade distribution is lower than expected but will not be curved downward. If a curve is applied, students will be notified of their effective score (after the curve is applied) at the time the exam is returned.

7. The Americans with Disabilities Act

The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 126 of the Koldus Building so your professor can best accommodate your needs. The phone number is 845-1637.
8. Copyrights Statement

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.

9. Scholastic Honesty and Classroom “Rules.”

A note on cheating. It is not tolerated! If caught in the act, you automatically receive a zero on the paper in question (the grade for that paper will not, under any circumstances, be dropped from final grade calculations) and be reported to your academic advisor, Department Head, and College Dean. As noted and copied explicitly from TAMU student rules on the Internet (http://student-rules.tamu.edu/) , remember the Aggie Code of Honor:

For many years Aggies have followed a Code of Honor, which is stated in this very simple statement:

\begin{center}
\textit{An Aggie does not lie, cheat or steal}
\textit{or tolerate those who do.}
\end{center}

The Aggie Code of Honor is an effort to unify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. It only calls for honesty and integrity, characteristics that Aggies have always exemplified.

The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other.
Texas A&M University  
Departmental Request for a Change in Course  
Undergraduate • Graduate • Professional  
* Submit original form and 25 copies *  

1. This request is submitted by the Department of Agricultural Economics.

2. Course prefix, number and complete title of course: AGEC 425 "Advanced Farm and Ranch Management"

3. Change requested:
   a) Prerequisite(s) From AGEC 330; ACCT 209/229; or approval of instructor To AGEC 424; junior or senior classification
   b) Withdrawal (reason)
   c) Cross-list with
      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.*

4. Complete current course title and current course description: "Advanced Farm and Ranch Management" Management and decision-making principles in planning and organizing commercial farms and ranches; management functions of planning, implementation and control; entry, growth and exit stages in a firm's life cycle.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Rural Entrepreneurship II" Strategic planning regarding feasibility of rural business ventures; emphasis on processes for developing comprehensive economic and financial prospectuses, including enterprise budgets, risk management planning, cash flow budgeting, net worth statements, income budgets, reconciliation statements, and stock analysis; exchanges with "real-world" lenders and other agribusiness management personnel are included.

6. a) As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC</td>
<td>425</td>
<td>FARM &amp; RANCH MGMT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>Subject Matter Content Code</th>
<th>Admin. Unit</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0202</td>
<td>03</td>
<td>01</td>
<td>010102200050140</td>
<td>003632</td>
<td>Level 4</td>
</tr>
</tbody>
</table>

b) Changed to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC</td>
<td>425</td>
<td>RURAL ENTREPRENEURSHIP II</td>
</tr>
</tbody>
</table>

<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>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0202</td>
<td>03</td>
<td>52</td>
<td>07010016014005</td>
<td>003632</td>
<td>Level 4</td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by: 

Head of Department  
Date  
Chair, College Review Committee  
Date  

Head of Department (if cross-listed course)  
Date  
Dean of College  
Date  

Submitted to Coordinating Board by:  
Date  
Dean of College  
Date  

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. Lang, Mail Stop 1265 or fax to 847-8737.

OARAS-1099
SYLLABUS

1. Course Specifics

a. Number and Title: AGEC 425, "Rural Entrepreneurship II"

b. Course Credit: (2-2-3)

c. Catalog Description:

Strategic planning regarding feasibility of rural business ventures; emphasis on processes for developing comprehensive economic and financial prospectuses, including enterprise budgets, risk management planning, cash flow budgeting, net worth statements, income budgets, reconciliation statements, and shock analysis; exchanges with 'real-world' lenders and other agribusiness management personnel are included.

d. Extended Description and Objectives:

The Rural Entrepreneurship courses offered in the Department of Agricultural Economics at Texas A & M University are designed to provide students opportunities to apply an assortment of management, marketing, and financial tools to a self-selected strategic-planning situation using various microcomputer applications. Targeted student clientele include those intending to own and/or manage/operate their own business, including an agribusiness production, processing, service; wholesaling, and/or retailing entrepreneurial entity, or a farming and/or ranching operation; to be employed in an agricultural production/marketing/financial business activity; or to be otherwise associated with a rural-based entrepreneurial activity. This second of the two-course sequence emphasizes use of integrated financial statement software, evaluation of the consequences of abnormal financial returns and determination of the business’ resiliency, and judgment of the overall economic potential of the rural business venture. Final written business plans and oral presentations are evaluated by a panel of real-world lenders, investors, and entrepreneurs.

2. Instructor Information

a. Instructor: Dr. M. Edward Rister
   Room 3311, Blocker Building
   Telephone: Office -- 979/845-3801; Home -- 979/690-0180 (after 7:00 a.m. and before 10:30 p.m.); Cell -- 979/255-5211; FAX -- 979/458-1755
   E-mail: e-rister@tamu.edu
   Homepage: http://agecon.tamu.edu/faculty/rister

b. Office Hours: T&F: 9:00-11:45 a.m., or by appointment.

3. Prerequisite: AGEC 424 and junior or senior classification.
4. Texts:

   a. Required


   4) Additional readings may be handed out in class, placed on reserve in the Ag. Eco Reference Room (room 303, Blocker) and/or University library(ies), or provided via the internet homepage.

   b. Additional Suggestions for Reference Materials:


5. Course topics/calendar:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>@Risk Analysis of Risk Management Alternatives</td>
</tr>
<tr>
<td>3</td>
<td>Consolidated Cash Flow Budgeting</td>
</tr>
<tr>
<td>4</td>
<td>FINYEAR: An Integrated Financial Statements Software Package &amp; Initial Net Worth Statement</td>
</tr>
<tr>
<td>5</td>
<td>Projected Income Statement &amp; Income and Self-Employment Taxes</td>
</tr>
<tr>
<td>6</td>
<td>Ending Net Worth Statement &amp; Reconciliation of all Financial Statements</td>
</tr>
<tr>
<td>7</td>
<td>Ratio Analysis &amp; Shock Analysis</td>
</tr>
<tr>
<td>8</td>
<td>Shock Analysis</td>
</tr>
<tr>
<td>9</td>
<td>Qualitative Projection of Years 2-10 &amp; Assessment of Business' Economic and Financial Potential</td>
</tr>
<tr>
<td>10</td>
<td>Assemble Final Business Plan</td>
</tr>
<tr>
<td>11</td>
<td>Assemble Final Business Plan</td>
</tr>
<tr>
<td>12</td>
<td>Submit Written Plan &amp; Develop Oral Presentation</td>
</tr>
<tr>
<td>13</td>
<td>Develop Oral Presentation</td>
</tr>
<tr>
<td>14</td>
<td>Present Oral Presentation</td>
</tr>
<tr>
<td></td>
<td><strong>Final Exam Days</strong></td>
</tr>
</tbody>
</table>

**Final Exam**
Course topics and weekly calendar, continued:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review of Status of Business Plan Materials for Individual Students*</td>
</tr>
<tr>
<td>2</td>
<td>Develop @Risk analysis of Risk Management Alternatives</td>
</tr>
<tr>
<td>3</td>
<td>Prepare Consolidated Cash Flow Budgets</td>
</tr>
<tr>
<td>4</td>
<td>Develop Initial Net Worth Statement Using FINYEAR</td>
</tr>
<tr>
<td>5</td>
<td>Develop Projected Income Statement Using FINYEAR &amp; Determine Income and Self-Employment Taxes</td>
</tr>
<tr>
<td>6</td>
<td>Develop Ending Net Worth Statement &amp; Reconciliation of all Financial Statements Using FINYEAR</td>
</tr>
<tr>
<td>7</td>
<td>Develop Ratio Analysis Using FINYEAR &amp; Begin Shock Analysis</td>
</tr>
<tr>
<td>8</td>
<td>Complete Shock Analysis</td>
</tr>
<tr>
<td>9</td>
<td>Prepare Qualitative Projection of Years 2-10 &amp; Assessment of Business' Economic and Financial Potential</td>
</tr>
<tr>
<td>10</td>
<td>Assemble Final Business Plan</td>
</tr>
<tr>
<td>11</td>
<td>Assemble Final Business Plan</td>
</tr>
<tr>
<td>12</td>
<td>Complete Written Plan &amp; Develop Oral Presentation</td>
</tr>
<tr>
<td>13</td>
<td>Develop Oral Presentation</td>
</tr>
<tr>
<td>14</td>
<td>Practice Oral Presentation</td>
</tr>
</tbody>
</table>

* Lab activities are directed toward individual students developing the designated materials for their specific businesses.
6. Course Grading Criteria

a. Relative weight for different components of course

<table>
<thead>
<tr>
<th>Item</th>
<th>% of Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Citizenship(^1)</td>
<td>20%</td>
</tr>
<tr>
<td>Timeliness of submitting homework(^2)</td>
<td>20%</td>
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<tr>
<td>Homework(^3)</td>
<td>10%</td>
</tr>
<tr>
<td>Project(^4)</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</table>

b. Grading scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90+</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
</tr>
</tbody>
</table>

c. Miscellaneous comments on grading structure

In case of illness or other maladies, call 845-3801, if able, **before class time** and either inform me directly or leave a message on my voice mail. Class attendance and participation is a vital component of this course – I expect you to be here everyday, **ON TIME**. Only University-excused absences are recognized as cause for allowing missed assignments to be submitted late.

7. The Americans with Disabilities Act

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---

\(^1\) Includes attendance, class participation, etc.

\(^2\) It is very important this semester that you stay on track timewise in terms of completing and submitting parts of your business plan; each successive part builds on the past; you cannot afford to fall behind!

\(^3\) E-mailing Rister short essays on guest speaker presentations and perhaps a few problems [written and/or computer], etc.

\(^4\) This project is an extensive assignment as outlined in a separate set of materials. Professional caliber, ready-to-take-to-the-bank, quality is the standard against which you will be graded. Your grade is a composite of your written materials and your oral presentation to a panel of commercial lenders, investors, and entrepreneurs.
8. Copyrights Statement

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The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Agricultural Economics

2. Course prefix, number and complete title of course: AGEC 432, "Farm and Ranch Appraisal and Organization"

3. Change requested:
   a) Prerequisite(s): From AGEC 422 To AGEC 330 & 422; ACCT 210 or 230; junior or senior classification
   b) Withdrawal (reason)
   c) Cross-list with
   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.*

4. Complete current course title and current course description: "Farm and Ranch Appraisal and Organization"
   Detailed problems involved in the appraisal and organization of specific farms and ranches covering appraisal principles, procedures, design, analysis and reporting.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Rural Real Estate and Finance Analysis" Advanced topics in investment analysis; financial intermediation in agriculture; real estate markets and market analysis; and appraisal valuation.

6. a) As currently in course inventory:

   Prefix    Course #    Title (exclude punctuation)
   AGEC 432  FARM & RANCH APPR & ORG

   Lect. Lab SCH Subject Matter Content Code Admin. Unit FICE Code
   0 2 0 2 0 3 0 1 1 0 1 0 4 0 0 0 5 0 1 4 0 0 3 6 3 2
   Do not complete shaded area.

   b) Changed to:

   Prefix    Course #    Title (exclude punctuation)
   AGEC 432  RURAL REAL EST & FIN CAN

   Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
   0 3 0 0 0 3 0 1 1 0 1 0 4 0 0 0 5 0 1 4 0 0 4 - 0 5 0 0 3 6 3 2
   Level 4

Approval recommended by:

Signed by

Head of Department Date Chair, College Review Committee Date

Head of Department (if cross-listed course) Date Dean of College Date

Submitted to Coordinating Board by:

Dean of College Date

Date

Director of Academic Support Services
Effective Date

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

1. Course Specifics

   a. Number and Title: AGEC 432, "Rural Real Estate and Financial Analysis"

   b. Course Credit: 3-0-3

   c. Catalog Description:

        Advanced topics in investment analysis; financial intermediation in agriculture; real estate markets and market analysis; and appraisal valuation.

   d. Extended Description and Objectives:

        Analysis of forces affecting rural real estate investment decisions, including risk, liquidity management, and the cost and availability of capital; concepts of property rights and alternative approaches to market valuation; preparation of appraisals for farm, ranch, and other rural properties.

2. Instructor Information

   a. Instructors: Dr. John B. Penson, Jr. Room 352 C, Blocker Building

        Telephone: 979/845-4060
        E-mail: jpenson@tamu.edu

        Dr. Curtis F. Lard Room 301, Blocker Building

        Telephone: 979/845-4746
        E-mail: c-lard@tamu.edu
        Homepage: http://agecon.tamu.edu/ageco/faculty/lard/432/ageco432.htm

   b. Office Hours: Penson – by appointment

        Lard – MW: 10:15 to 11:15, or by appointment

3. Prerequisites: AGEC 330 & 422; ACCT 210 or 230; and junior or senior classification.

5. Course topics/calendar:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overview of financial statement analysis &amp; Historical and comparative ratio analysis</td>
</tr>
<tr>
<td>2</td>
<td>Financial indicators and credit standards &amp; Pro forma analysis</td>
</tr>
<tr>
<td>3</td>
<td>Risk concepts and measurement &amp; Sources of risk in agricultural and rural economies</td>
</tr>
<tr>
<td>4</td>
<td>Related risk measurement issues &amp; Risk management tools and strategies</td>
</tr>
<tr>
<td>5</td>
<td>Investment analysis under risk &amp; Time value of money and options in capital budgeting &amp; Risk adjustments to specific capital budgeting models &amp; Agricultural and rural real estate investment decisions &amp; Liquidity management and portfolio balance decisions under risk &amp; Maximum bid price for real estate &amp; Real estate rental values; buy versus rent decision</td>
</tr>
<tr>
<td>6</td>
<td>Financial Intermediation in agriculture &amp; Source and cost of loanable funds &amp; Management and evolving credit market structure &amp; Mortgage application process (invite lender input)</td>
</tr>
<tr>
<td>7</td>
<td><strong>Review and Exam 1</strong></td>
</tr>
<tr>
<td>8</td>
<td>Real estate markets and market analysis &amp; Property ownership markets</td>
</tr>
<tr>
<td>9</td>
<td>Rental property markets &amp; Data collection and analysis</td>
</tr>
<tr>
<td>10</td>
<td>Alternative appraisal valuation approaches &amp; Cost analysis &amp; Sales comparison analysis</td>
</tr>
<tr>
<td>11</td>
<td>Income capitalization analysis &amp; Reconciliation of final value &amp; Formulation of appraisal report</td>
</tr>
<tr>
<td>12</td>
<td><strong>Exam 2</strong></td>
</tr>
<tr>
<td>13</td>
<td>Case studies/class projects</td>
</tr>
<tr>
<td>14</td>
<td>Case studies/class projects</td>
</tr>
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</table>

**Final Exam Days**

**Final Exam**
6. Course Grading Criteria

   a. Relative weight for different components of course

<table>
<thead>
<tr>
<th>Item</th>
<th>% of Course Grade</th>
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</thead>
<tbody>
<tr>
<td>Exam 1</td>
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<td>Exam 2</td>
<td>15%</td>
</tr>
<tr>
<td>Final Examination</td>
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<td>Case studies and class projects</td>
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<tr>
<td>Reviews and Quizzes and Exercises</td>
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<tr>
<td>Class Attendance and Participation</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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   b. Grading scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Points</th>
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<td>A</td>
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<tr>
<td>B</td>
<td>80-89</td>
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<tr>
<td>C</td>
<td>70-79</td>
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<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
</tr>
</tbody>
</table>

   c. Miscellaneous comments on grading structure

   1) Optional review sessions will be developed to coincide with students' demand and schedules.

   2) There is no curve in this course. You can determine your grade-to-date in this class at any time by dividing the total points you have achieved to date by the total points possible at that time, and then check the numerical range associated with each letter grade.

7. The Americans with Disabilities Act

The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 126 of the Koldus Building so your professor can best accommodate your needs. The phone number is 845-1637.

8. Copyrights Statement

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.
9. **Scholastic Honesty and Classroom “Rules.”**

   A note on cheating. **It is not tolerated!** If caught in the act, you automatically receive a zero on the paper in question (the grade for that paper will not, under any circumstances, be dropped from final grade calculations) and be reported to your academic advisor, Department Head, and College Dean. As noted and copied explicitly from TAMU student rules on the Internet (http://student-rules.tamu.edu/) , remember the Aggie Code of Honor:

   **For many years Aggies have followed a Code of Honor, which is stated in this very simple statement:**

   
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   or tolerate those who do.

   The Aggie Code of Honor is an effort to unify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. It only calls for honesty and integrity, characteristics that Aggies have always exemplified.

   The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Agricultural Economics.

2. Course prefix, number and complete title of course: AGEC 447, "Agricultural Prices"

3. Change requested:
   a) Prerequisite(s): From AGEC 317 To AGEC 314 & 317; junior or senior classification
   b) Withdrawal (reason)
   c) Cross-list with
   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.

4. Complete current course title and current course description: "Agricultural Prices"
   Factors influencing the level of agricultural commodity prices; price trends and seasonal variation; methods of forecasting demand and prices; and futures trading.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Food and Agricultural Price Analysis" Factors influencing the level of food and agricultural prices; price trends and seasonal variation; methods of forecasting demand and prices; and futures trading.

