The University Curriculum Committee recommends approval of the following:

1. New Courses

**AERO 440. Cockpit Systems and Displays. (3-0). Credit 3.** Design, development, and implementation of cockpit systems and multi-function displays; cockpit system requirements and specifications; human-machine interfaces, Flight Management Systems, navigation and guidance systems; 3-D real-time displays of weather, traffic, and terrain; characteristics and missions of air vehicles; project design and cost analysis. Prerequisite: AERO 421 or junior or senior classification in computer science.

**AGSM 439. Management of Agricultural Systems I. (0-2). Credit 1.** Application of agricultural systems management principles in solving realistic problems faced by agribusiness managers; project selection from problems posed by biological and agricultural industrial consultants; project feasibility study and outline; management and application philosophy; teamwork and communication, economics; product liability and reliability; standards and codes; goal setting and time management. Prerequisites: AGSM 335, 337, 403, 470 or registration therein; senior classification; must be taken prior to AGSM 440; AGSM majors only.

**ANSC 402. Exploring Animal Industries. (2-0). Credit 2.** Instruction for students nearing the end of their undergraduate studies; theoretical understanding of organizations and human resources available to students; awareness and understanding of the job application process, resume and cover letter writing; networking, professional and business attire; ethics related to job searches and retention. Prerequisite: Junior or senior classification.

**ENDG 409. Professional Computer Animation. (3-0). Credit 3.** Advanced studies in computer graphics with an emphasis on the intricacies of graphical design and how it applies to a cohesive project design. Prerequisites: ENDG 407 and 408; junior or senior classification.

**ENTC 381. Introduction to Micro/Nano Manufacturing. (2-3). Credit 3.** Product miniaturization and impact; review of atomic structure, electrical and physical properties of materials; ultraprecision machining; microlithography; dry and wet etching/sputtering techniques; isotropic and anisotropic processes; pattern transfer with additive processes; surface micromachining; microreplication processes; introduction to packaging technology and nanometrology; manufacturing of selected microsystems (MEMS) and their applications. Prerequisites: CHEM 107; PHYS 208; senior or graduate in engineering or science; admitted to major degree sequence (upper-level) in engineering technology for ENTC majors.

**HORT 332. Horticulture Landscape Graphics. (1-2). Credit 2.** Graphic representation of landscape design; demonstrations of technique; examination of drawing examples and drawing production; basic hand graphics techniques for visual-think and presentation-quality landscape drawings. Prerequisite: Junior or senior classification.
HORT 442. Horticulture Landscape Design II. (2-2). Credit 3. Introduce computer-aided-drafting (CAD) to produce site layout, grading and planting plan, and construction details for small-scale landscape design; advanced design principles and practices in their historical context, includes design and drafting of hardscape details, manipulation of earth forms, ecological urban park design to traditional garden design. Prerequisites: HORT 203, 432 and 308 or approval of instructor; junior or senior classification.

HORT 454. Special Event Design and Production. (1-2). Credit 2. Role of event planners, production managers, designers, and decorators within traditional event management practices; analyze how artistic components are used in visual styling to achieve a specific purpose; impact of collaborative planning, effective research, and strong communication skills, social psychological and economic influences as they relate to event planning. Prerequisite: Junior or senior classification.

RLEM 430. Advanced Restoration Ecology: Current Concepts and Emerging Issues. (3-0). Credit 3. A dynamic discipline on fundamentals of ecology; translating and communicating key ecological concepts to advanced case studies in ecological restoration. Prerequisites: RENR 205 and RLEM 320 or 420; junior or senior classification.

2. Changes in Courses

AGRO 304. Plant Breeding.

Credit hours
From: (3-2). Credit 4.
To: (3-0). Credit 3.

NUTR 405. Nutritional Treatment of Disease.

Credit hours
From: (3-3). Credit 4.
To: (3-2). Credit 4.

Course description
From: Nutritional intervention in pathological conditions, based on biochemical, physiological and psychological effects of disease state; application of diet therapy principles and nutritional assessment.

To: Nutritional intervention in pathological conditions, based on biochemical, physiological and psychological effects of disease state; current research in clinical nutrition.

HORT 422. Citrus and Subtropical Fruits.

Credit hours
From: (2-2). Credit 3.
To: (3-0). Credit 3.
Course description
From: History, taxonomy, planting, irrigation, soil management, pruning, hardiness, packing, processing, post harvesting physiology and marketing of citrus and other subtropical practices.

To: Various types of citrus: identification, culture, processing, marketing, and economic future; prepares students to function in a continuously changing production environment in production areas.

Prerequisite
From: HORT 319 or approval of instructor.
To: Approval of instructor.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 2 copies. Attach a course syllabus to each.

1. This request is submitted by the Department of ___Aerospace Engineering___

2. Course prefix, number and complete title ___AERO 440 Cockpit Systems and Displays___

3. Course description (not more than 50 words) Design, development, and implementation of cockpit systems and multi-function displays. Cockpit system requirements and specifications. Human-machine interfaces, Flight Management Systems, navigation and guidance systems. 3-D real-time displays of weather, traffic, and terrain. Characteristics and missions of air vehicles. Project design and cost analysis.