6. a) As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC</td>
<td>447</td>
<td>AGRICULTURAL PRICES</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>Subject Matter Content Code</th>
<th>Admin. Unit</th>
<th>FICE Code</th>
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<tbody>
<tr>
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<td>01</td>
<td>01</td>
<td>03</td>
<td>00</td>
</tr>
</tbody>
</table>

   Do not complete shaded area.

   b) Changed to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC</td>
<td>447</td>
<td>FOOD &amp; AG PRICE ANALYSIS</td>
</tr>
</tbody>
</table>

<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>
<th>FICE Code</th>
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<tbody>
<tr>
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<td>01</td>
<td>01</td>
<td>03</td>
<td>00</td>
<td>05</td>
</tr>
</tbody>
</table>

   Approval recommended by:

   10-30-08

   Head of Department

   Chair, College Review Committee

   Head of Department (if cross-listed course)

   Dean of College

   Submitted to Coordinating Board by:

   Dean of College

   Director of Academic Support Services

   Date

   Effective Date

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

1. Course Specifics

   a. Number and Title: AGEC 447, “Food and Agricultural Price Analysis”

   b. Course Credit: (3-0)-3

   c. Catalog Description:

      Factors influencing the level of food and agricultural prices; price trends and seasonal variation; methods of forecasting demand and prices; and futures trading.

   d. Extended Description and Objectives:

      This course focuses on developing an understanding of economic forces which influence agricultural price movements and behavior. This involves study into the theoretical basis of price determination as well as empirical estimation of economic models to identify forces that determine or cause prices and their movement. Initially there is a brief discussion of commodity futures and their use by agribusiness firms to reduce price risk. This is followed by a review of producer and consumer theory, and market demand and supply with their associated determinants. Next, is a review of simple and multiple regression which is followed by empirical estimation of commodity demand and supply relationships, and reduced-form, price-dependent equations that offer insight into price-making forces. Attention focuses on interpretation of estimated equations with associated elasticities and flexibilities. Price determination under alternative market structures is reviewed and expanded. Finally, the simple demand/supply model is modified to gain insight on marketing margins, and the temporal and spatial dimensions of agricultural markets and prices. In this section, attention is given to international trade and the effect of exchange rates, tariffs and quotas on trade.

2. Instructor Information

   a. Instructor: Dr. Stephen Fuller
       Room 321G, Blocker Building
       Telephone: 979/845-1941
       E-mail: sfuller@tamu.edu
       Homepage: http://ageco.tamu.edu/faculty/fuller/fuller.htm

   b. Office Hours: T&R: 12:30 - 1:30 p.m., or by appointment

3. Prerequisites: AGEC 314 & 317 and junior or senior classification.


Reference Readings:


5. Course topics/calendar:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
</table>
| 1 | I. Price Determination and Price Discovery Systems  
A. Individualized Activities  
B. Group Actions  
1. Auction  
2. Group Bargaining |
| 2 | II. Introduction to Futures Markets and Hedging  
A. Futures Markets  
1. Definitions  
2. Speculator  
B. Hedging with Futures Markets  
1. Selling Hedge  
2. Buying Hedge |
| 3 | III. Review of consumer/producer theory, market demand and supply with associated shifters, and introduction of empirical analysis focusing on demand and supply estimation as well as interpretation of estimated results.  
A. Consumer theory and market demand  
1. Indifference surface, budget line, individual demands  
2. Market demand  
3. Mathematical representation of market demand with demand shifters  
   a. Lengths of run, lags  
   b. Derived demand  
4. Own-price, cross-price and income elasticities, flexibilities and related coefficients  
5. Empirical estimates of demand elasticities for agricultural commodities and products.  
6. Analytical uses of demand relations for "real-world" problems. |
| 4 | B. Producer theory and market supply  
1. Firm cost curves and firm supply  
2. Market supply  
3. Mathematical representation of market supply with supply shifters  
   a. Supply through time, lags  
   b. Derived demand  
4. Own-price and cross-price elasticities and their usefulness.  
5. Empirical estimates of supply elasticities for agricultural commodities. |
| 5 | C. Market Price Determination  
1. Pure competition in the short- and long-run, and the influence of shifters on price.  
2. Monopolistic competition  
3. Oligopoly  
4. Monopoly  
5. Social costs of imperfect competition |
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
</table>
| 6    | D. Empirical Estimation of Market Demand, Supply and Reduced-Form, Price-Dependent Equations  
      1. Purpose of empirical estimates (structural estimates vs. forecasting)  
      2. Model specification with associated assumptions  
      3. Data collection and analyses, index numbers and correcting for inflation  
      4. Estimation of demand and supply models using ordinary least squares  
      5. Appraising results based on logic and statistical tests  
      6. Interpretation of estimated coefficients and calculation of elasticities |
| 7    | IV. Agricultural Prices beyond the Simple Demand/Supply Paradigm  
      A. Marketing Margins for Agricultural Commodities  
      1. Definition of marketing margins and introduction of primary and derived demand/supply  
      2. Changes in marketing margins and incidence of these changes  
      3. Factors comprising the marketing margin  
      B. Spatial Dimension of Agricultural Markets and Price  
      1. Transfer costs  
      2. Price surfaces  
         a. Producer price surfaces  
         b. Consumer price surfaces  
         c. Market boundaries  
      3. Interregional trade and transport costs  
      4. International trade  
         a. Tariffs, quotas and subsidies  
         b. Exchange rates  
      Exam 2 |
| 8    | C. Temporal Dimension of Agricultural Markets and Prices  
      1. Storage costs and the storage decision  
         a. Periodically produced, perishable commodities  
         b. Periodically produced, storable commodities  
      2. Regularities in agricultural commodity prices  
         a. Intra-year or seasonal price movements  
         b. Cycles  
         c. Trends  
         d. Estimation of regularities in prices  
      9    | D. Government Intervention into Agricultural Commodity Prices  
      1. Buffer-stock schemes to reduce price variability  
      2. Price-support programs  
         a. Government purchases  
         b. Consumption or Export Subsidies  
         c. Deficiency payments  
      3. Cooperatives/marketing orders and price discrimination schemes  
      10   | V. Imperfect Competition in Agricultural Commodity and Product Markets  
      A. An introduction to industrial organization  
      1. Structure  
      2. Conduct  
      3. Performance  
      11   |
### 6. Course Grading Criteria

a. **Relative weight for different components of course**

<table>
<thead>
<tr>
<th>Item</th>
<th>% of Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examinations</td>
<td>60%</td>
</tr>
<tr>
<td>Final*</td>
<td></td>
</tr>
<tr>
<td>Homework/Quizzes/Exercises</td>
<td>16%</td>
</tr>
<tr>
<td>Futures hedge project</td>
<td>12%</td>
</tr>
<tr>
<td>Team project</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Three examinations will be given during the regular semester and will comprise 60% of your total grade. If your average is a C or lower at the time of the final or if you have failed to take an hour exam offered during the regular semester, you will be required to take the final exam. For the student who has taken all exams, but has a C or lower grade, the final exam score will replace the two exams with the lowest scores. For the student that has missed an exam, the final exam score will replace the lowest exam score and the missed exam score. If your average is B or better at the time of the final, you will not be required to take the final exam; however, if you wish to take the final, it will replace your two lowest exam scores.*

b. **Grading scale**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
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<td>C</td>
<td>70-79</td>
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<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
</tr>
</tbody>
</table>

c. **Miscellaneous comments on grading structure**

1) **Homework/Quizzes/Exercises**: During the semester, you will complete several homeworks, take unannounced quizzes, and complete classroom exercises. These exercises will comprise 16% of your grade. Homework exercises lose 10% of their value for each late day and receive no credit if handed in after the exercise is returned. Days include weekends.
2) **Futures Hedging Project:** You will carry out and report on two commodity futures hedges. You will perform hypothetical hedges in the futures/cash market for selected commodities and report and explain the outcome of your hedges in a brief paper. The details of the paper format are included in the class notes. The paper will comprise 12% of your total grade. **This paper is not optional.** The paper will lose 10% of its value for each late day. This project must be completed before you will receive a final grade for the course.

3) **Class projects:** Class projects will involve teams of 4 - 6 people. The teams will be identified early in the semester. There are two class projects. **The first project is a price forecasting competition. In January, each team will submit their estimated close or settle price for three futures contracts in mid-April.** The three futures commodities to be speculated in will be determined by the instructor. Students will research secondary information sources (see listed web sites in course notes) to develop insight on likely price directions for the commodities during the semester.

   In addition to the price forecasting activity, the team will carry out a study into the forces which cause the price of a selected product. As a result of this effort, a paper will be produced that represents 12% of your grade. **Team members will carry out research into a product and estimate a price-dependent model that measures the role of various forces in determining the product’s price.** There will be a minimum of two conferences with the instructor to discuss the topic, appraise progress and examine results. See class notes for paper outline and estimation of price-dependent models. Your grade on this team effort will be determined by the paper grade as determined by the instructor and your contribution to the paper as measured by other team members.

7. **The Americans with Disabilities Act**

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Revised Courses Requiring Form, but No Syllabus
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Agricultural Economics

2. Course prefix, number and complete title of course: AGEC 314, "Marketing Agricultural Products"

3. Change requested:
   a) Prerequisite(s): From AGEC 105 or 3 hours of economics To AGEC 105 or 3 hours of economics, junior or senior classification
   b) Withdrawal (reason)
   c) Cross-list with
   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.*

4. Complete current course title and current course description: "Marketing Agricultural Products" General introductory course covering operations involved in movement of agricultural commodities from farmer to consumer; essential marketing functions of buying, selling, transportation, storage, financing, standardization, pricing and risk bearing.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Marketing Agricultural and Food Products" (Same course description as in #4)

6. a) As currently in course inventory:

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<thead>
<tr>
<th>Prefix</th>
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<th>Title (exclude punctuation)</th>
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<tbody>
<tr>
<td>AGEC 314</td>
<td>MKTG AGRI PRODUCTS</td>
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<th>Admin. Unit</th>
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Do not complete shaded area.

b) Changed to:

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<thead>
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<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 314</td>
<td>MKTG AG &amp; FOOD PRODUCTS</td>
<td></td>
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</tbody>
</table>

<table>
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<th>Lab</th>
<th>SCH</th>
<th>Subject Matter Content Code</th>
<th>Admin. Unit</th>
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<td>01</td>
<td>01</td>
<td>01</td>
<td>03</td>
<td>00</td>
<td>05</td>
</tr>
</tbody>
</table>

Level 3

Approval recommended by:

Head of Department Date Chair, College Review Committee Date

Head of Department (if cross-listed course) Date Dean of College Date

Submitted to Coordinating Board by:

Dean of College Date

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 Change in Course
Undergraduate • Graduate • Professional
• Submit original form and 25 copies •

1. This request is submitted by the Department of Agricultural Economics

2. Course prefix, number and complete title of course: AGEC 340, "Environment of Agribusiness"

3. Change requested:
   a) Prerequisite(s): From AGEC 105 or 3 hours of economics To AGEC 105 or 3 hours of economics, junior or senior classification
   b) Withdrawal (reason) ____________________________
   c) Cross-list with ____________________________
      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.*

4. Complete current course title and current course description: "Environment of Agribusiness"
   Systematic analysis of agribusiness firm-level decision-making using a broad array of management concepts,
   managing agribusiness firms and their unique problems and opportunities, exposure to decision-making in
   agribusiness environment.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Agribusiness Management" (Same course description as #4.)

6. a) As currently in course inventory:
   Prefix Course # Title (exclude punctuation)
   AGEC 340 ENVIRONMENT OF AGribusiness
   Lect. Lab SCH Subject Matter Content Code Admin. Unit FICE Code
   0 3 0 0 3 5 2 0 8 0 1 0 0 1 6 0 1 4 0 0 0 3 6 3 2
   Do not complete shaded area.
   Level 3

   b) Changed to:
   Prefix Course # Title (exclude punctuation)
   AGEC 340 AGribusiness Management
   Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
   0 3 0 0 3 0 1 0 1 0 2 0 0 0 5 0 1 4 0 0 4 - 0 5 0 0 3 6 3 2
   Level 3

   Approval recommended by: ____________________________
   Head of Department Date Chair, College Review Committee Date
   Head of Department (if cross-listed course) Date Dean of College Date
   Submitted to Coordinating Board by:
   Dean of College Date
   Director of Academic Support Services Date Effective Date

* Attach 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
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Agricultural Economics
2. Course prefix, number and complete title of course: AGEC 344, "Agricultural Law"

3. Change requested:
   a) Prerequisite(s): From _______ to _______
   b) Withdrawal (reason) _______
   c) Cross-list with _______
       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.*

4. Complete current course title and current course description: "Agricultural Law"
   Legal problems relevant to agribusiness; torts, fencing laws, liability for agricultural pollution, irrigation
   water rights, corporations and partnerships.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Food & Agricultural Law" (Same description as #4.)

6. a) As currently in course inventory:

   Prefix  Course #  Title (exclude punctuation)
   AGEC 344  AGRICULTURAL LAW

   Lect.  Lab  SCH  Subject Matter Content Code  Admin. Unit  FICE Code
   03000322010110050140  0031632
   Do not complete shaded area.

   Level 3

   b) Changed to:

   Prefix  Course #  Title (exclude punctuation)
   AGEC 344  FOOD & AGRICULTURAL LAW

   Lect.  Lab  SCH  Subject Matter Content Code  Admin. Unit  Acad. Year  FICE Code
   03000322010110050140405  0031632
   Level 3

Approval recommended by:

Head of Department  10-30-03
Chair, College Review Committee  Date

Head of Department (if cross-listed course)  Date
Dean of College  Date

Submitted to Coordinating Board by:

Dean of College  Date

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. Loevy, Mail Stop 1265 or fax to 847-8737.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Agricultural Economics

2. Course prefix, number and complete title of course: AGEC 414, "Agricultural Market Analysis"

3. Change requested:
   a) Prerequisite(s): From AGEC 317; MTKG 309 or 321 To AGEC 317; FINC 341; MTKG 321; junior or senior AGBU majors only
   b) Withdrawal (reason)
   c) Cross-list with
   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.

4. Complete current course title and current course description: "Agricultural Market Analysis"
   Application of economic and marketing principles to contemporary food and agribusiness marketing; practical marketing management for agribusiness firms; market analysis; marketing strategy, and planning as related to the emerging trends in global food and agribusiness sector of the economy.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Agribusiness and Food Market Analysis" (Same description as #4.)

6. a) As currently in course inventory:

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   Approval recommended by:

   [Signature] 10-30-03

   Date

   Chair, College Review Committee

   Date

   Dean of College

   Date

   Submitted to Coordinating Board by:

   Date

   Date

   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-1099
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

* Submit original form and 25 copies *

1. This request is submitted by the Department of Agricultural Economics

2. Course prefix, number and complete title of course: AGEC 440. "Economics of Agribusiness"

3. Change requested:
   a) Prerequisite(s): From AGEC 340; ECON 323; FINC 341; MGMT 363; MKTG 321 To AGEC 317 & 340; FINC 341; MGMT 363; MKTG 321: Junior or senior AGBU majors only
   b) Withdrawal (reason)
   c) Cross-list with
   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.

4. Complete current course title and current course description: "Economics of Agribusiness" Economic features of the agribusiness system and related management problems; problem recognition and economic decision-making in marketing, production and finance for agribusiness firms.

5. Complete proposed course title and proposed course description (not to exceed 50 words): "Agribusiness Strategic Analysis" (Same description as #4.)

6. a) As currently in course inventory:

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Approval recommended by: ___________________________ 10-30-03

Head of Department Date Chair, College Review Committee Date

Head of Department (if cross-listed course) Date

Dean of College Date

Submitted to Coordinating Board by: ___________________________

Dean of College Date

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.
NONSUBSTANTIVE ADMINISTRATIVE CHANGE REQUEST

Name of Institution: Texas A&M University, College Station, Texas

Display how administrative unit(s) and program(s) would appear on the Coordinating Board program inventory; include Texas CIP code designations(s).

<table>
<thead>
<tr>
<th>COLLEGE OF EDUC</th>
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<tbody>
<tr>
<td>Kinesiology-All-level Physical Education Certification</td>
<td>BS 31.0501.10</td>
</tr>
</tbody>
</table>

See Attachment 1 for a complete inventory of degree programs.

How would the name of the program appear on student diplomas?

Bachelor of Science in Kinesiology-All-level Physical Education Certification

Which administrative units would be responsible for the program?

College of Education and Human Development
Department: Health and Kinesiology

Proposed date for implementation of the program: Fall, 2004

Person to be contacted for further information about the administrative change:

Name: Jane Conoley Title: Dean, College of Education and Human Development, Texas A&M University

Phone: (979) 845-5311 FAX: (979) 845-6129 E-mail: jane-conoley@tamu.edu

Signatures: Jane B. Hackett, Associate Dean, for Academic Affairs.
Nonsubstantive Administrative Change Request

Describe briefly the change requested.

Change Requested:

The change being requested is for approval of a revision in the B.S. degree in Kinesiology-Physical Education Certification in the College of Education. The revised degree will be sponsored by the Department of Health and Kinesiology.

Any and all future changes and options will again be forwarded to the Texas Higher Education Coordinating Board for review and approval. See Attachment 1 for a complete inventory of degree programs.

Background Information. The College of Education and Human Development at Texas A&M University was founded in 1969 after its separation from the College of Arts and Sciences. Even though the College of Education is a "young college" at Texas A&M University, programs have existed at TAMU in rural education and in education and psychology since early in the twentieth century.

The recently reorganized College of Education and Human Development consists of four academic departments: Educational Administration and Human Resource Development; Educational Psychology; Health and Kinesiology; and Teaching, Learning, and Culture. These departments within the College offer a variety of degree programs at the bachelor's, master's, and doctoral levels. See Attachment 1.

The College of Education at Texas A&M University is well known for its work in the preparation of teachers in high need areas such as mathematics and science, for its collaboration with public school districts on issues related to PK-12 education, and for its graduate programs that provide well-prepared practitioners and researchers for institutions that include education as a part of their mission.

Today, the College of Education and Human Development is frequently called upon to provide baccalaureate level practitioners with a strong background in educational theory, organizational theory, and practice for non-certification settings.

Program Description. This program is offered to students who wish to teach physical education in public or private schools. Students seeking teacher certification will be qualified to teach Physical Education in grades PrcK-12 (All-Levels). After completion of the course work, students are required to complete a full semester of student teaching in a public school.

The proposed degree plan will require the completion of a total of 128 semester credit hours. The main components of the program will include the university core curriculum,
professional development courses, Kinesiology courses, directed student teaching, and electives. A graphic display of the program components is included below:

<table>
<thead>
<tr>
<th>Bachelor of Science Degree in Kinesiology-All-level Physical Education Certification</th>
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<tbody>
<tr>
<td>University Core Curriculum</td>
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<tr>
<td>Foundation Courses</td>
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<tr>
<td>Professional Development</td>
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<tr>
<td>Kinesiology</td>
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<tr>
<td>Directed Student teaching</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

See Attachments 3 for a more detailed layout of the proposed program option.

1. **Provide a rationale for the proposed change.**

Currently, the Department of Health and Kinesiology offers two Bachelor of Science degrees in Kinesiology with Physical Education certification. One is a Pre-K through 8th grade and the other is Secondary level-grades7-12. The State Board for Educator Certification has eliminated the options above for certification and replaced them with one certification for All-Level Physical Education. The change is proposed to provide a program that will lead to successful completion of the certification requirements outlined by the State of Texas.

2. **Include an assessment of its effect on the administrative unit(s) involved and on the institution as a whole. If a unit is being renamed, will program names need to be changed? If so, submit a separate nonsubstantive program request for each change.**

**Assessment of Effects**

Anticipated effects on the administrative units involved are all positive.

No new faculty will be required to implement the program. One new course (KINE 308) will be added to the program and will be offered in the second (2005-2006) year of the program.

**What is the expected enrollment in the program?**
In February of 2003, the current Teacher Certification degree program in Kinesiology consisted of approximately 300 students.

It is likely that some new enrollment will occur in the proposed All-level Teacher Certification option because the reduced student credit hours required and the removal of the second teaching field requirement. However, it is also likely that some students will select to enroll in other content areas for certification and add the coaching minor to prepare for coaching duties. Thus, interest in Physical Education Teacher Certification is expected to remain similar to the current programs. Management is expected to remain similar to that of the existing program and current resources will be able to accommodate 300-350 students over any 4 year period.

3. Summarize implications for classes, distribution of personnel, availability of facilities, and availability of equipment.

Implications
The necessary classes, personnel, facilities, and equipment are already in place.

The classes, personnel, facilities, and equipment for the proposed program are already in place within the College of Education and Human Development. Existing courses along with one new course will support the All-level Teacher Certification program. No new personnel, facilities, or equipment would be needed.

4. Give information regarding any additional costs or savings.

Additional Costs or Savings
There will not be any additional costs.

The nonsubstantive administrative request will make use of existing resources and will effectively prepare Kinesiology majors for successful completion of certification requirements both in the state of Texas and Nationally.
## ATTACHMENT 1

**TEXAS HIGHER EDUCATION COORDINATING BOARD INVENTORY OF APPROVED DEGREE PROGRAMS**

FOR

**COLLEGE OF EDUCATION**

**TEXAS A&M UNIVERSITY**

### CURRENT LISTING

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KINE 199 M 1
KINE 199 M 1
KINE 199 M 1
KINE 199 M 1
KINE 121 2
KINE 213 3
KINE 215 1
KINE 240 3
KINE 307 3
KINE 311 (Visual and Performing Arts Elective) 3
KINE 318 3
KINE 406 3
KINE 425 3
KINE 426 4
KINE 429 3
KINE 433 3

DIRECTED STUDENT TEACHING (9)
TEFB 429 9

** Refer to general rules handout
* To be selected in consultation with an advisor
Texas A&M University

A Proposal

to the

TEXAS HIGHER EDUCATION COORDINATING BOARD

to authorize a

BACHELOR OF SCIENCE DEGREE PROGRAM

in

SPATIAL SCIENCES

Presented by the Colleges of:

Agriculture and Life Sciences
Geosciences

Texas A&M University

September 2003
TABLE OF CONTENTS

Substantive Degree Program request

Executive Summary

I. Program Administration
II. Program Description
III. Evaluation
IV. Program Need/Demand
V. Program Potential
VI. Resources
VII. Costs
I. Program Administration

A. Description of how the program would be administered.

The B.S. in Spatial Sciences is an interdisciplinary degree, which will be jointly administered by Associate Deans of the College of Agriculture and Life Sciences and College of Geosciences, Heads of the Department of Forest Science and Department of Geography, and faculty advisors of the respective departments.

1. Indicate name and title of person(s) who would be responsible for curriculum development and on-going review.

   Dr. Fuller W. Bazer, Professor and Executive Associate Dean, College of Agriculture and Life Sciences
   Dr. Vatche P. Tchakerian, Professor and Interim Associate Dean, College of Geosciences
   Dr. C. T. Smith, Professor and Head, Department of Forest Science
   Dr. Doug Sherman, Professor and Head, Department of Geography
   Dr. Raghavan Srinivasan, Associate Professor, Department of Forest Science, and Director, Spatial Sciences Laboratory
   Dr. Andrew G. Klein, Assistant Professor, Department of Geography

2. Describe responsibilities for student advisement and supervision.

   Drs. Smith and Sherman work with the designated faculty academic advisors in the Department of Forest Science and Department of Geography to advise undergraduate students. These departments utilize an academic advising system that includes a full time professional staff member, the academic advisor, and the faculty undergraduate student advisor to help with career paths and goals.

3. If the program would be administered by more than one administrative unit, what factors make this desirable?

   This program will be administered jointly by the Departments of Forest Science and Geography and will therefore be offered at the University level. The interdisciplinary faculty serving in support of this program provide the intellectual depth and breadth required for the proposed curriculum, draw from the wealth of classes available in these programs, and allow students greater opportunities to use an increased amount of software and technology, to become involved in cutting edge technological development and application of the technology.

B. If some non-academic administrative units, e.g., "institute" or "center" would be involved in administering the program, describe the relationships.
This program will be administered jointly by the Department of Forest Science and the Department of Geography.

C. If a new organizational unit would be created or an existing organizational entity modified as a result of this program, identify and describe the anticipated result.

The creation of this degree program will not create any new units.

II. Program Description

A. Educational Objectives

1. Describe the educational objectives of the program.

The primary objective of this new degree program is to provide a broad based education in the spatial sciences. The associated theory and technology are becoming increasingly essential in resolving complex environmental issues. This program will incorporate diverse disciplines ranging from Agricultural Economics to Zoology in the application of spatial sciences to identifying and developing potential resolutions for various environmental problems. In the current work force, scientists often use spatial science tools without proper guidance, instruction, and expertise in interpretation. This void can be filled by educating students that have an extensive theoretical, technological, and science-based knowledge of the spatial sciences, as well as a thorough knowledge and understanding of their application to environmental issues.

The spatial sciences greatly enhance our ability to analyze and solve issues. They provide a means of managing large amounts of information that would otherwise not be available to resource managers. Furthermore, this technology is extremely dynamic, and allows for the manipulation of quantitative and qualitative information for planning and decision making purposes. The power of this complex tool in management is only restricted by the knowledge of the user. Completion of the spatial sciences degree program would provide students with an advanced knowledge of Geographic Information Systems (GIS), Global Positioning Systems (GPS), and Remote Sensing (RS), as well as a broad understanding of computer programming, photo interpretation, database management, and other courses that will help to utilize the full potential of the spatial sciences in real-world problem solving.

This degree program is designed to equip students with the well-rounded credentials necessary for an exciting environmental career as well as provide a solid foundation for students choosing to advance into a more specialized degree program. Some of the many jobs requiring knowledge of the spatial sciences include the fields of animal science, entomology, forestry, rangeland ecology, soil and crop sciences, wildlife and fisheries, air and water quality, natural resource management, bioenvironmental science, coastal ecosystem management, government regulatory agencies, environmental consulting, urban and community planning, oil and gas industry,
agricultural economics, business marketing, medical research, public health forensics, bio-terrorism, and homeland security. The demand for spatial sciences expertise is growing rapidly and has become an extremely powerful, dynamic management tool used to help solve many issues faced by society today.

The proposed spatial sciences program satisfies the requirements of the university's core curriculum and utilizes a multidisciplinary set of existing courses within the College of Agriculture and Life Science and other applicable courses available throughout the university in other disciplines. This curriculum provides an opportunity for contributing departments to develop new courses relevant to the spatial sciences. The degree program is designed to allow students flexibility in tailoring their education to suit their career interests through elective classes that compliment the courses in the spatial sciences.

At Texas A&M, spatial sciences courses are currently offered through several colleges and departments. However, current curricula prohibit students from mastering these skills since most curricula have very limited optional or elective courses that would allow taking adequate numbers of spatial sciences courses to develop the depth of knowledge desired. Hence students must take credit hours over and above their degree requirements to master the spatial sciences skills that are required to solve and address environmental problems or other issues related to their discipline.

2. If the program design includes multiple curricula (concentrations, emphases, options, specializations, tracks), describe the educational objectives of each.

This degree program is initially being designed without any options, emphases or tracks.

B. Admissions Standards

1. State admission requirements for the program.

In order to be in this program, students must be admitted to Texas A&M University as a current undergraduate student.

C. Degree Requirements

1. In tabular form, indicate the semester credit hour (SCH) requirements in each of the following categories applicable to the proposed program; include the total SCH requirement for the degree.
University Core and Competency Courses

REQUIRED COURSES
American History Electives 6
BOTN 101 Botany 4
or BIOL 113/123 Introductory Biology and Lab
CHEM 101 Fundamentals of Chemistry I 4
CHEM 102 Fundamentals of Chemistry II 4
COMM 203 Public Speaking 3
ENGL 104 Composition and Rhetoric 3
ENGL 210 Scientific and Technical Writing 3
or ENGL 301 Technical Writing or AGJR 404 Communicating Agricultural Information to the Public
GEOG 203/213 Planet Earth: Intro. to Earth Systems Science 4
or BIOL 114/124 Introductory Biology and Lab
KINE 198 Health and Fitness Activity 1
KINE 199 Required Physical Activity 1
MATH 141 Business Math I 3
or MATH 172 Calculus
MATH 142 Business Math II 3
or MATH 171 Analytic Geometry and Calculus
POLS 206 American National Government 3
POLS 207 State and Local Government 3
RENR 205/215 Fundamentals of Ecology and Laboratory 4
STAT 302 Statistical Methods 3

Humanities - Choose 3 hours
GEOG 202 Geography of the Global Village 3
GEOG 301 Geography of the United States 3
GEOG 305 Geography of Texas 3
GEOG 323 Geography of Latin America 3

Social and Behavioral Science - Choose 3 hours
AGEC 105 Introduction to Agricultural Economics 3
ECON 202 Principles of Economics 3
GEOG 440 History and Nature of Geography 3
GEOG 201 Introduction to Human Geography 3
GEOG 204 Economic Geography 3

Visual and Performing Arts

International and Cultural Diversity $^2$ – 6 hours
(Please see note 1)
Environmental Core Courses

**REQUIRED COURSES**
AGEC 350 Environmental Resource Economics 3
or AGEC 344 Agricultural Law
AGRO 301 Soil Science 4
AGSM 337 Technology for Environmental and Natural Resource Engineering 3
BESC 403 Sampling and Environmental Monitoring 3
MGMT 309 The Management Process 3
RENR 470 Environmental Impact Assessment 3

**Natural Resources- Choose 12 hours**
AGRO 310 Soil Morphology and Interpretation 2
FRSC 304 Forest Ecology 3
RENR 375 Conservation of Natural Resources 3
RENR 410 Ecosystem Management 4
RLEM 301 Range and Forest Watershed Management 3
WFSC 428 Wetland Ecosystem Management 3

**Policy/Regulations- Choose 3 hours**
FRSC 406 Forest Policy 3
GEOG 330 Resources and the Environment 3
MGMT 209 Legal and Social Environment of Business 3
PHIL 314 Environmental Ethics 3
WFSC 303 Fish and Wildlife Laws and Administration 3

Spatial Sciences Courses

**REQUIRED COURSES**
CPSC 110 Programming 4
FRSC 398/GEOG 398 Interpretation of Aerial Photographs 3
FRSC 484 Internship Credit 3
GEOL 352 GPS in the Geosciences 2
RENR 444 Remote Sensing in Renewable Natural Resources 3

**Choose 3 hours**
FRSC 461 GIS for Natural Resource Managers 3
GEOG 390 Principles of Geographic Information Systems 3
LAND 461 Geographic Information System Application in Resource Management 3
RENR 405 GIS for Environmental Problem Solving 3

34 hours

36 hours
**Selected Courses- Choose 9 hours**

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<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<td>AGSM 410 Spatial Technology for Precision Agriculture</td>
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<td>CPSC 206 Structured Programming in C</td>
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<td>CPSC 310 Database Systems</td>
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<td>ENDS 170 Computer Techniques for Design and Visualization</td>
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<td>GEOG 361 Remote Sensing in Geosciences</td>
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<td>GEOG 475 Advanced Topics in GIS</td>
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<td>PLAN 365 Introduction to Planning</td>
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<td>RPTS 307 Methods of Environmental Interpretation</td>
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<tr>
<td><strong>Free Electives</strong></td>
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</table>

**TOTAL HOURS** 131

1 If a course listed in the core curriculum satisfies another degree requirement, it can be used to satisfy both requirements if the student so wishes to.

2 These courses can be used to satisfy the International and Cultural Diversity Requirement

**a. Foundation courses.**

61 hours of core curriculum courses, with the following prescribed courses:

- ENGL 104 (3), ENGL 210 or 301 (3) or AGJR 404 (3) - for communication,
- MATH 141 or 172 (3), MATH 142 or 171 (3), STAT 302 (3) - for mathematics,
- CHEM 101 (4), BOTN 101(4), CHEM 102(4) - for basic sciences, RENR 205/215 (4), GEOG 203/213 (4) - for natural sciences, GEOG 202/301/305/323 (3) - for humanities, GEOG 440/201/204 or ECON 202 or AGEC 105 (3) - for social and behavioral science.

**b. Courses required for all students in the proposed program.**

12 hours of environmental core courses: AGEC 350/344(3), AGSM 337(3), BESC 403(3), MGMT 309 (3)

16 hours of natural resources: AGRO 301 (4), 12 credits selected from RLEM 301 (3), RENR 375(3), AGRO 310(2), WFSC 428 (3), RENR 410(4), FRSC 304 (3).

6 hours of policy/regulations: RENR 470(3), and one course selected from MGMT 209(3), PHIL 314(3), RENR 420(3), WFSC 303 (3), GEOG 330 (3).

9 hours of mathematics and statistics: MATH 141 or 172 (3), MATH 142 or 171 (3), STAT 302 (3).

6 hours of history selected from: HIST 359(3), HIST 360(3), HIST 363(3), HIST 364(3).

15 hours of core spatial sciences courses: RENR 444 (3), FRSC 398 (3), CPSC 110 (4), GEOL 352 (2), FRSC 461/GEOG 390/LAND 461/RENR405 (3).

20 hours of core curriculum courses: ENGL 104(3), ENGL 210/ENGL301/AGJR 404 (3), 3 hours of visual and performing arts, 6 hours of philosophy from POLS 206(3), POLS 207(3), KINE 198(1), KINE 199(1), GEOG 202/301/305/323 (3), GEOG 440/201/204 or ECON 202 or AGEC 105 (3).

c. Elective courses prescribed for those students.

9 hours from the following courses: CPSC 310 (3), RPTS 307 (3), GEOG 361 (3), CPSC 206 (3), PLAN 365 (3), ENDS 170 (3), GEOG 475 (3).

d. Courses freely elected by students.

9 hours of free electives.

e. Other, specify.

None.

2. Identify and describe special requirements for the program, e.g., clinicals, field experience, internship, practicum, thesis, etc.

This degree program requires an on-the-job, supervised experience program to be conducted in the area of the student's specialization.

3. If transfer students would be admitted to the program, list articulation agreements completed, in negotiation, or planned.

At this time there are no articulation agreements completed, in negotiation, or planned.
D. Curriculum

1. Identify by prefix, number, title, and description (including prerequisites) courses to be required or elected in the proposed program.

Courses that are required and/or elective courses for the Spatial Sciences Degree Program are attached in Appendix 1.

2. If the program design includes multiple curricula (concentrations, emphases, options, specializations, tracks, or related items), identify courses unique to each alternative.

The proposed degree program does not include any options, concentrations, or tracks.

3. Provide a semester-by-semester projection for the offering of the required and prescribed courses during the first five years.

The semester-by-semester availability of courses required or prescribed in this program is shown in Table 1.

4. Describe arrangements that would serve non-traditional students, e.g., non-traditionally scheduled classes, delivery of instruction by telecommunications and/or off-campus instruction sites, library services, student advisement, and related items if applicable.

At this time the degree program will primarily serve traditional students on the Texas A&M University College Station campus; however, FRSC faculty are modifying existing courses to take advantage of technologies (e.g. Internet) to facilitate non-traditional students and distance learning access.

5. If the general education/core curriculum component of the proposed program differs from that required for all or most other undergraduate programs at the institution, indicate how and why.