4. Prerequisite(s) ___AERO 421 or upper division standing in CS__ 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? 1 Indicate the number of students enrolled for each academic period it was taught. 16 in 08A

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)

Bachelor of Science in Aerospace 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) ___AERO 440 COCKPIT SYSTEMS DISPLAYS___

<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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Do not complete shaded area.

Approval recommended by: ___Arlen J. Paced___ 7/24/06
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

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
OAR/AS-5/04
AERO 440 Cockpit Systems and Displays  
Credit 3: (3-0)

Instructor: Dr. John Valasek, Associate Professor, Aerospace Engineering Dept., 727D HRBB, 
(979)845-1685, valasek@aero.tamu.edu  
Spring 2006 – Tentative: M W F 9:10 - 10:00 AM, 131 HRBB

Prerequisites: AERO 421 for Aerospace Engineering Students; Junior or Senior Level Standing for 
Computer Science Students.

Course Description: Student teams will respond to a given software development RFP by developing a 3-D 
moving map display with NEXRAD weather, real-time traffic display, terrain display, and navigation for the 
four cockpits of the Flight Simulation Laboratory (FSL) at Texas A&M University. The course will consist 
of both lecture and project work, and experienced graduate students will provide direct oversight. Rockwell 
Collins engineers will advise students and provide guest lectures to the class as needed and appropriate. A 
Preliminary Design Review (PDR) for the customer (Rockwell Collins personnel) will be held at the course 
mid-point, and a Critical Design Review (CDR) will be held at the end of the course.

Learning Objectives: This course is intended to familiarize aeronautical engineering students and 
computer science students with modern cockpit systems and displays. By the end of this course, students 
should be able to:

1. Apply basic principles of aircraft navigation and guidance to the creation of user displays.  
2. Understand basic aviation human factors, and man-machine interfaces.  
3. Apply skills learned in real-time software development skills.  
4. Working effectively on a team to meet realistic deadlines and deliverables.

Text: None; only lecture notes will be used.

Design Software:  
VAPS, eNGENUITY Technologies Inc., 2005. VAPS will be used for rapid prototyping, designing, testing, 
and deploying of HMIs that this class will require.

Matlab, Mathworks Inc, Natick, MA 2005. Matlab will be used to synthesize and validate the navigation 
and guidance algorithms.

Office and Office Hours:  
Dr. John Valasek, 727D Bright Building  
W 10:00 - 11:00 AM; or by email or appointment  
845-1685  valasek@aero.tamu.edu

Grading: Each student will be graded individually, but function in a team environment. The grade is based 
upon specified deliverables, presentations, and on performance assessment within the team.
Grade Breakdown

- Deliverables: 65%
- Oral Presentation: 15%
- Team Performance: 20%

Grading Scale

- 90 - 100: A
- 80 - 89: B
- 70 - 79: C
- 60 - 69: D
- below 60: F

COURSE CONTENT BY TOPIC
(45 total hours)

1. HISTORICAL PERSPECTIVE ON COCKPITS AND DISPLAYS
2. CHARACTERISTICS AND MISSIONS OF AIRCRAFT
3. AIRCRAFT NAVIGATION
4. AIRCRAFT GUIDANCE
5. AIRCRAFT DYNAMICS
6. COCKPIT SYSTEM REQUIREMENTS
7. CREATION OF SPECIFICATIONS FOR REQUEST FOR PROPOSAL
8. PROJECT DESIGN AND COST ANALYSIS

AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT

The following ADA Policy Statement (part of the Policy on Individual Disabling Conditions) was submitted to the University Curriculum Committee by the Department of Student Life. The policy statement was forwarded to the Faculty Senate for information.

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

ACADEMIC INTEGRITY

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

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

2. Course prefix, number and complete title of course: AGSM 439 – Management of Agricultural Systems I

3. Course description (not more than 50 words): Application of agricultural systems management principles in solving realistic problems faced by agribusiness managers; project selection from problems posed by biological and agricultural industrial consultants; project feasibility study and outline; management and application philosophy; teamwork and communication, economics; product liability and reliability; standards and codes; goal setting and time management.

4. Prerequisite(s) AGSM 335, 337, 403, 470 or registration therein; senior classification; must be taken prior to AGSM 440; AGSM majors only

Cross-listed with

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

6. Is this a repeatable course? Y Yes N No If yes, this course may be taken 3 ___ times.

7. Will the course be repeated within the same semester/term? Y Yes N No

8. Has this course been taught as a 489/689? Y Yes N No If yes, how many times? ___

9. Indicate the number of students enrolled for each academic period it was taught. 63/05C

10. This course will be:
   a. Required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      B.S. in Agricultural Systems Management
   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) |
     AGSM | 439 | MGMT | AGRI | SYSTEM | I |

Lect. | Lab | SCHI | Subject Matter Content Code | Admin. Unit | Academic Year | FICE Code |
0 | 0 | 0 | 201 |

Do not complete shaded area.

Approval recommended by:
Head of Department 3/22/06

Chair, College Review Committee 8/15/06

Dean of College 8-17-06

Head of Department (if cross-listed course) 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 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

Application of agricultural systems management principles in solving realistic problems faced by agribusiness managers; project selection from problems posed by biological and agricultural industrial consultants; project feasibility study and outline; management and application philosophy; teamwork and communication, economics; product liability and reliability; standards and codes; goal setting and time management. Prerequisites: AGSM 301 and senior classification in AGSM. AGSM 439 must be taken prior to AGSM 440, which should be taken the last spring semester prior to graduation.