The core curriculum for this degree program is similar to other undergraduate degree programs that are offered at this university.
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E. Supporting Fields

1. Identify existing degree programs and non-degree supporting fields that would complement the proposed program; describe the relationship of each to the proposed program.

College of Geosciences

Geography and Geographic Information Science -- The Geography and Geographic Information Science degree programs are designed with 40 credits of geography courses and 24 credits of “track” electives with a rigorous component and emphasis in Geographic Information Science as an interdisciplinary degree focused on all the geosciences with a management and policy emphasis. This program complements the proposed degree program; however, the Spatial Sciences degree differs because it incorporates a diverse range of disciplines from Agricultural Economics to Zoology required in the application of spatial sciences to identifying and developing potential resolutions of various environmental problems.

College of Agriculture and Life Sciences

Forestry – The Forest Resource Management and Urban Forestry options in the Forestry degree program require courses in spatial sciences (3 credits in the Basic Forest Resource Core for both options, and another 3 credits in the Urban Forestry option); however, these options do not have sufficient number of free electives for students to develop the expertise in spatial sciences to compete for professional positions in the spatial sciences field.

Renewable Natural Resources – The Renewable Natural Resources degree focus is on the study and management of sustainable ecosystems for a wide variety of resource values. Three credits of course work in Geographical Information Systems for Resource Management are required; but students do not develop in-depth education in the use of a variety of spatial sciences in resource management.

Agronomy – The Agronomy degree is a combination of crop science and soil science that are of importance to the health and quality of life enjoyed by society. Students are educated in resource management; but not in the application of spatial sciences to resource issues.

Plant and Environmental Soil Science – The Plant and Environmental Soil Science degree develops and utilizes basic knowledge of biology, chemistry, mathematics and physics to understand earth’s resources. Students in this program are not educated in the spatial sciences.

Rangeland Ecology and Management – The Rangeland Ecology and Management degree integrates knowledge and technology in a systems approach to manage land for sustainable utilization of natural resources but does not require spatial sciences courses.
College of Architecture

Landscape Architecture – The Landscape Architecture degree stresses problem-solving process, design and communication, construction technology, resource management, and business and professional skill development but does not require spatial sciences courses.

Graduate Certificates

The Graduate Certificates in Remote Sensing and Geographic Information Systems, offered jointly by the Departments of Geography and Forest Science, are non-degree certificates that are directly related to the proposed degree program, but are only available at the graduate level.

2. If the existing programs or supporting fields would require updating or expansion because of the new program, explain how and why.

No existing programs or supporting fields would require updating or expansion as a result of the proposed new program.

F. Effect on Existing Programs

1. Describe how existing courses would be affected by enrollments generated in the proposed program, include information on, but not limited to, the potential needs for additional sections or increased class sizes, the faculty, library resources, equipment, supplies, and/or space.

This proposed program would positively affect existing courses because enrollment would increase to fill available seats in existing courses, and might increase the number of sections available to students as the relevance of these courses to resource management becomes more visible. Space is presently available in all courses, and the proposed program would not require additional manpower. Current faculty, library resources, equipment and supplies are sufficient to implement the proposed program.

2. For a graduate program, describe how related undergraduate programs would be affected by enrollments in the proposed program, include changes anticipated in the rank and/or credentials of faculty teaching in the undergraduate program, and use of graduate student teaching assistants, graduate assistants, and assistant instructors, etc. and their credentials. Provide evidence that faculty (full-time, part-time, or Teaching Assistants) in the proposed program or who would replace current faculty reassigned to the proposed program, would meet Southern Association of Colleges and Schools minimum standards for credentials and experience.
G. Accreditation

1. If there is a professional program accreditation procedure in this field, attach current standards.

There is not currently a professional program accreditation system applicable to this field; however, if one becomes available, we will consider seeking accreditation for this degree program.

2. State intention regarding accreditation.

Not applicable (see above).

III. EVALUATION

A. Describe procedures for evaluation of the program and its effectiveness in the first five years of the program, including admission and retention rates, program outcomes assessments, placement of graduates, changes of job market need/demand, ex-student/graduate surveys, or other procedures. How would evaluations be carried out?

Texas A&M University and the Department of Forest Science have assessment tools in place whereby we survey our graduates and employers to review the institutional effectiveness of the program. The Departments of Geography and Forest Science will implement a similar assessment tool in the proposed program. Additionally, our faculty and advisors meet annually to review all programs and curricula and propose appropriate revisions. This annual assessment process includes the progress of students in the degree program, and suggestions for better advising of the students, as well as marketing strategies for prospective freshmen and transfer students. A copy of the Forest Science survey instrument is located in Appendix 2.

IV. Program Need/Demand

A. Identify similar programs at:

1. Texas public and independent universities.

There are no degree programs similar to the one proposed available at any Texas public or independent institution.

2. Out-of-state institutions, if the proposed program would be unique in Texas.

There are no institutions in the United States that offer the proposed program.
B. Describe justification for the proposed program in terms of the following, as applicable.

1. **Local regional, state, national, and international needs.**

The spatial sciences, Geographic Information Systems (GIS), Global Positioning Systems (GPS), and Remote Sensing (RS) provide the theoretical and technical foundation to answer the questions who, what, when, and primarily where. Today, expertise in spatial sciences is needed from planning and managing the infrastructure of utilities in our home towns to a whole range of applications involving scientists and technicians advising governments, the military, and businesses from local to world scale. In this context, the spatial sciences degree will provide a broad-based education allowing graduates to utilize the full potential of spatial sciences in applications covering natural resources, forestry, agriculture, environment, national security, transportation, disasters, and emergency response. Rapid improvements in enabling technologies associated with spatial sciences, from user-friendly GIS software to commercially available high-resolution satellite data, have broadened the range of applications from local to global scales and increased the need for specialists to implement such applications. Therefore, the spatial sciences degree will address directly the educational needs of future users of spatial information technologies at a variety of scales.

Although voluntary to date, there is growing momentum in the spatial sciences community for certification of GIS and remote sensing specialists. Two professional organizations, the American Society for Photogrammetry and Remote Sensing (ASPRS) and the Urban and Regional Information Systems Association (URISA) have, or are establishing, professional certification programs. Increasing overlap between GIS activities and Land Surveying (e.g., http://www.urisa.org/surveylaw.htm) is also influencing certification and licensing activities in GIS. Developing a structured spatial sciences degree program at Texas A&M will help assure that this university is educating students with the requisite skills and background to meet future certification guidelines.

2. **The long-range academic plan of the institution.**

The development of a B.S. in Spatial Sciences is part of the strategic plan for the Departments of Forest Science and Geography and Colleges of Agriculture and Life Sciences and Geosciences. The new degree program is strongly aligned with Vision 2020 and the University mission to serve the State of Texas. The Geography-Geographic Information Science option of the Department of Geography has been in existence for approximately 20 years, and the courses in spatial sciences in the Department of Forest Science have been taught in one form or another for about 30 years.

3. **Demand from prospective students.**
Student demand at Texas A&M for courses in the spatial sciences is strong and growing. Fifty-two geography majors have enrolled in the jointly-administered minor in Geoinformatics between the Departments of Geography and Geology and Geophysics since 2000. In the year and a half since its inception, the Geographic Information Science Option within the regular Geography degree has enrolled 22 majors. A broad-based bachelors program in the spatial sciences that is capable of attracting students whose major interests lay outside geography should be equally successful.

It is expected that the demand from prospective students for the Spatial Sciences degree will likely correlate with the demands of the growing GIS industry. Even during economically challenging periods, the GIS industry often remains resilient. For instance, according to a GIS industry forecast by Cambridge, MA-based Daratech, Inc. (http://www.daratech.com), a market research and technology assessment firm, the total GIS core-business revenue (pertaining to the software, hardware, services and data products sectors) is predicted to increase 8% to $1.75 billion in 2003. The 2002 growth relative to the previous year was 2.4% (to $1.6 billion in core-business revenues). Approximately $1.1 billion in revenues were derived from the software market, and almost half of the total GIS software revenues are attributable to Environmental Systems Research Institute, Inc. (ESRI) and Intergraph Corporation. Service-related revenue remained at approximately the same level as 2001 (~24%), while hardware revenues, usually derived from GIS software/hardware bundles, have been declining over multiple years. Regarding the major market segments, the utilities, transportation, telecommunications, and education sectors constitute the regulated segment, and it comprises approximately 50% of the market. The utilities sector accounts for the largest market for GIS software, with a growth of 8% in 2002, and it additionally accounted for 51% of the total regulated sector-related revenues. The public sector includes local, state, and federal government, and this sector increased 5% over the prior year and accounts for 30% of total revenue. The federal segment was an early adopter of GIS technology; however, recent activity has trended toward decreased federal spending for GIS, while local and state governments have increased expenditures, associated with increased responsibilities. In 2002, state and local government markets accounted for 67% of total public sector-derived GIS revenue, and federal government provided 33% of the revenues. The private sector, including Earth resources, architecture, engineering, construction and marketing, remained steady by contributing to 24% of the 2002 GIS revenues. Of this, the Earth resources sector represented the greatest private sector-based revenue source at 43% of total private sector revenue (Daratech, 2003).

4. **Job market needs (identify specific potential employers and supply names, addresses, and phone numbers where possible).**

The GIS job market has remained vital, even in light of the recent economic slowdown. This applies to both the U.S. and European (e.g., United Kingdom) GIS job markets. GIS professionals with database and programming skills are particularly
in-demand, as are those with application domain-specific knowledge (see Ratzlaff, A. 2002. GIS Job Outlook 2002. Directions Magazine. 19 February 2002.). Appendix 3 contains examples of potential employers of students graduating with a Spatial Sciences degree.

5. **Educational and cultural needs of the community.**

A very high proportion of all data collected today has a spatial component. A structured curriculum in the spatial sciences will provide students with the education to analyze spatial relationships occurring at various scales, and to understand the environmental, social, and economic factors affecting the local and global welfare of all natural and highly developed ecosystems and human populations.

V. **PROGRAM POTENTIAL**

A. **Estimate the cumulative headcount and full time equivalent (FTE) enrollment for each of the first five years (majors only, considering expected attrition and graduation)** and indicate the number expected to be new to the institution each year.

**Table 2. Total estimated enrollment in the first five years of program implementation.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Enrollment</th>
<th>New</th>
<th>Change of major</th>
<th>Attrition</th>
<th>Graduation</th>
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<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2</td>
<td>40</td>
<td>16</td>
<td>6</td>
<td>2</td>
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<tr>
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<td>5</td>
<td>100</td>
<td>27</td>
<td>10</td>
<td>2</td>
<td>15</td>
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</tbody>
</table>

B. **Explain assumptions used in making these estimates.**

It is anticipated that many of the students initially entering the program will be through a change of curriculum from other majors in the university. Enrollment increases in successive years will be through a combination of new enrollments, as a result of advising, advertising and marketing the program, and word-of-mouth among undergraduates, and continued change of major. Enrollment estimates are based on enrollments in the Geography program.

VI. **RESOURCES**

A. **Personnel**

1. Describe any personnel additions or changes in the past three years made in anticipation of the program.


2. Indicate for the first five years the cumulative number of FTE personnel who would be involved in delivery of the program in each of the following categories.

Table 3. Five year forecast of FET personnel

<table>
<thead>
<tr>
<th>Year</th>
<th>Admin FTE</th>
<th>Faculty FTE</th>
<th>Part-time FTE</th>
<th>GANT FTE</th>
<th>Support Staff</th>
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<tr>
<td>1</td>
<td>0.1</td>
<td>1.69</td>
<td>0.5</td>
<td>2</td>
<td>0.7</td>
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<tr>
<td>2</td>
<td>0.1</td>
<td>1.69</td>
<td>0.5</td>
<td>2</td>
<td>0.7</td>
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<tr>
<td>3</td>
<td>0.1</td>
<td>1.69</td>
<td>0.5</td>
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<td>4</td>
<td>0.1</td>
<td>1.69</td>
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<tr>
<td>5</td>
<td>0.1</td>
<td>1.69</td>
<td>0.5</td>
<td>2</td>
<td>0.7</td>
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</table>

3. List current faculty members, indicating highest earned degree/institution, field of study, current teaching and research assignments, dates of appointment, and anticipated contribution to the program. Specify course(s) each faculty member would teach.

Srinivasan, Raghavan. Associate Professor. Ph.D., 1992, Purdue University. Field: use of spatial technologies to solve natural resources problems including environmental, water, bio-security. Appointed 1992. Anticipated contribution: FRSC 461, and possibly a new advanced topics course in GIS (e.g. FRSC 462).


4. If current faculty would be teaching new courses, how would their teaching assignments change and how would their current assignments be accommodated?
It is anticipated that the current spatial sciences faculty would continue their current level of teaching appointments, and that any reassignments and development of new courses would occur as a result of natural evolution in the curriculum as a result of regular curriculum review and attempts to improve program excellence.

5. **List all new positions (faculty, graduate assistants, clerical/support, etc.) required during the first five years of the program and indicate whether the positions would be additions or reassignments. If reassignment, indicate the source.**

No new resources are required to implement the proposed degree program; however, it is anticipated that curriculum implementation would result in some potential for staff reassignments to accommodate the administrative demands of the program.

6. **Describe qualifications that would be sought in new faculty, indicate the expected level of appointment and anticipated contributions to the program (including research grants, contract resources, etc.).**

No new faculty are required to implement this program.

7. **For graduate programs:**
   a. **Describe departmental faculty policy regarding chairing or serving on thesis/dissertation committees and number of students supervised at one time.**

      Not applicable.

   b. **Identify faculty who would supervise theses, dissertations, and internships; provide examples of their ongoing research projects and scholarly publications.**

      Not applicable.

B. **Library**

1. **List any library holdings added in the past three years in anticipation of the program.**

   No library holdings were added in the past three years in anticipation of this program.

2. **Describe library holdings relevant to the proposed program, noting strengths and weaknesses. If there are guidelines for the discipline, do current holdings meet or exceed standards? Describe planned actions that would maintain strengths and/or remedy weaknesses.**

   The Universities Libraries continue to collect in the relevant areas to support other
programs, which use the same resources. For example, in the past four weeks (September 16, 2003) the library has added thirty books specifically relevant to this subject, and many more in other areas that might be relevant. Adequate periodicals, monographs, and indexes to the literature are available to support the program. Since this is highly interdisciplinary, many resources are potentially of use.

3. Describe cooperative library arrangements that would be available to students in this program.

The Universities Libraries have loan agreements with other libraries adequate to provide access to library materials not available on campus.

4. Provide library director's assessment of library resources necessary for the proposed program.

A letter from Dr. Charles L. Gilreath is attached as Appendix 4.

C. Equipment

1. List any equipment acquired in the past three years in anticipation of the program.

No additional equipment was acquired during the past three years in anticipation of this program.

2. Itemize expenditures projected during each of the first five years for equipment and supplies specifically for the proposed program.

Expenditures projected during each of the first 5 years for equipment and supplies specifically for the proposed program are attached as Appendix 5.

D. Facilities

1. Describe any facility added or modified in the past three years in anticipation of the program.

No new facilities have been added in the past three years in support of the program in the Department of Geography as the geography department had already developed two fully-equipped GIS/Remote Sensing labs. These two labs have sufficient capacity to meet demand in undergraduate instruction in geographic techniques including the anticipated load of the spatial sciences degree. The department’s long term computer plan assures the computers are upgraded on a three-year cycle and the requisite software licenses are maintained. This year, both labs are being fitted with computer projection devices and SMART technology boards. The department’s geographic techniques classes are already supported by a full-time system administrator.
The Spatial Sciences Laboratory (SSL) is located in the Centeq Research Plaza west of the Horticulture/Forest Science Building in the TAMU Research Park. The SSL includes a total of 4,250 ft² of laboratory and office space. The SSL provides two research laboratories. These labs are used to carry out all phases of research projects and technology transfer between participating agencies. These offices are equipped with cutting edge technology to fulfill the requirements of any spatial science project or education program. The teaching laboratory is equipped with 12 Pentium IV workstations (20” flat panel monitors, 2 GHz, 512 MB RAM, 80 G hard drives) for conducting university and continuing education courses. This room has a variety of multi-media devices such as an overhead projector, slide projector, SMART technology board, and a LCD projector.

2. Describe the availability and adequacy of existing facilities that would be used for the proposed program.

The facilities described above, as well as teaching classrooms, are available for the proposed program. Continual updating of computer facilities and programs are required to maintain the cutting edge technology necessary for delivery of the program. No new facilities are required.

3. Describe planned alteration or renovation of existing facilities needed for the program; estimate dates of availability and display estimated cost in Item VII.

No alteration or renovation of existing facilities is needed for the program.

4. Describe planned new facilities needed for the program; estimate dates of availability and display estimated cost in Item VII.

No new facilities are needed for the program.

VII. Costs

On the attached forms, provide estimates of new costs to the institution related to the proposed program(s) and provide information regarding sources of the funding that would defray those costs.

Five year costs estimates are attached as Appendix 5 and sources of anticipated funding are shown on Appendix 6.
Appendix 1. Courses that are required and/or elective courses for the Spatial Sciences Degree Program

AGEC 105. Introduction to Agricultural Economics. (3-0). Credit 3. I, II, S
Characteristics of our economic system and basic economic concepts; survey of the farm and ranch firm and its organization and management; structure and operation of the marketing system; functional and institutional aspects of agricultural finance; government farm programs.

AGEC 344. Agricultural Law. (3-0). Credit 3. I, II. Legal problems relevant to agribusiness; torts, fencing laws, liability for agricultural pollution, irrigation water rights, corporations and partnerships. Prerequisite: Junior classification or approval of instructor.