MEETING PLACE AND TIME: 11:10 AM – 1:00 PM. Location: To be determined

INSTRUCTOR: Dr. James Gilley, P.E.
Professor
Biological & Agricultural Engineering Department
Room 311 Scoates Hall
Phone (979) 458-1428, E-mail: gilley@tamu.edu

OFFICE HOURS: To be determined

TEXT: No Required Text. The course will rely on the knowledge gained from previous courses, personal experiences and on-the-job training. As such, your personal library of previous required texts now becomes your text materials for this course.

COURSE OBJECTIVES: When you complete this course (AGSM 439) and the following course (AGSM 440) you should be able to professionally handle the following:

1. Complete a thorough management plan for a significant management problem including necessary drawings, prototypes, plans and management chart.

2. Conduct a thorough literature/information review with appropriate written summary and correct literature citation for the references used. Please note: a literature/information review is not key words submitted to "GOOGLE", "YAHOO" or other similar WEB search engines. Utilization of appropriate library materials, both hard copies as well as electronic means will be a requirement for this course. Literature searches and reviews of the technical and management literature will be required.
3. Include consideration of product liability, social impact, environmental impact, ethical issues and safety associated with the management project.

4. Evaluate the financial and economic issues associated with the management project.

5. Completely document a management project (e.g. project notebooks, interim reports both oral and written, biweekly updates and a final report, both oral and written).

6. Make quality, professional oral and written presentations.

ATTENDANCE AND GRADING:

Attendance:

The entire class is structured around student participation and interaction. There will be assignments and in-class exercises to reinforce the material or concepts required to complete the course objectives. **NO LATE ASSIGNMENTS WILL BE ACCEPTED WITHOUT A UNIVERSITY EXCUSED ABSENCE.**

All students will be expected to be in class every class day and as such, **attendance at all classes is required.** A maximum of **ONE TOTAL absence** is allowed without a reduction in the student's final grade.

Each absence in excess of **ONE** will result in a **ONE LETTER GRADE reduction in the student’s final grade.**

To have an excused absence from class, you must contact me before the absence or have a medical excuse from a doctor. Leaving me an E-mail message is adequate, or if absolutely necessary, a voice-mail at my office phone is acceptable as well. If your management team has work to do that is better done outside the classroom that is fine; however, you will need to come to class and check in (initial class roll) first.

Grading:

Course grades will be calculated as a percentage of points received out of 250 possible points according to the following structure:

<table>
<thead>
<tr>
<th>Course Topic</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Informational Assignments</td>
<td>10</td>
</tr>
<tr>
<td>Team Selection</td>
<td>20</td>
</tr>
<tr>
<td>Project Selection</td>
<td>20</td>
</tr>
<tr>
<td>Project Contract</td>
<td>40</td>
</tr>
</tbody>
</table>
Project Introduction 40
Literature/Information Review 20
Oral Report 40
Written Report 60

TOTAL 250 points

In general, the following grading system will apply.

<table>
<thead>
<tr>
<th>Weighted Course Score (%)</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>92-100</td>
<td>A</td>
</tr>
<tr>
<td>83-91</td>
<td>B</td>
</tr>
<tr>
<td>74-82</td>
<td>C</td>
</tr>
<tr>
<td>65-63</td>
<td>D</td>
</tr>
<tr>
<td>below 64</td>
<td>F</td>
</tr>
</tbody>
</table>

SEMESTER PROJECTS:

Students will work together on a team to complete a semester-long project. Each team member is expected to do his/her fair share of the work and will be graded accordingly. You are expected to take the initiative and seek out appropriate resources and information as you would in the “real” world. Team members will evaluate the individual contribution and performance of their other team members for all written and oral materials.

The presentation of your project work in oral and written form throughout the semester is important to your grade.

UNIVERSITY, DEPARTMENT AND COURSE POLICIES

The Texas A&M University Student Rules provide the official definition of scholastic dishonesty and acts that are characterized as scholastically dishonest at [http://student-rules.tamu.edu/](http://student-rules.tamu.edu/)

7. Attendance (Revised: 2004)

Introduction
The university views class attendance as an individual student responsibility. Students are expected to attend class and to complete all assignments. Instructors are expected to give adequate notice of the dates on which major tests will be given and assignments will be due. This information should be provided on the course syllabus, which should be distributed at the first class meeting. Graduate students are expected to attend all examinations required by departments or advisory committees as scheduled formally.

7.1 The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for absence. Among the reasons absences are considered excused by the university are the following: (1) Muster)
7.1.1 Participation in an activity appearing on the university authorized activity list. (see List of Authorized and Sponsored Activities)

7.1.2 Death or major illness in a student’s immediate family. Immediate family may include: mother, father, sister, brother, grandparents, spouse, child, spouse’s child, spouse’s parents, spouse’s grandparents, stepmother, step-father, step-sister, step-brother, step-grandparents, grandchild, step-grandchild, legal guardian, and others as deemed appropriate by faculty member or student’s academic dean.

7.1.3 Illness of a dependent family member.

7.1.4 Participation in legal proceedings or administrative procedures that require a student’s presence.

7.1.5 Religious holy day. (See Appendix IV.)

7.1.6 Illness that is too severe or contagious for the student to attend class (to be determined by Health Center or off-campus physician).

7.1.7 Required participation in military duties.

7.1.8 Mandatory admission interviews for professional or graduate school which cannot be rescheduled.

7.2 If the student is found to be too ill to attend class by a Health Center physician, the director of the Health Center or his/her representative will, on request of the student, confirm this fact.

7.3 If an off-campus physician provides evidence of a student’s illness, the excuse documentation must contain the date and time of the illness and doctor’s opinion that the student was too ill to attend class. If a physician determines that the student is not ill, he or she will not receive an excuse. If no evidence is available, the instructor will decide whether makeup work will be allowed.

7.4 The associate dean for undergraduate programs, or the dean’s designee, of the student’s college may provide a letter for the student to take to the instructor stating that the dean has verified the student’s absence as excused.

7.5 Students may be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Section 7.1, or other reason deemed appropriate by the student's instructor. To be excused the student must notify his or her instructor in writing (acknowledged e-mail message is acceptable) prior to the date of absence if such notification is feasible. In cases where advance notification is not feasible (e.g. unanticipated illness, accident, or emergency) the student must provide notification by the end of the second working day after the absence. This notification should include an explanation of why notice could not be sent prior to the class.

The student must also provide documentation substantiating the reason for the absence, that is satisfactory to the instructor, within one week of the last date of the absence. For illness, documentation should include a note from a doctor or clinic.

If the absence is excused, the instructor must either provide the student an opportunity to make up any quiz, exam or other graded activities or provide a satisfactory alternative to be completed within 30 calendar days from the last day of the absence.

7.6 The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence.
7.7 See Part III, Grievance Procedures: 45. Unexcused Absences, for information on appealing an instructor's decision.

7.8 If the student is absent for excused reasons for an unreasonable amount of time during the semester, the academic dean of the student's college may consider giving the student a grade of W during the semester enrolled or a NG (no grade) following posting of final grades.

7.9 Whenever a student is absent for unknown reasons for an extended period of time, the instructor should initiate a check on the welfare of the student by reporting through the head of the student's major department to the dean of the student's college.

---

**Aggie Code of Honor (Revised: 2003)**

For many years Aggies have followed a Code of Honor, which is stated in this very simple verse:

An Aggie does not lie, cheat, or steal 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.

---

1 [http://www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/)

**Plagiarism.** As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc. which belongs 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 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.

**Plagiarism**
The appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

Examples:

- Intentionally, knowingly, or carelessly presenting the work of another as one's own (i.e., without crediting the author or creator).

- Failing to credit sources used in a work product in an attempt to pass off the work as one's own.
• Attempting to receive credit for work performed by another, including papers obtained
in whole or in part from individuals or other sources. Students are permitted to use the
services of a tutor (paid or unpaid), a professional editor, or the University Writing
Center to assist them in completing assigned work, unless such assistance is explicitly
prohibited by the instructor. If such services are used by the student, the resulting
product must be the original work of the student. Purchasing research reports, essays,
lab reports, practice sets, or answers to assignments from any person or business is
strictly prohibited. Sale of such materials is a violation of both these rules and State
law.

• Failing to cite the World Wide Web, databases and other electronic resources if they
are utilized in any way as resource material in an academic exercise.

• Other similar acts.

General information pertaining to plagiarism:

Style Guides:
Instructors are responsible for identifying any specific style/format requirement for the course.
Examples include, but are not limited to, American Psychological Association (APA) style and
Modern Languages Association (MLA) style.

Direct Quotation:
Every direct quotation must be identified by quotation marks or appropriate indentation and
must be properly acknowledged in the text by citation or in a footnote or endnote.

Paraphrase:
Prompt acknowledgment is required when material from another source is paraphrased or
summarized, in whole or in part, in one's own words. To acknowledge a paraphrase properly,
one might state: "To paraphrase Locke's comment..." and then conclude with a footnote or
endnote identifying the exact reference.

Borrowed facts:
Information gained in reading or research, which is not common knowledge, must be
acknowledged.

Common Knowledge:
Common knowledge includes generally known facts such as the names of leaders of
prominent nations, basic scientific laws, etc., basic historical information (e.g., George
Washington was the first President of the United States.) Common knowledge does not
require citation.

Works Consulted:
Materials which add only to a general understanding of a subject may be acknowledged in the
bibliography, and need not be footnoted or end-noted. Writers should be certain that they have
not used specific information from a general source in preparing their work unless it has been
appropriately cited. Writers should not include books, papers, or any other type of source in a
bibliography, "works cited" list, or a "works consulted" list unless those materials were actually
used in the research. The practice of citing unused works is sometimes referred to as
"padding."

Footnotes, endnotes, and in-text citations:
One footnote, endnote, or in-text citation is usually enough to acknowledge indebtedness when a number of connected sentences are drawn from one source. When direct quotations are used, however, quotation marks must be inserted and acknowledgment made. Similarly, when a passage is paraphrased, acknowledgment is required.

Graphics, design products, and visual aids:
All graphics, design products, and visual aids from another creator used in academic assignments must reference the source of the material.

Other similar acts.

If you have questions regarding plagiarism or cheating, please consult the Texas A&M University Student Rules, http://www.tamu.edu/aggiehonor/acadmisconduct.htm.