AGEC 350. Environmental and Natural Resource Economics. (3-0). Credit 3. I, II
Inspection of issues such as environmental degradation, population growth, recycling, water use and depletion, natural habitat protection, water and air pollution, acid deposition, fishery management, and global warming using economically derived principles and tools. Prerequisite: Junior classification or approval of instructor.

AGJR 404. Communicating Agricultural Information to the Public. (2-2). Credit 3. Use of agricultural education principles and techniques to communicate scientific information related to agriculture, agribusiness, natural resources, and life sciences to the general public. Communication processes include audience identification, writing, editing, and production of agricultural science-based manuscripts for popular and refereed publications. Prerequisite: Junior or senior classification.

AGSM 410. Spatial Technology for Precision Agriculture. (2-2). Credit 3. Information techniques and technologies used for precision agriculture and their application within agronomic systems with emphasis on commercial practices; including global positioning system, mapping software, variable rate technologies and decision support systems. Selection of appropriate technologies for use in a management system. Prerequisite: AGRO 301, AGLS 201 or equivalent, Junior Classification.

AGRO 301. Soil Science. (3-2). Credit 4. I, II, S An introduction to the nature and properties of soils. Application of science and technology to the use of this natural resource and the roles in the environment. Prerequisite: CHEM 101 or equivalent.

AGRO 310. Soil Morphology and Interpretations. (1-3). Credit 2. I, II Field study of morphological features of soil profiles and the morphological characteristic of important soils of Texas in relation to soil use and management. Prerequisite: AGRO 301 or registration therein.

AGSM 337. Technology for Environmental and Natural Resource Engineering. (3-0). Credit 3. I For the non-engineering student in the environmental and management sciences; concentrates on the application of technology for solving local environmental problems while considering global issues; reduction of water, air and hazardous waste pollutants; legislative issues and modeling. Prerequisites: AGRO 301 or approval of instructor; MATH 131 or 142.

BIOL 113. Introductory Biology. (3-0). Credit 3. I, II, S Survey of contemporary biology that covers the chemical basis of life, structure and biology of the cell, molecular biology and genetics. The corresponding laboratory course, BIOL 123, provides practical experience and reinforcement of the topics discussed in BIOL 113.

BIOL 114. Introductory Biology. (3-0). Credit 3. I, II, S Continuation of a two-semester course in biological concepts; BIOL 114 will emphasize organismal diversity, comparative physiology, ecology and evolution. BIOL 124 is the laboratory course for this lecture course. Prerequisite: BIOL 113.

BIOL 123. Introductory Biology Laboratory. (0-3). Credit 1. I, II, S Laboratory study of topics covered in BIOL 113; experimental techniques, cell biology, metabolism, DNA and genetics. Prerequisite: BIOL 113 or concurrent enrollment.

BIOL 124. Introductory Biology Laboratory. (0-3). Credit 1. I, II, S Laboratory studies of topics covered in BIOL 114; diversity of life, comparative anatomy and physiology, and ecology and evolution. Prerequisites: BIOL 113, 123, 114 or concurrent registration in BIOL 114.

BOTN 101. Botany. (3-3). Credit 4. I, II Structure, physiology and development of plants; emphasis on seed plants. (Not open to students who have taken BIOL 113 and 114.)
BESC 403. Sampling and Environmental Monitoring. (2-3). Credit 3. Introduction to environmental sampling and methodology; strategies and analyses of sampling data; overview of current applications of sampling and monitoring in the environmental sciences; emphasis on practical aspects of sampling from air, soil and water; detection and quantification of microbial and chemical unknowns in environmental media. Prerequisite: Junior or senior classification or approval of instructor.


CHEM 102. Fundamentals of Chemistry II. (3-3). Credit 4. Lecture: theory and applications of oxidation-reduction systems, thermodynamics and kinetics, complex equilibria and solubility product; nuclear chemistry, descriptive inorganic and organic chemistry, laboratory: introduction to analytical and synthetic methods and to quantitative techniques to both inorganic and organic compounds. Prerequisites: CHEM 101, 103, 107 or equivalent.

COMM 203. Public Speaking. (3-0). Credit 3. Lecture: training in speeches of social and technical interest designed to teach students to develop and illustrate ideas and information and to inform, stimulate, and persuade their audiences.

CPSC 110. Programming I. (3-2). Credit 4. Lecture: basic concepts, nomenclature and historical perspective of computers and computing; internal representation of data, software design principles and practices; structured programming in Pascal, use of terminals, operation of editors and execution of student-written programs.

CPSC 206. Structured Programming in C. (3-2). Credit 4. Lecture: basic concepts, nomenclature and historical perspective of computers and computing; internal representation of data, software design principles and practices; structured and object-oriented programming in C, use of terminals, operation of editors and execution of student-written programs.

CPSC 310. Database Systems. (3-0). Credit 3. Lecture: files, databases and access methods; database modeling, design and user interface; components of database management systems; information storage and retrieval, query languages, high-level language interface with database systems. Prerequisite: CPSC 210 or 211.

ECON 202. Principles of Economics. (3-0). Credit 3. Lecture: elementary principles of economics; the economic problem and the price system; theory of demand, theory of production and the firm, theory of supply, the interaction of demand and supply.

ENGL 104. Composition and Rhetoric. (3-0). Credit 3. Lecture: focus on referential and persuasive researched essays through the development of analytical reading ability, critical thinking and library research skills; for U1 and U2 students only. (ENGL 104 offered for students whose native language is not English.)

ENGL 210. Scientific and Technical Writing. (3-0). Credit 3. Lecture: principles of composition and rhetoric applied to the basic genres of scientific and technical writing, including the report, proposal and manual. Prerequisite: ENGL 104.

ENGL 301. Technical Writing. (3-0). Credit 3. Lecture: advanced writing in technical, scientific, and business fields; reports, proposals and other papers; correspondence. Prerequisites: ENGL 104; junior classification in the major department.

ENDS 170. Computer Techniques for Design and Visualization. (2-3). Credit 3. Lecture: introduction to the history of computing; fundamentals of computer applications for visualization, design, planning and construction; review of applications for management, network publishing, vector editing, modeling, rendering, animation, multimedia/hypermedia presentations and the development of virtual environments. Prerequisite: Basic computer literacy.

FRSC 304. Forest Ecology. (3-0). Credit 3. Lecture: life history and general characteristics of trees; structure and function of forest ecosystems; fundamental principles of forest tree physiology and ecology applied to an analysis of tree growth in relation to environmental factors and present day forest management; global changes and forests. Prerequisite: Junior or senior classification or approval of instructor.

FRSC 305. Silviculture. (3-3). Credit 4. Lecture: the theory and practice of controlling forest establishment,
composition, structure and growth; principles of natural and artificial regeneration; intermediate
cultural operations; silvicultural systems; use and control of fire in forests.

Information System (GIS) approach to the integration of spatial and attribute data to study the
capture, analysis, manipulation and portrayal of natural resource data; examination of
data types/formats, as well as the integration of GIS with remote sensing and Global
Positioning System; laboratory includes extensive use of GIS applications to conduct analyses of
topics in natural resources. Prerequisite: Approval of instructor.

FRSC 484. Internship. Credit 1 to 4. I, II, S On-the-job supervised experience program conducted in
the area of the student’s specialization. Prerequisite: Approval of instructor.

FRSC 495. Interpretation of Aerial Photographs. (2-3). Credit 3. I Identification and evaluation of
natural and cultural features on aerial photographs; methods for extracting information concerning
land use, vegetative cover, surface and structural features, urban/industrial patterns
and archaeological sites. Prerequisites: Any mathematics course and one of the following:
AGRO 301, BIOL 113, FRSC 101, GEOG 203, GEOL 101, RENR 205, WFSC 101. Cross-listed
with GEOG 398.

GEOG 201. Introduction to Human Geography. (3-0). Credit 3. I, II A survey of the major systems of
man-land relations of the world and their dissimilar developments; the processes of innovation,
diffusion and adaptation stressed with regard to changing relationships between people
and their environment.

GEOG 202. Geography of the Global Village. (3-0). Credit 3. I, II Uses of resources; identification of
problems pertaining to poverty, hunger, overpopulation, relations between nations and races, environmental destruction and violence within the major geographic regions of
the world.

of energy and matter and interaction with air, land, water and plant subsystems of
earth; processes, distributions and interactions between subsystems and humans; laboratory
activities to illustrate principles of physical geography.

GEOG 204. Economic Geography. (3-0). Credit 3. I, II Location of economic activities over the earth;
distribution of agriculture, manufacturing, tertiary activities and transportation; economic
growth of areas.

GEOG 213. Planet Earth Lab. (0-3). Credit 1. Exercises and maps to illustrate principles of physical geography.
Prerequisite: GEOG 203 or registration therein.

GEOG 301. Geography of the United States. (3-0). Credit 3. I, II Geographic personality (physical and
cultural) of the United States.

GEOG 305. Geography of Texas. (3-0). Credit 3. I, II Exploration into the geographic personality of
Texas: past and current physical and biotic environments; cultural pluralism, including ethnic
origins and distinctive human ecologies; and the social, economic and political sources of
environmental problems.

GEOG 323. Geography of Latin America. (3-0). Credit 3. Physical and cultural characteristics of Latin
America; physical landscape, cultural succession and the present cultural landscape; details
on sub-regions.

GEOG 440. History and Nature of Geography. (3-0). Credit 3. Summary of classical knowledge of
the world; development of thought on nature of geography from 1800 to present. Prerequisite:
Junior or senior classification.

resources; international conditions of population growth, resource depletion and geopolitical
control; resource perceptions and decision-making.

GEOG 361. Remote Sensing in Geosciences. (3-2). Credit 4. Introduction to the principles, techniques
and applications of remote sensing technology in geosciences including the analysis and
interpretation of airborne and space borne remote sensing data for studying key earth system
processes. Prerequisite: GEOG 322 or approval of instructor.

GEOG 390. Principles of Geographic Information Systems. (2-2). Credit 3. I, II Basic concepts of
design, planning and implementation of geographic information systems. Prerequisite: Junior or senior classification.

GEOG 475. Advanced Topics in GIS (Geographic Information Systems). (3-2). Credit 4. Topics related to GIS implementation, spatial database design, spatial data analysis, and various advanced GIS applications. Prerequisite: GEOG 390 or equivalent.

GEOL 352. GPS in the Geosciences. (1-3). Credit 2. Introduction to the Global Positioning System (GPS); basic geodesy, figure of the earth, frames of reference, map projection, datums, ellipsoids; GPS accuracy and precision; applications in earth resource mapping and database creation; elementary GPS phase data processing. Prerequisites: Junior or senior classification; approval of instructor.

KINE 198. Health and Fitness Activity. (0-2). Credit 1. Half lecture; half activity; student choice of designated fitness or strength related activities; lecture portion covers current health topics.

KINE 199. Required Physical Activity. (0-2). Credit 1. Selection from a wide variety of activities designed to increase fitness and/or encourage the pursuit of lifetime activity.

LAND 461. Geographic Information System Application in Resource Management. (2-4). Credit 3. Process of and planning for change in the urban environment and its infrastructure; Geographic Information System (GIS) tools introduced and used to support this work; GIS theory and resource management modeling. Prerequisites: Junior classification and approval of instructor.

MGMT 209. Business, Government and Society. (3-0). Credit 3. 1, II, S Impact of the external environment legal, political, economic and international—on business behavior; market and non-market solutions to contemporary public policies confronting business persons examined including antitrust law, employment and discrimination law, product safety regulation, consumer protection and ethics. Prerequisites: Sophomore classification, for students other than business and agribusiness majors.

MGMT 309. Survey of Management. (3-0). Credit 3. 1, II, S Survey of the basic functions and responsibilities of managers; includes the environmental context of management, planning and decision making, organization structure and design, leading and managing people, and the controlling process; issues of globalization, ethics, quality and diversity integrated throughout the course. Prerequisites: Junior classification; for students other than business and agribusiness majors.

MATH 141. Business Mathematics I. (3-0). Credit 3. 1, II, S Linear equations and applications, linear forms and systems of linear equations, matrix algebra and applications, linear programming (graphical and simplex methods), probability and applications, statistics. Prerequisites: High school algebra I and II and geometry. Credit will not be given for more than one of MATH 141 and 166.

MATH 142. Business Mathematics II. (3-0). Credit 3. 1, II, S Derivatives, curve sketching and optimization, techniques of derivatives, logarithms and exponential functions with applications, integrals, techniques and applications of integrals, multivariate calculus. Prerequisites: High school algebra I and II and geometry or satisfactory performance on a qualifying examination. Credit will not be given for more than one of MATH 131, 142, 151 and 171.

MATH 171. Analytic Geometry and Calculus. (4-0). Credit 4. 1, II Vectors, functions, limits, derivatives, Mean Value Theorem, applications of derivatives, integrals, Fundamental Theorem of Calculus, computer algebra (Maple). Prerequisite: MATH 150 or satisfactory performance on a qualifying examination. Credit will not be given for more than one of MATH 131, 142, 151 and 171.

MATH 172. Calculus. (4-0). Credit 4. 1, II Techniques of integration, applications of integrals, improper integrals, sequences, infinite series, vector algebra and solid analytic geometry, computer algebra (Maple). Prerequisite: MATH 151 or 171. Credit will not be given for both MATH 152 and 172.

PLAN 365. Introduction to Planning. (3-0). Credit 3. 1, II, S Determinants of land use patterns; classification of uses; idealized conceptual alternatives; location and size criteria; mapping; comprehensive planning process, relationship to circulation planning.

POLS 207. State and Local Government. (3-0). Credit 3, 1, II, S Survey of state and local government and politics with special reference to the constitution and politics of Texas.

PHIL 314. Environmental Ethics. (3-0). Credit 3. Moral basis of duties to preserve or protect plants, animals and environmental systems; foundations of environmental law and policy; the idea of nature in philosophy; critique of social and economic analyses of environmental values. Prerequisite: Sophomore classification or approval of instructor.

RENR 205. Fundamentals of Ecology. (3-0). Credit 3, 1, II Principles of ecology using a holistic approach treating plants, animals and humans as one integrated whole; composition, structure, nutrient cycles and energetics of biotic communities; adaptations to environmental factors; biotic relationships; and problems of environmental quality and resource use.

RENR 215. Fundamentals of Ecology—Laboratory. (0-3). Credit 1, 1, II, S Sampling and estimating plant-animal populations; measuring environmental factors and recognizing and studying morphological, physiological and behavioral adaptations of plants and animals to biotic or abiotic influences.

RENR 375. Conservation of Natural Resources. (3-0). Credit 3, 1, II, S Principles and philosophies associated with the development, management and use of natural resources; ecological and social implications inherent in management alternatives involving the natural environment and use of renewable natural resources.

RENR 405. GIS for Environmental Problem Solving. (2-2). Credit 3. Interdisciplinary approach to train students to integrate GIS and relevant technologies for environmental problem solving; helps students relate learning to real world situations; students conceptualize, develop and manage projects using real data; one term project required. Prerequisite: RENR 201 or equivalent, or approval of instructor.

RENR 410. Ecosystem Management. (3-3). Credit 4. Concepts and practices relevant to the development of landscape/regional level ecosystem management plans; an ecosystem management plan will be developed utilizing a strategic management/coordinated resources approach to establish resource goals, ecosystem resource analysis and impact evaluation, and implementation compatible with societal and individual concerns. Prerequisite: Senior classification or approval of instructor.

RENR 420. Natural Resource Law. (3-0). Credit 3. Basic legal relationships and issues involved in the management, development and allocation of natural resources; includes federal, state and local statutes, administrative rules and judicial decisions; alternative dispute resolution theories and techniques. Cross-listed with RPTS 420.

RENR 444. Remote Sensing in Renewable Natural Resources. (2-3). Credit 3. II Application of fundamental photogrammetry and photo interpretation and the use of other sensors in remote detection and analysis of natural resources; interpretation of natural vegetation as it applies to ecosystem analysis for range, forest and wildlife management; natural resource planning for rural, urban and recreational development. Prerequisite: Junior classification.

RENR 470. Environmental Impact Assessment. (3-0). Credit 3. The evolution of natural resources regulatory policies and how this influences current procedures for environmental/natural resources assessment and management; demonstration of the environmental impact assessment procedures and policy issues associated with environmental impacts. Prerequisite: Senior classification or approval of instructor.

RLEM 301. Range and Forest Watershed Management. (2-2). Credit 3, 1, II Elements of watershed management and principles and practices of range and forest land management for protection, maintenance and improvement of water resource values. Field trips required for which departmental fees may be assessed to cover costs.

RPTS 307. Methods of Environmental Interpretation. (2-2). Credit 3, 1, II Communication processes and practices between resource managers and publics using or affected by natural, cultural, and tourism resource places; principles and techniques of gathering, analyzing and disseminating information through various media, such as exhibits, presentations, publications and programs. Field trips required for which departmental fees may be assessed to cover costs.

STAT 302. Statistical Methods. (3-0). Credit 3, 1, II, S Intended for undergraduate students in the biological sciences and agriculture (except agricultural economics). Introduction to concepts of random sampling and statistical inference; estimation and testing hypotheses of means and variances; analysis of variance; regression analysis; chi-square tests. Credit will not be
allowed for more than one of STAT 301, 302 or 303. Prerequisite: MATH 141 or 166 or equivalent.

WFSC 303. Fish and Wildlife Laws and Administration. (3-0). Credit 3. A review and analysis of state and federal laws and international treaties and conventions affecting fish and wildlife; their application and administration; organizational structure of state, federal and international agencies; their objectives, policies and practices. Prerequisite: Junior classification.