PLEASE UNDERSTAND that plagiarism or cheating will not be tolerated in this course. If, in the view of the instructor, any student or “team” has plagiarized work in any course assignment a ZERO will be recorded for that assignment. Thus, severe grade reductions and/or course failure will result from any sort of plagiarism in this course!

University Statement on Harassment and Discrimination
http://student-rules.tamu.edu/statement.htm

Texas A&M is committed to the fundamental principles of academic freedom, equality of opportunity and human dignity. To fulfill its multiple missions as an institution of higher learning, Texas A&M encourages a climate that values and nurtures collegiality, diversity, pluralism and the uniqueness of the individual within our state, nation and world. All decisions and actions involving students and employees should be based on applicable law and individual merit.

Texas A&M University, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, or veteran status.

Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Students should contact the Office of the Dean of Student Life at 845-3111, faculty members should contact the Office of the Dean of Faculties and Associate Provost at 845-4274, and staff members should contact the Human Resources Department Employee Relations Office at 862-4027.

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 reasonable accommodation of their disabilities. If you believe that you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities at 845-1637.
Texas A&M University  
Departmental Request for a New Course  
Undergraduate • Graduate • Professional

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

1. This request is submitted by the Department of Animal Science

2. Course prefix, number and complete title ANSC 402 - Exploring Animal Industries

3. Course description (not more than 50 words) Instruction for students nearing the end of their undergraduate studies; theoretical understanding of organizations and human resources available to students; awareness and understanding of the job application process, resume and cover letter writing; networking, professional and business attire; ethics related to job searches and retention.

4. Prerequisite(s)  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.

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 Animal Science, Dairy Science

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

10. Prefix  Course #  Title (exclude punctuation)  ANSC 402  EXPLORE ANIMAL INDUS TRI

<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>02000</td>
<td>201</td>
<td>090</td>
<td>10005</td>
<td>02700</td>
<td>07 - 08</td>
<td>003632</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

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
OAR/AS-5/64
ANSC 402  
Exploring Animal Industries

**Course Description:** Instruction for students nearing the end of their undergraduate studies; theoretical understanding of organizations and human resources available to students; awareness and understanding of the job application process, resume and cover letter writing; networking, professional and business attire; ethics related to job searches and retention.

**Course Format:** 2 hours of lecture, 0 hours of lab, 2 credits.
Prerequisites: junior or senior classification

**Professor:** Glenn A. Holub  
**Meeting Time:** Wednesday 4-6 p.m.

**Attendance:** Regular class attendance is expected. Work due to an excused absence will be allowed to be turned in. Excused absences must be confirmed and include:

a. Participation in an authorized University activity  
b. Confinement due to illness (statement signed by a physician is required)  
c. Death in immediate family  
d. Participation in legal proceedings that require the student’s presence.

**Americans with Disabilities Act (ADA) Policy Statement**
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 979-845-1637.

**Required Text:** pending

**Grading Procedure:**
- Beginning Resume 10.0%  
- Final Resume 20.0%  
- Career Exploration Paper 25.0%  
- Beginning Cover Letter 12.5%  
- Final Cover Letter 12.5%  
- Company Mock Interview 20.0%

The standard grading procedure percentage scale will be used:  
(90 and above = A, 80-89 = B, 70-79 = C, 60-69 = D, and below 60 = F)

“Aggies do not lie, cheat or steal, nor do they tolerate those who do.”

Aggie Code of Honor, [http://www.tamu.edu/aggiehonor/know.html](http://www.tamu.edu/aggiehonor/know.html)

**Assignments:** Four assignments are required for this course.
The **beginning resume** will be due two weeks into the course. This is to determine where each student’s knowledge of resume writing exists. Grade will be determined upon effort of the student to recall past experience, education and attempt to reflect their career readiness.

The **final resume** will be due at the end of the semester and will be graded according to the student’s effort in representing their life education, skills, career preparedness, and experiences combined with the ideas presented to them within the class as to proper resume design, order and emphasis.

The **beginning cover letter** will be graded on the student’s ability to express his/herself within the context of a business letter format. Grading will be on effort made to be neat, orderly and professional.

The **final cover letter** will be graded on the student’s ability to write a business letter and communicate their desire to apply for a particular position.

The **career exploration paper** will be graded as the student’s effort to research their desired career choice. Topics to address will include: what are the general requirements of the job; which are the companies that hire these positions and how are they structured; what are these companies’ net worth; how many positions are available each year; who the competitors within the field are; the job requirements; the gross salary and compensation offered to starting employees; etc.

The student’s ability to show they are prepared to communicate with the company(s) of choice regarding application will be the determining factor the the grade for the career exploration paper.

The “**mock**” interview will be an opportunity for the student to experience an interview with a real person located within the field of their job choice. The purpose of this interview is to allow the student to experience the preparation and realization of the interview process. “Mock” interview will not be conducted by the professor of this course. Professionals within their fields will be available throughout the semester for the student to hold their mock interview. This interview is **not for a real position**. It is solely for the purpose of gaining experience in interviewing. If a student is preparing to enter a professional school, an attempt will be made to make available to that student a person or persons who have successfully made entrance to that professional school for their interview. The mock interview grading sheet is attached to this syllabus.