WFSC 425 Wetland Ecosystem Management. (3-3). Credit 4. Ecosystem approach to the ecology and management of wetlands; emphasis on factors controlling wetland structure and function, characteristics of different wetland types, and applied issues of wetland restoration, creation and delineation. Prerequisite: Junior or senior classification*. 
Appendix 2. Survey Instrument

The Agriculture Program
Department of Forest Science

Please return this survey by ______________ to the address listed at the bottom of this form.

Name: __________________________ Phone: ( ) ________________

Last First MI

Current Address: __________________________________________

Street City State Zip

E-mail Address: ________________________________

Your Program of Study
[ ] Forestry
[ ] Urban Forestry
[ ] Forest Resource Management
[ ] Arboriculture
[ ] Human Ecology
[ ] Landscape Design
[ ] Spatial Sciences
[ ] International Forestry
[ ] Forest Industries
[ ] Forest Products
[ ] Restoration and Protection of Native Forests

FRSC Degree/Year
[ ] BS Applied: ____________________
[ ] MS Institution: ____________________
[ ] PhD Degree: ____________________

Current Status:
[ ] Employed Full-Time/Permanent Date: ________________
[ ] Employed Part-Time/Seasonal
[ ] Full-Time Student
[ ] Part-Time Student

Title: ________________________________

Institution: ________________________________

Employer: ________________________________ Degree Sought: ________________________________

Brief Description of Duties:

We are interested in the career paths of alumni employed outside as well as within the forestry and environmental professions. Have you found your Texas A&M education to be an asset? Are you using your forestry background either in your professional world or in other roles you might play in your community? Please explain briefly.

How satisfied are you with the education you received from the Department of Forest Science?
[ ] very satisfied [ ] satisfied [ ] neutral [ ] dissatisfied [ ] very dissatisfied

How satisfied are you with the education you received from Texas A&M in general?
[ ] very satisfied [ ] satisfied [ ] neutral [ ] dissatisfied [ ] very dissatisfied

As you reflect back on your education in FRSC, how satisfied were you with the academic advising you received as a FRSC student?
[ ] very satisfied [ ] satisfied [ ] neutral [ ] dissatisfied [ ] very dissatisfied

What was your most valuable educational experience or course work?

Please comment on any aspects of your education that you have found particularly useful.

Did your education at Texas A&M University instill in you a desire for further knowledge and continuing learning opportunities?
[ ] Yes [ ] No

Would you be willing to have FRSC students contact you with employment questions?
[ ] Yes [ ] No

Do you have access to information about internship and employment opportunities within your organization that you could share with us? If yes, we will contact you regarding these opportunities.
[ ] Yes [ ] No

If you need additional space, please feel free to use the back. Thank you for taking the time to fill out this form.
### Appendix 3. Examples of potential employers

<table>
<thead>
<tr>
<th>Potential Commercial Employer Name</th>
<th>Web/E-mail Addresss</th>
<th>Physical Address</th>
<th>Phone/Fax Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/E Consultant</td>
<td><a href="mailto:lucisanogx@c-b.com">lucisanogx@c-b.com</a></td>
<td>Denver, CO</td>
<td></td>
</tr>
<tr>
<td>Agua Caliente Band of Cahuilla Indians</td>
<td><a href="mailto:sgehan@aguacaliente.net">sgehan@aguacaliente.net</a></td>
<td>650 E. Tahquitz Canyon Way Palm Springs, CA 92262</td>
<td></td>
</tr>
<tr>
<td>AMEC Earth and Environmental</td>
<td><a href="http://www.amec.com">www.amec.com</a></td>
<td>Westford, MA</td>
<td></td>
</tr>
<tr>
<td>ARCADIS</td>
<td><a href="mailto:mdepining@arcadis-us.com">mdepining@arcadis-us.com</a>/arcadis_qs@hotmail.com</td>
<td>Greenville, SC</td>
<td></td>
</tr>
<tr>
<td>AutoZone</td>
<td><a href="mailto:az.jobs@autozone.com">az.jobs@autozone.com</a></td>
<td>Memphis, TN</td>
<td></td>
</tr>
<tr>
<td>Borton-Lawson Engineering, Inc.</td>
<td><a href="mailto:mpetchavage@orton-lawson.com">mpetchavage@orton-lawson.com</a></td>
<td>613 Baltimore Drive, Wilkes-Barre, PA 18702</td>
<td></td>
</tr>
<tr>
<td>CALIBRE</td>
<td><a href="http://www.calibresys.com">www.calibresys.com</a></td>
<td>Alexandria, VA</td>
<td></td>
</tr>
<tr>
<td>CGE&amp;Y Canada Inc.</td>
<td><a href="mailto:vu.tien@inergi.ca">vu.tien@inergi.ca</a></td>
<td>Toronto, Canada</td>
<td>416.345.5541</td>
</tr>
<tr>
<td>CH2M HILL World HQ</td>
<td><a href="http://www.ch2mhill.com">www.ch2mhill.com</a></td>
<td>9191 South Jamaica Street, Engelwood, CO 80112</td>
<td>303.771.0900</td>
</tr>
<tr>
<td>CommunityViz</td>
<td><a href="mailto:jobs@communityviz.com">jobs@communityviz.com</a></td>
<td>Boulder, CO</td>
<td></td>
</tr>
<tr>
<td>Cultural Site Research and Management</td>
<td><a href="mailto:applicant@culturalsite.com">applicant@culturalsite.com</a></td>
<td>Baltimore, MD USA</td>
<td></td>
</tr>
<tr>
<td>Digital Aerial Solutions</td>
<td><a href="mailto:timk@digitalaerial.com">timk@digitalaerial.com</a></td>
<td>Tampa, Florida, Chicago, IL</td>
<td></td>
</tr>
<tr>
<td>Eagan, McAllister Associates, Inc.</td>
<td><a href="mailto:ema@emainc.com">ema@emainc.com</a></td>
<td>Indian Head, MD</td>
<td>Fax: 301-863-5183</td>
</tr>
<tr>
<td>ECorp Consulting Inc.</td>
<td><a href="mailto:rtobys@ecorpconsulting.com">rtobys@ecorpconsulting.com</a></td>
<td>Roseville, CA</td>
<td></td>
</tr>
<tr>
<td>Energy Velocity</td>
<td><a href="mailto:lmolyneux@energyvelocity.com">lmolyneux@energyvelocity.com</a></td>
<td>Boulder, CO</td>
<td></td>
</tr>
<tr>
<td>EPA</td>
<td><a href="http://www.epa.gov/ezhire/index.htm">http://www.epa.gov/ezhire/index.htm</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPG Inc</td>
<td><a href="mailto:jobs@epgaz.com">jobs@epgaz.com</a></td>
<td>Phoenix Arizona</td>
<td></td>
</tr>
<tr>
<td>ESRI Main Headquarters</td>
<td><a href="http://gis.esri.com/jobs/jobs.cfm">http://gis.esri.com/jobs/jobs.cfm</a></td>
<td>380 New York Street, Redlands, CA 92373-8100</td>
<td>1-909-793-2853</td>
</tr>
<tr>
<td>Forsite Consultants Ltd</td>
<td><a href="mailto:sjohnson@forosite-sa.com">sjohnson@forosite-sa.com</a></td>
<td>Canada</td>
<td>Fax (250)832-3811</td>
</tr>
<tr>
<td>Gannett Fleming, Inc.</td>
<td><a href="mailto:employment@gfnet.com">employment@gfnet.com</a></td>
<td>Suite 1530, 1515 market St., Philadelphia, PA 19102</td>
<td></td>
</tr>
<tr>
<td>GeoAnalytics, Inc.</td>
<td><a href="mailto:resumes@geoanalytics.com">resumes@geoanalytics.com</a></td>
<td>1716 Fordem Avenue, Madison, WI 53704</td>
<td>Fax 608-241-7116</td>
</tr>
<tr>
<td>GEOFIELDS, INC.</td>
<td><a href="mailto:bschaff@geofields.com">bschaff@geofields.com</a></td>
<td>1180 West Peachtree St., Ste. 1250, Atlanta, GA 30309</td>
<td>Fax: (404) 875-2442</td>
</tr>
<tr>
<td>Geotopo, Inc</td>
<td><a href="mailto:jjohnston@geotopo.com">jjohnston@geotopo.com</a></td>
<td>630 20th st. 3rd fl., Oakland, CA 94612</td>
<td>fax:510.763.6401</td>
</tr>
<tr>
<td>GIS Solutions, Inc.</td>
<td><a href="mailto:rhudson@gis-solutions.com">rhudson@gis-solutions.com</a></td>
<td>St. Peters, FL, Florida</td>
<td></td>
</tr>
<tr>
<td>Company Name</td>
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<td>Gray Hawk Systems Incorporated</td>
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<td>Maui, Hawaii</td>
<td></td>
</tr>
<tr>
<td>GreenInfo Network</td>
<td><a href="mailto:jobs@greeninfo.org">jobs@greeninfo.org</a></td>
<td>West Los Angeles (Culver City), fax 310-670-3938</td>
<td></td>
</tr>
<tr>
<td>I.T.S. Corporation</td>
<td><a href="mailto:resume@itsfed.com">resume@itsfed.com</a></td>
<td>29 Palms, CA, fax 877-642-2485</td>
<td></td>
</tr>
<tr>
<td>IMS, Inc.</td>
<td><a href="http://www.IMSWEB.com">www.IMSWEB.com</a></td>
<td>Silver Spring, MD USA, 301-680-9770</td>
<td></td>
</tr>
<tr>
<td>INDUS Corporation</td>
<td><a href="mailto:pierson.sue@epa.gov">pierson.sue@epa.gov</a></td>
<td>Newport, OR</td>
<td></td>
</tr>
<tr>
<td>Intergraph Corporation</td>
<td><a href="mailto:skcoaten@igr.com">skcoaten@igr.com</a></td>
<td>Kansas City, KS</td>
<td></td>
</tr>
<tr>
<td>J. M. Waller Associates, Inc.</td>
<td><a href="mailto:hr@jmwaller.com">hr@jmwaller.com</a></td>
<td>Burlington, VT, (770) 632-0810</td>
<td></td>
</tr>
<tr>
<td>JB Management, Inc.</td>
<td><a href="mailto:dnous@jbmanagement.com">dnous@jbmanagement.com</a></td>
<td>Ft. Belvoir, VA, USA</td>
<td></td>
</tr>
<tr>
<td>Johnson Center for Philanthropy &amp; Nonprofit Leadership</td>
<td><a href="mailto:vaniwaad@gv-su.edu">vaniwaad@gv-su.edu</a></td>
<td>Grand Valley State University, Grand Rapids, MI.</td>
<td></td>
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<tr>
<td>Johnson Controls World Services Inc., Nat'l Wetlands Research Center</td>
<td><a href="mailto:Darlene_Lyons@usgs.gov">Darlene_Lyons@usgs.gov</a></td>
<td>700 Cajundome Blvd., Lafayette, LA 70506, Fax: (337) 266-8595</td>
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<tr>
<td>Keet Consulting Services, LLC</td>
<td>Birmingham, AL, <a href="mailto:esouthern@keetconsultingservices.com">esouthern@keetconsultingservices.com</a></td>
<td>123 South Broad Street, Suite 1270, Philadelphia, PA 19109</td>
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</tr>
<tr>
<td>Kise Straw &amp; Kolodner</td>
<td><a href="mailto:smccaney@ksk1.com">smccaney@ksk1.com</a></td>
<td>Richmond, VA, Fax: 814 472-7712</td>
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<tr>
<td>L. Robert Kimball &amp; Associates</td>
<td><a href="mailto:hmnres@lrkimball.com">hmnres@lrkimball.com</a></td>
<td>DC Metro area (Sterling, VA)</td>
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<td>Laser Scan Inc</td>
<td><a href="mailto:dncproduction@lsiva.com">dncproduction@lsiva.com</a></td>
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<td>Michael Baker Jr., Inc.</td>
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<td>Southern CA</td>
<td></td>
</tr>
<tr>
<td>Millennium Technical Contracting, Inc.</td>
<td><a href="mailto:jeff@mtc2kinc.com">jeff@mtc2kinc.com</a></td>
<td>Fort Collins, CO and Athens, GA</td>
<td></td>
</tr>
<tr>
<td>Miner &amp; Miner</td>
<td><a href="mailto:marciaolson@miner.com">marciaolson@miner.com</a></td>
<td>New Jersey</td>
<td></td>
</tr>
<tr>
<td>Navigation Technologies</td>
<td><a href="mailto:career@navtech.com">career@navtech.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORBIMAGE</td>
<td><a href="mailto:recruiter_dulles@orbimage.com">recruiter_dulles@orbimage.com</a></td>
<td>21700 Atlantic Blvd., VA 20166, FAX: 703-450-9573</td>
<td></td>
</tr>
<tr>
<td>Organization for Tropical Studies</td>
<td><a href="mailto:jjimenez@ots.ac.cr">jjimenez@ots.ac.cr</a></td>
<td>P.O. Box 676-2050 San Pedro, Costa Rica, (506) 240 6696</td>
<td></td>
</tr>
<tr>
<td>Pacific Western Technologies, Ltd.</td>
<td><a href="mailto:cgoranson@pwt.com">cgoranson@pwt.com</a></td>
<td>605 Parfet St., Suite 200, Lakewood, CO 80215</td>
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</tr>
<tr>
<td>Parsons</td>
<td><a href="mailto:dana.johnson@parsons.com">dana.johnson@parsons.com</a></td>
<td>Austin, TX</td>
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<tr>
<td>PBS&amp;J</td>
<td><a href="http://www.pbsj.com">www.pbsj.com</a></td>
<td>Denver, CO</td>
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<tr>
<td>Pickering Corts and Summerson</td>
<td><a href="mailto:majeusk@pcs-inc.biz">majeusk@pcs-inc.biz</a></td>
<td>Newtown, PA, fax 215.968.3649</td>
<td></td>
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<tr>
<td>PlanGraphics, Inc.</td>
<td><a href="mailto:dwagner@pcs-inc.biz">dwagner@pcs-inc.biz</a></td>
<td>Washinton, DC Area</td>
<td></td>
</tr>
</tbody>
</table>
| ReMetrix LLC                         | e-mail: doug@remetrix.com           | 11550 N. Meridian St., Suite 600, Carmel, IN 46032-4565     | Fax: (317) 580-8290
<table>
<thead>
<tr>
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<th>E-mail Address</th>
<th>Physical Address</th>
<th>Phone/Fax Number</th>
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<td>Reynolds, Smith and Hills, Inc</td>
<td><a href="mailto:employment@rsandh.com">employment@rsandh.com</a></td>
<td>10748 Deerwood Park Blvd South, Jacksonville, FL 32256-0597</td>
<td>Fax: (904) 256-2520</td>
</tr>
<tr>
<td>Safe Harbor Group</td>
<td><a href="mailto:David@safeharborgroup.com">David@safeharborgroup.com</a></td>
<td></td>
<td></td>
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<tr>
<td>Space Imaging</td>
<td><a href="mailto:resumes@spaceimaging.com">resumes@spaceimaging.com</a></td>
<td>12076 Grant Street, Thornton, CO 80241</td>
<td>fax 303-254-2216</td>
</tr>
<tr>
<td>Spatial Data Research, Inc.</td>
<td><a href="mailto:careers@sdrmaps.com">careers@sdrmaps.com</a></td>
<td>14 E. 8th Street, Lawrence, KS, 66044</td>
<td></td>
</tr>
<tr>
<td>Susquehanna River Basin Commission</td>
<td><a href="http://www.srbc.net/employ.htm">http://www.srbc.net/employ.htm</a></td>
<td>1721 North Front Street, Harrisburg, PA 17102</td>
<td></td>
</tr>
<tr>
<td>TeamExcel</td>
<td><a href="mailto:rbrock@team-excel.com">rbrock@team-excel.com</a></td>
<td>Gulfport, MS</td>
<td>952-921-5855</td>
</tr>
<tr>
<td>TGS-NOPEC Geophysical Company</td>
<td><a href="mailto:personnel@tgsnopec.com">personnel@tgsnopec.com</a></td>
<td>Houston, TX</td>
<td>Fax (713) 334-3308</td>
</tr>
<tr>
<td>TITAN Corporation</td>
<td><a href="mailto:GISJobs@titan.com">GISJobs@titan.com</a></td>
<td>Melbourne, Florida</td>
<td>Fax 703-383-4090</td>
</tr>
<tr>
<td>Woolpert LLP</td>
<td><a href="http://www.woolpert.com">www.woolpert.com</a></td>
<td>409 East Monument Ave, Dayton, OH 45402</td>
<td></td>
</tr>
<tr>
<td>Zapata Engineering</td>
<td><a href="mailto:gisrecruiter@zapeng.com">gisrecruiter@zapeng.com</a></td>
<td>Charlotte, NC</td>
<td></td>
</tr>
</tbody>
</table>

**POTENTIAL MUNICIPAL EMPLOYERS**

<table>
<thead>
<tr>
<th>Employer Name</th>
<th>Web/E-mail Address</th>
<th>Physical Address</th>
<th>Phone/Fax Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Water Development Board</td>
<td><a href="http://www.twdb.state.tx.us/about/employment_opportunities/EmploymentOpport.htm">http://www.twdb.state.tx.us/about/employment_opportunities/EmploymentOpport.htm</a></td>
<td>Austin, TX</td>
<td></td>
</tr>
<tr>
<td>Capital Metropolitan Transportation Authority</td>
<td><a href="mailto:application@capmetro.org">application@capmetro.org</a></td>
<td>2910 E. 5th St, Austin, Texas, 78702</td>
<td>fax (512) 369-6010</td>
</tr>
<tr>
<td>Lee County BoCC - Utilities</td>
<td><a href="http://www.lee-county.com">www.lee-county.com</a></td>
<td>Lee County, Fort Myers, Fl.</td>
<td>389-7445</td>
</tr>
<tr>
<td>Yavapai County</td>
<td><a href="http://www.co.yavapai.az.us/departments/hr/employment/DownloadAppInstructions.asp">http://www.co.yavapai.az.us/departments/hr/employment/DownloadAppInstructions.asp</a></td>
<td>1015 Fair Street, Prescott, AZ 86305</td>
<td>FAX (928) 771-3419</td>
</tr>
</tbody>
</table>
Appendix 4. Letter from TAMU library director

TEXAS A&M UNIVERSITY
Libraries - Office of the Dean
5000 TAMU
College Station, Texas 77843-5000
(979) 864-8111
FAX (979) 845-6238

September 16, 2003

Professor C. T. Smith, Head
Department of Forest Science
2135 TAMU
Texas A&M University Campus

Dear Professor Smith:

We have reviewed the curriculum for the proposed new B.S. degree in Spatial Sciences, and we are confident that library holdings are more than adequate to support this new degree. It is a highly interdisciplinary program, drawing on the literature of many fields which the library already supports at the masters and doctoral level. We subscribe to virtually all the most important journals in these fields, and we have ready access through national and international interlibrary loan agreements to any publications which students or faculty might need that is not owned by Texas A&M. Our current collection activity in support of this subject matter is vigorous. For example, over the past month we have added some 30 monographs on topics directly relevant to this field along with hundreds of other titles in supporting areas. In addition, our Map Room collections are strong in both topographic and subject maps, and our GIS capabilities are sufficient to support most types of inquiries.