Each lecture period will be divided into three parts:

a) 10-15 minutes for career center update by Dale Pracht,

b) 60-90 minutes for main lecture topic,

c) 15-20 minutes for company representative presentations.
<table>
<thead>
<tr>
<th>Lecture</th>
<th>Topic</th>
<th>Hours</th>
</tr>
</thead>
</table>
| 01      | General Review of Course   
Syllabus review, lecture rules, etc..                              | 2.0   |
| 02      | Role of TAMU Career Center  
Dale Pracht                                                          | 2.0   |
| 03      | Resume Writing (first assignment, resume)                           | 2.0   |
|          | Dale Pracht                                                          |       |
| 04      | Cover Letter Writing                                                 | 1.0   |
|          | Organizational Culture                                               | 1.0   |
|          | Dale Pracht                                                          |       |
| 05      | Networking (first assignment due)                                    | 2.0   |
|          | Paul Pausky                                                          |       |
| 06      | Dress for Success, professional, business, casual                   | 2.0   |
| 07      | Job Fairs, Career Days (ACE)                                         | 2.0   |
|          | (second assignment, cover letter)                                    |       |
| 08      | Job Search Ethics                                                    | 1.0   |
|          | Business ethics                                                      | 1.0   |
|          | Bill Mies                                                            |       |
|          | (second assignment due)                                              |       |
| 09      | Etiquette, meetings with meals                                       | 2.0   |
| 10      | Psychometric testing                                                 | 2.0   |
| 11      | Interviews                                                           | 2.0   |
| 12      | Cultural Diversity in Jobsites                                       | 2.0   |
| 13      | Job Site Visits – an extension of the interview                      | 2.0   |
|          | (third assignment due, Career Exploration Paper)                     |       |
| 14      | Competing in Careers                                                 | 2.0   |
|          | (fourth assignment due, Final Resume)                                |       |
|          | (Mock interview must have been completed)                            |       |
Mock Interview Grade Sheet

Scale of 1 to 5; 1 = poor, 3 = average, 5 = excellent

1. Was applicant on time? 1 2 3 4 5
2. Was applicant dressed appropriately? 1 2 3 4 5
3. Did applicant have documents needed? 1 2 3 4 5
4. Did applicant give complete answers to questions? 1 2 3 4 5
5. Did applicant show proper interview etiquette? 1 2 3 4 5
6. Did applicant have prior knowledge of your company? 1 2 3 4 5
7. Did applicant seem sincere? 1 2 3 4 5
8. Did applicant represent him/herself well? 1 2 3 4 5
9. Did applicant ask questions? 1 2 3 4 5
10. Did applicant keep a positive attitude throughout the interview? 1 2 3 4 5

Additional comments:
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 2 copies. Attach a course syllabus to each.
1. This request is submitted by the Department of Engineering Technology & Industrial Distribution
2. Course prefix, number and complete title ENDG 409, Professional Computer Animation

3. Course description (not more than 50 words) Advanced studies in computer graphics with an emphasis on the intricacies of graphical design and how it applies in a cohesive project design.

4. Prerequisite(s) ENDG 407, ENDG 408 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. 05A-11, 05C-14, 06A-12

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)

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)
    ENDG 409 PROF COMPUTER ANIMATION

<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>
<td>3</td>
<td>0</td>
<td>030003</td>
<td></td>
<td></td>
<td>003632</td>
</tr>
</tbody>
</table>

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

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
OAR/AS-504
ENDG 409
Professional Computer Animation
3 Credit Hours

Class hours:        MW, 3:00-4:15 PM
Room:              CVLB 237
Instructor:        Richard Hutchinson (class of 88')
Office:            215 CE/TTI (Or in the computer labs)
Phone:             845-1634
Office Hours:      TBA (in CVLB building) and by appointment.
E-mail:            hutchinson@entc.tamu.edu

Course Contents:   To complete the directed studies of Computer graphics and design. The class will allow
students to further advance their studies in the intricacies of graphical design and how it
applies in a cohesive project design.

Prerequisites:     ENDG 407, ENDG 408. This equates to a strong background in CAD and 3d design
software, which includes solid modeling with native solids and Boolean operations.

Textbooks:         No textbooks are required for this class. A reference list of books is available.

Course Outline:

Topics:
- Creating Physical Constraints in a 3D environment 2 Lectures
- Project: Idea Development 1 Lecture
- Biped Construction and Design 2 Lectures
- Project: Brainstorming 1 Lecture
- Using bones to correctly model a mesh 2 Lectures
- Project: Storyboarding and Animatics 1 Lecture
- Programming non-biped Crowd systems 2 Lectures
- Project: Fleshing out your scenes 1 lecture
- Programming biped Crowd Systems 2 Lectures
- Material and Style Using the best 2 Lectures
- Using reactor for physics based modeling 3 Lectures
- Particle Based Systems 3 Lectures
- Post production and design 4 Lectures

Project Proposal: You will be required to submit a project proposal detailing what you plan to do for your
project. In it you need to detail what you are planning to do, what software you are planning
to use, and a basic timeline on how you plan to get it done.

Lab:               Lab time will be reserved for hands-on work with the computer as well as to discuss how the
projects are proceeding and any obstacles that may arise. The students will be required to keep a
log of their progress and be able to show examples of their ongoing work. In addition “homework”
will be assigned during lab hours.

Project Demonstration:
The culmination of their work will be demonstrated at the end of the semester. This work will
be evaluated to see how it met the initial specifications of the project design and how or if it
was able to evolve as the project became more refined.

Project Report:    Due at the end of the semester, this report will consist of an overview of your project and how
it progressed throughout the semester. It should describe problems and new concepts
discovered and overcome as the project developed.
Grading: Course Grade will be calculated as follows:

- Homework/lab work 35%
- Exams 30% (2 at 15% each)
- Final Project 35% (Oral 20% plus written 15%)

Computer Time: Rooms 237 and 238 of the CVLB have approximately 50 computers, which are reserved for use by ENDG students. Room 237 is reserved exclusively for ENDG 408 and ENDG 489 students and is accessed by electronic keys, which are issued to students. Your grade will not be issued until your key is returned. The fee for replacing lost keys is $20.00. Returning the key is a course requirement and as such failure to submit the key will result in an incomplete grade for the course.

The Lab Schedule: Lab Times will be posted and are subject to change as the semester progresses.

Course Materials: You have space reserved on the ENDG DEPARTMENT SERVER, but you would be wise to back up your work with a USB drive, or on a CD. All of the computers in room 237, the advanced modeling lab, are equipped with CD burners.

Scholastic Dishonesty: Real Aggies do not lie, cheat, or steal, nor do you tolerate those who do. This has been the Aggies honor code for many years. Violations will result in a zero on the work in question, as well as an arbitrary one-letter grade reduction in the course. As per university policy, a confirmation letter about the violation will be sent to the student's department head.

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

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

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

AMERICANS WITH DISABILITIES ACT POLICY STATEMENT

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 that you have disability requiring accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room B118 of Cain Hall or call 845-1637.

Finally: Have fun! This class is set up to be a fun, while working with top of the line equipment and software. It is set up to be done at the students own pace. All of the progress updates are set up to help the student not fall behind until the last minute when you will be competing for computer time and render space. So have a good time and enjoy yourselves.

NOTE: FOOD, DRINKS, OR TOBACCO PRODUCTS ARE NOT PERMITTED IN THE COMPUTER LABS.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Engineering Technology & Industrial Distribution

2. Course prefix, number and complete title of course: ENTC 414, Introduction to Micro/Nano Manufacturing

3. Change requested:
   a) Prerequisite(s): From CHEM 107; PHYS 208; admitted to major degree sequence (upper-level) in engineering technology
   b) Withdrawal (reason) To CHEM 107; PHYS 208; senior or graduate in engineering or science; admitted to major degree sequence (upper-level) in engineering technology for ENTC majors
   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: ENTC 381, Electronics Manufacturing
   The electronics manufacturing technologies and processes; surface-mount devices and technologies

5. Complete proposed course title and proposed course description (not to exceed 50 words): Product miniaturization and impact; review of atomic structure, electrical and physical properties of materials. Ultraprecision machining; microlithography; dry and wet etching/sputtering techniques; isotropic and anisotropic processes; pattern transfer with additive processes; surface micromachining; micromachining processes; introduction to packaging technology and nanometrology; manufacturing of selected microsystems (MEMS) and their applications.

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>ENTC</td>
<td>381</td>
<td>ELECTRONICS MANUFACTURING</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>SCH Subject Matter Content Code</td>
</tr>
<tr>
<td>02</td>
<td>02</td>
<td>03</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>ENTC</td>
<td>414</td>
<td>MICRO/NANO MANUFACTURING</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>SCH Subject Matter Content Code</td>
</tr>
<tr>
<td>02</td>
<td>03</td>
<td>03</td>
</tr>
</tbody>
</table>

Approval recommended by:

Head of Department [

Head of Department (if cross-listed course) [

Submitted to Coordinating Board by:

Dean of College [

Director of Academic Support Services [

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

OAR/AS-5/04
Texas A&M University  
Department of Engineering Technology & Industrial Distribution

Class: ENTC 414, Introduction to Micro/nano Manufacturing  
Professor: Dr Wayne N.P. Hung. Office: 117D Thompson Hall, Tel: (979) 845-4989  
Email: hung@tamu.edu, website: http://etidweb.tamu.edu/faculty/hung  
Schedule: Lecture: Mon, Wed 10:20-11:10 AM  
Lab: R, 8:00-9:50 AM, (Sec. 501)  
F, 8:00-9:50 AM (Sec. 502)  
Prerequisites: CHEM 107; PHYS 208; senior or graduate in engineering or science; admitted to major degree sequence (upper-level) in engineering technology for ENTC majors.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Reading &amp; Homework</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Introduction. Project assignment. Advanced metrology.</td>
<td>Ch 1</td>
<td>No lab this week</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Atomic structure &amp; material properties. Wafer fabrication.</td>
<td>Ch 2, Hw 1, Ch 4.</td>
<td>Lab orientation Project selection</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Pattern generation. Lithography.</td>
<td>Ch 8, Ch 9, Hw 2</td>
<td>Lab projects start</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Lithography (continue)</td>
<td>Ch 11, Hw 3</td>
<td>Optical and electron microscopy</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Wet etching (continue)</td>
<td></td>
<td>Lithography</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Dry etching. Dry etching (continue)</td>
<td>Ch 11, Hw 4</td>
<td>Vacuum technology</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Thin film. Thin film (continue)</td>
<td>Ch 13, Hw 5</td>
<td>Surface mount technology</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Thin film (continue). Laser processing.</td>
<td>Hand out. Hw 6</td>
<td>Lab project progress report</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>X-ray processing. Electron beam processing.</td>
<td>Ch 15, 20, Hw 7</td>
<td>Micro fabrication: EDM</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Ion beam processing.</td>
<td></td>
<td>Micro fabrication: molding</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>MEMS and applications. NEMS and applications.</td>
<td>Ch 24, Hw 8</td>
<td>Lab project</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Other microsystems and applications. Process integration.</td>
<td>Ch 28, Ch 18, Hw 9</td>
<td>Lab project</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>Novel processes. Novel processes.</td>
<td>Hand out Hw 10</td>
<td>Lab project</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Project presentation. Project presentation and review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Final exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Homework and Exam Policy
An Aggie does not lie, cheat or steal or tolerate those who do