We feel that we can easily support this new degree program. Good luck with its further development.

Sincerely,

Charles L. Gilreath
Interim Executive Associate Dean

cc: file, Duran
Appendix 5. Five year cost projections

<table>
<thead>
<tr>
<th>COSTS OF PROGRAM/ADMINISTRATIVE CHANGE TO THE INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before Approval</strong></td>
</tr>
<tr>
<td>Faculty Salaries (New)</td>
</tr>
<tr>
<td>(Reallocated)</td>
</tr>
<tr>
<td>Program Admin (New)</td>
</tr>
<tr>
<td>(Reassignments)</td>
</tr>
<tr>
<td>Grad Assists (New)</td>
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<tr>
<td>(Reallocated)</td>
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<tr>
<td>Clerical/Staff (New)</td>
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<tr>
<td>(Reallocated)</td>
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<td>Supplies &amp; Materials</td>
</tr>
<tr>
<td>Library &amp; IT Resources **</td>
</tr>
<tr>
<td>Equipment</td>
</tr>
<tr>
<td>Facilities</td>
</tr>
<tr>
<td>Other (Identify)</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
</tr>
</tbody>
</table>

* Include costs incurred for three years before the proposal is approved by the Board; e.g., new faculty, library resources, equipment, facilities remodeling, etc.

** IT = Instructional Technology

Explanations:
Faculty salaries @60,000/yr.
Lecturer salaries @$45,000/yr.
Program administration @$5,000/yr.
2 Graduate assistants @$1,300/mo.
Systems Analyst $.50FTE @$39,000/yr.
## Appendix 6. Anticipated sources of funding

<table>
<thead>
<tr>
<th>Funding Category</th>
<th>1st year</th>
<th>2nd year</th>
<th>3rd year</th>
<th>4th year</th>
<th>5th year</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Appropriation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
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<tr>
<td>Other State Funding (specify)</td>
<td>$200,300</td>
<td>$199,300</td>
<td>$198,300</td>
<td>$197,300</td>
<td>$196,300</td>
<td>$991,500</td>
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<tr>
<td>Reallocation of Existing Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Funding (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Other Funding (student IEEF)</td>
<td>$2,000</td>
<td>$3,000</td>
<td>$4,000</td>
<td>$5,000</td>
<td>$6,000</td>
<td>$20,000</td>
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<tr>
<td>TOTAL</td>
<td>$202,300</td>
<td>$202,300</td>
<td>$202,300</td>
<td>$202,300</td>
<td>$202,300</td>
<td>$1,011,500</td>
</tr>
</tbody>
</table>
24 September 2003

MEMORANDUM

To: Dr. Valeric Taylor, Professor and Head
    Department of Computer Science

From: Dr. C. T. Smith, Professor and Head
      Department of Forest Science

Subject: Course requirements notification for
         new B. S. in Spatial Sciences degree

This is to advise your department that the following courses are required by the B.S. in
Spatial Sciences degree.

CPSC 110

Please acknowledge receipt of the attached curriculum requirements by signing below
and faxing a copy of this letter to Shay Harman at 845-6049. Your response would be
greatly appreciated; please contact me if you have any questions or concerns.

The Department of Computer Science acknowledges receipt of curriculum requirements
for the proposed B. S. in Spatial Sciences degree.

Valeric E. Taylor
Name 10/13/03
Date

Stewart J. Stevenson, Professor and Head
Title  Dept. of Computer Science

A Member of the Texas A&M University System and its Statewide Agriculture Program
24 September 2003

MEMORANDUM

To: Dr. Gerald Risowski, Professor and Head
   Department of Biological and Agricultural Engineering

From: Dr. C. T. Smith, Professor and Head
      Department of Forest Science

Subject: Course requirements notification for
         new B. S. in Spatial Sciences degree

This is to advise your department that the following courses are required by the B.S. in
Spatial Sciences degree.

AGSM 337

Please acknowledge receipt of the attached curriculum requirements by signing below
and faxing a copy of this letter to Shay Harman at 845-6049. Your response would be
greatly appreciated, please contact me if you have any questions or concerns.

The Department of Biological and Agricultural Engineering acknowledges receipt of
curriculum requirements for the proposed B. S. in Spatial Sciences degree.

[Signature]
Name

[Signature]
Title

[Signature]
Date

A Member of the Texas A&M University System and Its Statewide Agriculture Program
24 September 2003

MEMORANDUM

To: Dr. Walter Peacock, Professor and Interim Head
   Department of Landscape Architecture and Urban Planning

From: Dr. C. T. Smith, Professor and Head
      Department of Forest Science

Subject: Course requirements notification for new B. S. in Spatial Sciences degree

This is to advise your department that the following courses are required by the B. S. in Spatial Sciences degree.

LAND. 461 —

Please acknowledge receipt of the attached curriculum requirements by signing below and faxing a copy of this letter to Shay Harman at 845-6049. Your response would be greatly appreciated; please contact me if you have any questions or concerns.

The Department of Landscape Architecture and Urban Planning acknowledges receipt of curriculum requirements for the proposed B. S. in Spatial Sciences degree.

[Signature]

Date

[Signature]

Title

A Member of the Texas A&M University System and its Statewide Agriculture Program
October 2, 2003

MEMORANDUM

To: Dr. C.T. Smith, Professor and Head
   Department of Forest Science

From: Dr. Walter Gillis Peacock, Professor and Interim Head
      Department of Landscape Architecture & Urban Planning

Subject: Course Requirement – LAND 461

This is to advise your department that LAND 461 is likely to become a requirement for the B.S. in Landscape Architecture in the near future. However, we should have 4-5 slots available in the class each time it is offered. If this becomes problematic please let me or Associate Department Head, Dr. Chang-Shan Huang know. Thank you.
24 September 2003

MEMORANDUM

To: Dr. Mark A. Hussey, Professor and Head
   Department of Soil and Crop Sciences

From: Dr. C. T. Smith, Professor and Head
   Department of Forest Science

Subject: Course requirements notification for new B. S. in Spatial Sciences degree

This is to advise your department that the following courses are required by the B.S. in Spatial Sciences degree.

AGRO 301

Please acknowledge receipt of the attached curriculum requirements by signing below and faxing a copy of this letter to Shay Harman at 845-6049. Your response would be greatly appreciated; please contact me if you have any questions or concerns.

The Department of Soil and Crop Sciences acknowledges receipt of curriculum requirements for the proposed B. S. in Spatial Sciences degree.

Mark A. Hussey
Name 9/29/2003
Date

Professor & Head
Title
24 September 2003

MEMORANDUM

To: Dr. Angelo DeNisi, Professor and Head
   Department of Management

From: Dr. C. T. Smith, Professor and Head
      Department of Forest Science

Subject: Course requirements notification for
         new B. S. in Spatial Sciences degree

This is to advise your department that the following courses are required by the B.S. in Spatial Sciences degree.

MGMT 309

Please acknowledge receipt of the attached curriculum requirements by signing below and faxing a copy of this letter to Shay Harman at 845-6049. Your response would be greatly appreciated; please contact me if you have any questions or concerns.

The Department of Management acknowledges receipt of curriculum requirements for the proposed B. S. in Spatial Sciences degree.

Name

Date 9/24/03

Head,Dept. Title

A Member of the Texas A&M University System and Its Statewide Agriculture Program
24 September 2003

MEMORANDUM

To: Dr. Steve Whisenant, Professor and Interim Head
   Department of Rangeland Ecology Management

From: Dr. C. T. Smith, Professor and Head
      Department of Forest Science

Subject: Course requirements notification for new B. S. in Spatial Sciences degree

This is to advise your department that the following courses are required by the B. S. in Spatial Sciences degree.

RENR 470

Please acknowledge receipt of the attached curriculum requirements by signing below and faxing a copy of this letter to Shay Harman at 845-6049. Your response would be greatly appreciated; please contact me if you have any questions or concerns.

The Department of Rangeland Ecology Management acknowledges receipt of curriculum requirements for the proposed B. S. in Spatial Sciences degree.

[Signature]
Name: Date: Sep 26, 2003

[Signature]
Title: Asst. Dept. Head
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 Maritime Administration

2. Course prefix, number and complete title: MARA 484 - Management Internship

3. Course description (not more than 50 words): Internship in management: staffing, planning, organizing, leading and controlling. Enrollment is limited to those who have managerial responsibilities for the resources used by a business, non-profit, or other organization.

4. Prerequisite(s) Department Head Approval

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)

   B.S. in Maritime Administration

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

10. Prefix Course # Title (exclude punctuation) Admin. Unit Acad. Year FICE Code

<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>
<th>FICE Code</th>
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<td></td>
<td>0406.0401.1016</td>
<td>17/1904-05</td>
<td></td>
<td></td>
<td>010278</td>
</tr>
</tbody>
</table>

Approval recommended by:

Head of Department: ___________________________ Date: 11/10/03

Chair, College Review Committee: ___________________________ Date: 7-16-03

Head of Department (if cross-listed course): ___________________________ Date:

Dean of College: ___________________________ Date: 7-16-03

Submitted to Coordinating Board by:

Director of Academic Support Services: ___________________________ Date:

Effective Date:

* Attach a syllabus according to the guidelines on the Internet site nar-as.tamu.edu. To have this form reviewed, please send to Linda F. Lacey, Director of Academic Support Services, 1265 TAMU or fax to 847-8737.
TEXAS A&M UNIVERSITY AT GALVESTON

Department of Maritime Administration

Maritime Administration (MARA) 484 – Management Internship

COURSE OBJECTIVES AND DESIGN:

Management Internships are opportunities for students to develop their understanding of staffing, planning, organizing, leading and controlling in a business environment and to receive academic credit for demonstrating such understanding in a formal, structured way. Internships will normally (but not always) be executed in a large, multi-departmental business that represents the cross-functional challenge of contemporary organizations.

Internships are more than part-time jobs and cannot be used to grant credit in situations where a student has been working; it is not a means of granting credit for work previously accomplished. Internships completed through enrollment in MARA 484 are established through a written, formal Internship Agreement. The Agreement describes the duties and responsibilities of the Intern and describes how these are intended to evolve and involve the application of skills and knowledge that students have acquired in their formal academic studies. The firm will complete a mid-point and final Intern Evaluation of the student. The company and the student agree that the Intern Evaluations will be reviewed by the Head of the Department of Maritime Administration, any company policies regarding confidentiality of evaluations notwithstanding.

Credits for an Internship are established at the time of registration for MARA 484 and are based on the scheme that follows. A student that, in fact, spends more time on the Internship than s/he agreed to at the time of registration, cannot subsequently change the credits for which s/he registered. A semester consists of 14 weeks for the purpose of calculating time allocations.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Hours per week</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three</td>
<td>20</td>
<td>280</td>
</tr>
<tr>
<td>Four</td>
<td>30</td>
<td>420</td>
</tr>
</tbody>
</table>

Internships may be paid or unpaid; paid Internships are preferred. An Internship must be completed in the span of one semester. A student who wishes to continue an Internship in a second semester or to undertake an Internship with another company in a subsequent semester must initiate a new Internship Agreement. A second Internship with the same or a different organization will have requirements that build on the first Internship. While a student may enroll twice in MARA 484, the requirements of the second enrollment will differ from those of the first.
To fulfill the course objectives, and with appropriate flexibility to suit the nature of the Internship experience, a student will normally:

1. Maintain a daily journal, to be submitted with the final report, in which are recorded the significant elements of their managerial and work experience according to:
   a. The allocation of staff, material, dollar and time resources in their department.
   b. The planning of the Intern's own work and the work of others that is controlled by the Intern.
   c. The organizing and coordination of the work of the Intern and others who are controlled by the Intern.
   d. The exercise of leadership by the Intern in shaping the behaviors of others and the development of teams and groups that the Intern is a part of. The Intern will also comment on the leadership activities of others that s/he observes.
   e. The use of control mechanisms in the conduct of work. Such control mechanisms will include personal actions on the part of the Intern or others, the influence of control mechanisms as represented by institutional policies, control mechanisms that are a part of labor contracts, the influence of control in the form of informal pressure structures that exist in the work force, and such other control processes as the Intern observes.

2. Prepare a periodic (weekly, bi-weekly, etc., as appropriate) E-mail report of the Internship experience as agreed upon with the Faculty Supervisor. This report shall chronicle the significant events of the daily journal and will contain a substantiated commentary as to why/where things went well or why/where they could have gone better. Critical evaluation of the process of management is the central focus of this report. Specific "learning points" shall be identified in this report. The minimum requirements of the report are:

   a. The location of the Internship.
   b. A listing of each day worked, the daily hours worked, the total hours for the reporting period, and the total hours worked to date since the inception of the Internship.
   c. A summary of the work activities performed each day.
   d. The projected work schedule of the Intern for the next reporting period.
   e. An evaluation of the "learning points" for the period.

The E-mail report must be received by the Faculty Sponsor by 5 PM on the Monday following the week where the reporting period is completed. Reporting periods will always end on a Friday. If the student is ill, not scheduled to work, or the University is closed/on break the report is still required. Each week of the 14 week semester must be covered by a report.
3. Prepare a comprehensive Internship report that will be submitted at the conclusion of the Internship experience. Normally the report will be 15-20 pages in length. Because the nature of Internships differs and Internships themselves may evolve, the supervising faculty member will provide written guidance as to the structure of the report no later than the 5th week of the Internship, following discussions with the Intern. The “learning points” of the periodic reports will occupy a central place in the comprehensive report.

**PREREQUISITES**

Students must have completed/transfered the following courses:

- ACCT 229, 230
- FINC 341
- MKTG 321
- MARA 363

Students will have at least junior classification in the MARA curriculum.

The Head of the Department of Maritime Administration will approve/disapprove an Internship application.

**GRADING SCHEME**

<table>
<thead>
<tr>
<th>Employer’s Evaluation</th>
<th>40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final written Report</td>
<td>60%</td>
</tr>
</tbody>
</table>

**PERFORMANCE EVALUATIONS**

In the Internship experience, it is very important for the Intern to receive constructive feedback from a “real world” manager. It is also very important for the student to learn to do accurate self-evaluations and to learn to accept feedback from others.

To achieve these goals, the Company Representative and the Intern will complete an evaluation on two separate occasions using the evaluation forms adopted by the University. The mid-point will be completed in the 6th or 7th week of the Internship and the final evaluation will be completed at the end of the Internship. The two evaluation forms are to be compared with each other and the Intern and the Company Representative will review and discuss their content and implement measures to assure that areas of concern are addressed. The Intern must comment on these evaluations in the periodic reports and in the final Internship report.

Since this may be the first formal business-oriented management evaluation that the Intern has experienced, it will be helpful for the Company Representative to set the stage at the start of the Internship by explaining the process as one which is focused on performance improvement and not on criticism. Constructive feedback is critical to improved job performance.
The Intern must forward copies of the mid-point and final evaluation to the Faculty Supervisor at the agreed-upon times. The mid-point and final evaluation must be a part of the weekly E-mail report to the Supervisor and the E-mail must contain a commentary on what the Intern learned from the evaluation.

**ESTABLISHING AN INTERNSHIP**

Step 1: Internship agreements are established between Texas A&M University at Galveston/Department of Maritime Administration and another organization. A student may recommend a firm to be contacted.

Step 2: Before students are allowed to interview for an Internship, they are required to meet with the Department Head to discuss the terms of the existing or proposed Internship Agreement with the company. At this time, the eligibility of the student will be determined according to the established pre-requisites for MARA 484.

Step 3: A student who has satisfactorily completed the Department Head interview and the company interview, and has been selected, will, with the employer, complete the appropriate section of the Internship Agreement. The employer assumes the responsibility to supervise the Intern and to assure that the general intent and terms of the Internship Agreement are met.

Step 4: The completed Internship Agreement, signed by the Company Representative and the student is returned to the Head of the Maritime Administration Department and the student is then registered for MARA 484.

**TAMUG AMERICANS WITH DISABILITIES ACT STATEMENT**

"The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, the legislation requires that all students 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 Director of Counseling."

**TAMUG ACADEMIC DISHONESTY STATEMENT**

"For many years, Aggies have followed a Code of Honor which is stated in this very simple verse: ‘Aggies do not lie, cheat or steal, nor do they tolerate those who do.’ As such, it is the responsibility of students and faculty members to help maintain scholastic integrity at the University by refusing to participate in or tolerate scholastic dishonesty. The Aggie Code of Honor and the Scholastic Dishonesty sections in the TAMUG University Rules handbook will be the standards upon which scholastic integrity is maintained at Texas A&M University at Galveston."
TEXAS A&M UNIVERSITY AT GALVESTON
DEPARTMENT OF MARITIME ADMINISTRATION

INTERNSHIP AGREEMENT

This agreement describes the responsibilities of the company/organization that agrees to accept a Maritime Administration major as an Intern. In doing so, the company/organization agrees:

To identify a Company Supervisor who will provide supervisory oversight for the student’s Internship experience, including:

a. Orienting the student to the organization and to the staff.
b. Assisting the student in developing measurable objectives for the project/activities that constitute the Internship.
c. Serving as a role-model in the professional environment.
d. Helping the student to plan and complete a special project/study.
e. Participate in the formal grading of written and oral presentations that the student will prepare.
f. Guiding, directing and re-directing the activities of the student, as necessary and appropriate.
g. Complete a mid-point and final performance evaluation using the company’s evaluation process, modified as necessary for the purpose of the Internship and discussing them with the student.
h. Maintain appropriate contact with the Intern’s Faculty Supervisor in the Department of Maritime Administration.
i. Forwarding the mid-point and final evaluation to the Head, Department of Maritime Administration or his/her designee.

----------------------------------------------------
Student Name: ________________________________

Company/Organization: ________________________________

Name of Intern’s Faculty Supervisor: ________________________________
Phone: (O) __________
Phone: (H) __________

Company/Organization Representative: ________________________________
Phone: (O) __________
Phone: (H) __________

Beginning Date of Internship: _________ Ending Date of Internship: _________

Supervisor’s Requirements/Expectations – Please attach

Job Description – What will the Intern be doing? – Please attach

I understand that if problems arise that cannot be resolved through discussion with the Intern, I should contact the Intern’s Faculty Supervisor or the Head, Department of Maritime Administration as soon as possible.

Company/Organization Representative: ____________________ Date: __________

This agreement must be signed and received in the Department of Maritime Administration before a student can begin an Internship.
TEXAS A&M UNIVERSITY AT GALVESTON
DEPARTMENT OF MARITIME ADMINISTRATION

STUDENT INTERNSHIP AGREEMENT

Student Name (Print): ________________________________

Mailing Address: _____________________________________

Local Phone: ________________________________________

E-Mail Address: ______________________________________

Student’s Learning Goals and Objectives: Attached

READ THE FOLLOWING INFORMATION CAREFULLY BEFORE YOU SIGN

My responsibilities include:

1. To complete all the agreed-upon requirements of the Internship including the written and oral reports.
2. To submit required weekly reports by E-mail.
3. To request that mid-point and final evaluations be completed.
4. To arrange for a site visit by my departmental Internship Supervisor.
5. To contact my departmental Internship Supervisor at any time that I am uncertain as to the necessary progress of the Internship.

I understand that as an Intern, I may come into contact with information that is considered confidential/proprietary. I agree that as a term and condition of my Internship, I will hold all such information in confidence. I agree to undertake my responsibilities seriously and I understand that my internship may be terminated by my Company Representative, my departmental Internship Advisor, the Head, Department of Maritime Administration, or a University official representing the Department of Maritime Administration, if I fail to live up to these responsibilities. Such termination will result in my receiving an “F” for the Internship course – MARA 484.

Student’s Signature: ________________________________ Date: ________

This agreement must be signed and received in the Department of Maritime Administration before a student can begin an Internship.
TEXAS A&M UNIVERSITY AT GALVESTON
DEPARTMENT OF MARITIME ADMINISTRATION

STUDENT INTERNSHIP AGREEMENT

INSURANCE COVERAGE

I acknowledge that I have sufficient health, accident, disability, and hospitalization insurance coverage in effect during my internship. I understand that I am responsible for the cost of such insurance and for expenses not covered by any applicable insurance. I recognize that Texas A&M University at Galveston does not have an obligation to provide me with any insurance coverage. I acknowledge that I am not relying on the University for any insurance coverage.

I understand that if I use my personal vehicle for the benefit of the organization/agency with whom I perform my internship that Texas A&M University at Galveston has no liability for personal injury or property damage which may result from that use. I agree to rely solely on my personal vehicle insurance coverage and on any insurance coverage provided by my internship organization/agency.

______________________________ Date: ________________
Signature

Print Name: ________________________________
TEXAS A&M UNIVERSITY AT GALVESTON
DEPARTMENT OF MARITIME ADMINISTRATION

STUDENT INTERN'S SELF-EVALUATION AT MID-POINT

Intern's Name: _____________________________

Company Representative Name: _____________________________

Key: 
Agree Strongly -1
Agree - 2
Most of the Time - 3
Disagree - 4
Disagree Strongly - 5

How does your performance compare with the following statements?

1. I attend work as scheduled 100% of the time. ______
2. I am punctual and never late. ______
3. I learn assigned tasks quickly and effectively. ______
4. I maintain an appropriate appearance for the work setting. ______
5. I complete work in a reasonable amount of time and meet deadlines. ______
6. I accept assigned duties without complaint. ______
7. I seek new work when finished with assigned tasks. ______
8. I work with minimal supervision. ______
9. I ask questions when uncertain about assigned work. ______
10. I attempt to find solutions on my own when appropriate. ______
11. I adapt easily to changes in assignments, time frames, etc. ______
12. I interact at an appropriate level with co-workers and supervisors. ______
13. I interact at an appropriate level with customers and clients. ______
14. I am receptive to feedback and constructive criticism. ______
15. I show promise as a top-performing manager. ______

Attach a statement of not more than two pages as to those things that you have identified about yourself as a manager that you see as most important to your success.
Intern's Name: __________________________

Company Representative Name: __________________________

Key:  Agree Strongly -1
      Agree – 2
      Most of the Time – 3
      Disagree – 4
      Disagree Strongly - 5

How does your performance compare with the following statements?

16. I attend work as scheduled 100% of the time. __________________________

17. I am punctual and never late. __________________________

18. I learn assigned tasks quickly and effectively. __________________________

19. I maintain an appropriate appearance for the work setting. __________________________

20. I complete work in a reasonable amount of time and meet deadlines. __________________________

21. I accept assigned duties without complaint. __________________________

22. I seek new work when finished with assigned tasks. __________________________

23. I work with minimal supervision. __________________________

24. I ask questions when uncertain about assigned work. __________________________

25. I attempt to find solutions on my own when appropriate. __________________________

26. I adapt easily to changes in assignments, time frames, etc. __________________________

27. I interact at an appropriate level with co-workers and supervisors. __________________________

28. I interact at an appropriate level with customers and clients. __________________________

29. I am receptive to feedback and constructive criticism. __________________________

30. I show promise as a top-performing manager. __________________________

Attach a statement of not more than two pages as to those things that you have identified about yourself as a manager that you see as most important to your success.
COMPANY/ORGANIZATION EVALUATION OF INTERN AT MID-POINT

Intern's Name: ______________________________
Company Representative Name: __________________________

Key:  Agree Strongly -1  
Agree - 2  
Most of the Time - 3  
Disagree - 4  
Disagree Strongly - 5

How does the Intern's performance compare with the following statements?

1. S/he attends work as scheduled 100% of the time.  _____
2. S/he is punctual and never late.  _____
3. S/he learns assigned tasks quickly and effectively.  _____
4. S/he maintains an appropriate appearance for the work setting.  _____
5. S/he completes work in a reasonable amount of time/meets deadlines.  _____
6. S/he accepts assigned duties without complaint.  _____
7. S/he seeks new work when finished with assigned tasks.  _____
8. S/he works with minimal supervision.  _____
9. S/he asks questions when uncertain about assigned work.  _____
10. S/he attempts to find solutions on his/her own when appropriate.  _____
11. S/he adapts easily to changes in assignments, time frames, etc.  _____
12. S/he interacts at an appropriate level with co-workers/supervisors.  _____
13. S/he interacts at an appropriate level with customers and clients.  _____
14. S/he is receptive to feedback and constructive criticism.  _____
15. S/he shows promise as a top-performing manager.  _____

Please attach a statement of not more than two pages as to those things that you have identified about the Intern as a manager that you see as most important to his/her success.
COMPANY/ORGANIZATION FINAL INTERN EVALUATION

Intern’s Name: ____________________________

Company Representative Name: ____________________________

Key:  Agree Strongly -1
      Agree - 2
      Most of the Time - 3
      Disagree - 4
      Disagree Strongly - 5

How does the Intern’s performance compare with the following statements?

16. S/he attends work as scheduled 100% of the time. ____________

17. S/he is punctual and never late. ____________

18. S/he learns assigned tasks quickly and effectively. ____________

19. S/he maintains an appropriate appearance for the work setting. ____________

20. S/he completes work in a reasonable amount of time/meets deadlines. ____________

21. S/he accepts assigned duties without complaint. ____________

22. S/he seeks new work when finished with assigned tasks. ____________

23. S/he works with minimal supervision. ____________

24. S/he asks questions when uncertain about assigned work. ____________

25. S/he attempts to find solutions on his/her own when appropriate. ____________

26. S/he adapts easily to changes in assignments, time frames, etc. ____________

27. S/he interacts at an appropriate level with co-workers/supervisors. ____________

28. S/he interacts at an appropriate level with customers and clients. ____________

29. S/he is receptive to feedback and constructive criticism. ____________

30. S/he shows promise as a top-performing manager. ____________

Please attach a statement of not more than two pages as to those things that you have identified about the Intern as a manager that you see as most important to his/her success.
MEMORANDUM

TO: University Curriculum Committee

THROUGH: Karen Kubena, AOC Dean, COALS

THROUGH: A. Gene Nelson, Professor and Head

FROM: M. Edward Rister, Professor and Associate Head for Undergraduate Programs

SUBJECT: Proposed Certificate in International Trade and Agriculture

The Department of Agricultural Economics proposes to offer a certificate program in “International Trade and Agriculture.” The attached document details the 15 hours of credit required to earn the certificate. The goal of this certificate program is to provide students in agricultural economics, agribusiness, and other degree programs with a more complete knowledge and understanding of the global forces shaping change in agriculture.

This certificate program is a component of our Department’s commitment to expand the international dimensions of our curriculum in order to better prepare our students for the globalization of the U.S.’ and other countries’ economies. Our faculty has discussed the certificate program with current and former students as well as with employers. There is a consensus that the certificate program both satisfies an interest of our students and responds to an important expressed need in the agricultural sector of our economy.

Once approved, our Department will assume the responsibility for administering this certificate program. We will provide the appropriate information for students satisfying the certificate requirements to the Registrar’s Office so that the certificate may be listed on their transcripts.

Please direct any questions to me at either 845-3801 or e-rister@tamu.edu.

pc: AGEC Undergraduate Advisory Committee
    COALS Undergraduate Program Committee
    Clair Nixon, Associate Dean, Mays Business School
    Linda Windle, Assistant Director, Mays Business School
Certificate in International Trade and Agriculture  
Proposed by the Department of Agricultural Economics  
October 8, 2003

The Certificate in International Agriculture and Trade (CITA) is designed to provide students in agricultural economics and agribusiness with a more complete knowledge and understanding of the global forces shaping change in agriculture. The CITA is also available to students in other disciplines provided that all prerequisites are met.

The program requires a minimum of 15 credit hours in designated courses. Either AGEC 452 (International Trade and Agriculture) or AGEC 453 (International Agribusiness Marketing) is required for the certificate. The remaining 12 hours must be taken from any combination of the courses listed below. (NOTE: Prerequisites do not count toward the 15 credit hour requirement.)

Study abroad, foreign languages, and international internships are encouraged and allowed to contribute toward the 15 hours required for the certificate. No more than three (3) hours of foreign language or six (6) hours of study abroad or six (6) hours of international internship may be counted as credit toward the certificate.

**Agricultural Economics**
AGEC 429, "Agricultural Policy"
AGEC 452, "International Trade and Agriculture"
AGEC 453, "International Agribusiness Marketing"

**Economics**
ECON 330, "Economic Development"
ECON 410, "Macroeconomic Theory"
ECON 452, "International Trade Theory and Policy"

**Geography**
GEOG 202, "Geography of the Global Village"
GEOG 204, "Economic Geography"
GEOG 320, "The Middle East"
GEOG 321, "Geography of Africa"
GEOG 323, "Geography of Latin America"

**Management**
MGMT 450, "International Environment of Business"
MGMT 452, "International Management"
MKTG 401, "Global Marketing"

**Political Science**
POLS 322, "Western European Government and Politics"
POLS 323, "Political Systems of Latin America"
POLS 324, "Third World Politics"
POLS 338, "Government and Politics of the Former Soviet Union"
POLS 365, "Asian Governments and Politics"
Certificate in International Trade and Agriculture, continued
Proposed by the Department of Agricultural Economics
October 8, 2003

These courses require AGEC 105 or 3 hours of economics as a prerequisite.
Either AGEC 452 or AGEC 453 is required for the Certificate in International Trade and Agriculture.
The AGEC 453 course referred to in the certificate guidelines has been taught as a 489 course for the last several years. Paperwork for approval as AGEC 453 is presently being submitted for approval through COALS and the University Curriculum Committee.
ECON 202 and 203 are prerequisites.
ECON 203 is prerequisite.
ECON 322 or 323 is prerequisite.
GEOG 201 or 202 or 203 or equivalent or approval of instructor is prerequisite.
ECON 202 and 203 and junior classification are prerequisites.
Students must be AGBU or some other Mays Business School major eligible to take upper-level courses in order to take these courses.
MGMT 450 or co-enrollment in MGMT 450 and 452 are prerequisites.
MKTG 321 is prerequisite.
POLS 206 or approval of department head is the prerequisite for these courses.
MEMORANDUM

TO: Ms. Linda Lacey

FROM: Karen S. Kubena

SUBJECT: New Minor in the College of Agriculture & Life Sciences

Enclosed is an original and one copy of a request for a proposed minor in Agricultural Journalism in the Department of Agricultural Education in the College of Agriculture and Life Sciences. We submit this request to the University Curriculum Committee for consideration.
Proposed Minor Field of Study

Department/Program: AGJR College: Agriculture & Life Sciences

Will grant a minor ☑ Yes ☐ No Academic Year 2004

A selection from among the following courses will constitute a minor field of study. (Note: the College of Agriculture and Life Sciences requires a “C” or better in any course used for the minor.)

A. Select ☑ 6 hours ☐ 9 hours or 5 hours from the following 100-200 level courses:
   AGJR 105
   AGJR 203

B. Select ☑ 6 hours ☐ 9 hours or ☐ 10 hours from the following 300-400 level courses:
   AGJR 303
   AGJR 304
   AGJR 305

Please indicate further requirements such as grade point requirement, prerequisites, residency (if above the minimum 6 hours at 300/400 level), capstone or methods course:

Select 3 hours from: AGJR 305, 306 or 307
Select 3 hours from: AGJR 405, 406, or 407
Passage of Departmental Entrance Exam Required.

- Minimum of 15-18 hours required (17)
- Must have 6 hours upper level (12)

Reviewed and approved by Department Head/Program Director:

[Signature and Date]

ABC Dean Signature Date
Minor in Agricultural Communications and Journalism

Students seeking a minor in Agricultural Communications and Journalism should begin the process by discussing the option with their academic advisor in their major. Students should then make an appointment with an advisor in agricultural journalism to discuss their interests and to arrange a time to take the program’s entrance examination. The examination takes approximately 45 minutes to complete and is a prerequisite for establishing a minor in Agricultural Communications and Journalism. Call 862-3001 to arrange an appointment.

Course Requirements for AGJR Minor

<table>
<thead>
<tr>
<th>Course Descriptor</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGJR 105</td>
<td>Introduction to Agricultural Communications</td>
<td>2</td>
</tr>
<tr>
<td>AGJR 203</td>
<td>Agricultural Media Writing I</td>
<td>3</td>
</tr>
<tr>
<td>AGJR 303</td>
<td>Agricultural Media Writing II</td>
<td>3</td>
</tr>
<tr>
<td>AGJR 304</td>
<td>Editing for Agricultural Audiences</td>
<td>3</td>
</tr>
<tr>
<td>Select one course:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AGJR 305</td>
<td>Agricultural Publishing</td>
<td></td>
</tr>
<tr>
<td>AGJR 306</td>
<td>Agricultural Public Relations</td>
<td></td>
</tr>
<tr>
<td>AGJR 307</td>
<td>Electronic Media Production in Ag. Comm.</td>
<td></td>
</tr>
<tr>
<td>Select one course:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AGJR 405</td>
<td>Agricultural Publication Production</td>
<td></td>
</tr>
<tr>
<td>AGJR 406</td>
<td>Agricultural Public Relations Methods</td>
<td></td>
</tr>
<tr>
<td>AGJR 407</td>
<td>Web Authoring in Agricultural Communications</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 17

Agricultural Communications and Journalism is highly focused on written communication. Interested students should consider their interest in writing before beginning the minor.