Grade: Homework & presentation 15%, Lab 10%, Quiz #1 15%, Quiz #2 15%, Final 45%.
Any make-up/special quiz must be agreed and arranged before the class quiz except for excused absences as defined in the Student Rules.
Final grade: A (90-100), B (80-89), C (70-79), D (60-69), F (<60).

References: http://student-rules.tamu.edu,
http://www.tamu.edu/admissions/records/registration/prereg_schedule.html,
Office of Student Counseling Service, and Office of International Student Service.

1. Check the class website for handouts, solution to homework, previous exams, and contact information.
2. Late homework: 0 point deduction if submitting to my office within the due date (before 5pm), -25 points afterward. No late homework is accepted after the solution is posted on the web (2 days after the due date) except for excused absences as defined in the Student Rules.
3. We will have closed-book and closed-note exams, but you are allowed to have 1 letter-sized sheet to write notes and formulas for each exam.

Laboratory

1. Lab orientation will be conducted during the 2nd week of class.
2. Description and scope of lab projects will be distributed and explain. Each project allows a group of students to explore either a microfabrication process or physical phenomenon in further details. The project could be among the provided list or being suggested by students subjected to the instructor's approval.
3. Possible laboratory projects: microassembly, lithography, scanning electron microscopy, optical microscopy, microEDM, micromolding, surface mount technology, non contact metrology techniques, micromachining, vacuum technology, surface engineering, material characterization using energy beam...
4. Each subgroup working on a lab project will share the same grade. There will be two group presentations (week # 8 and #14) for the whole class.
5. Make sure you are familiar with the equipment and procedure before starting a lab project since SAFETY is our number-one priority.
ACADEMIC INTEGRITY STATEMENT

All students have the responsibility to be fully acquainted with and to comply with University Regulations. Every student should be familiar with the content of University Regulations regarding academic dishonesty.

**Aggie Honor Code:** “An Aggie does not lie, cheat, or steal or tolerate those who do.”

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

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

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

AMERICANS WITH DISABILITIES ACT POLICY STATEMENT

The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of Cain Hall or call 845-1637.
ENTC 414. Introduction to Micro/Nano Manufacturing.
(3-2). Credit 3. Total 14 weeks. Prerequisite: CHEM 107; PHYS 208; senior or graduate in engineering or science; admitted to major degree sequence (upper-level) in engineering technology for ENTC majors.

Product miniaturization and impact; review of atomic structure, electrical and physical properties of materials. Ultraprecision machining; microlithography; dry and wet etching /sputtering techniques; isotropic and anisotropic processes; pattern transfer with additive processes; surface micromachining; microreplication processes; introduction to packaging technology and nanometrology; manufacturing of selected microsystems (MEMS) and their applications.

APPROACH AND DETAILED SYLLABUS
This introductory course is designed for engineering or science students who would like to have a broad understanding of current micro/nano manufacturing processes in preparation to work directly or indirectly in this field. Although most processes were originated from the field of microelectronics, the leveraging of micro/nano manufacturing into diversified and interdisciplinary fields is emphasized. Short theories are presented as basis for understanding a process capability. The classroom lecture is complimented with demonstration of selected processing and nanometrology equipment at various campus engineering/science laboratories and centers. Interdisciplinary mini-project and project presentation allow small teams to have hands-on experience while broadening their knowledge in other subject areas.

Background Review (3 hrs)
Survey of product trend, product miniaturization and its impact.
Atomic structure; models and relation to the basic electrical, physical, and mechanical properties of materials.

Micro/nano Manufacturing Processes (24 hrs)
Ultraprecision machining; diamond tool and requirement. Ductile regime machining.
Microlithography using UV, electron, or ion beams.
Pattern transfer using wet etching processes; dry etching processes with plasma, photon, or physical beam; micromachining using electron beam, ion beam, and laser; isotropic versus anisotropic etching.
Thin film and additive techniques; physical and chemical vapor deposition, plasma spraying, oxidation growth, and doping. Molecular beam epitaxy.

Integration and Novel Processes (6 hrs)
Surface micromachining for manufacturing of MEMS and other microdevices.
Microreplication and other novel techniques; LIGA, micromolding, microEDM, and hot embossing.

Analysis, Measurement, and Applications (9 hrs)
Survey and presentation of packaging technology.
Advanced metrology and surface characterizing techniques: AFM/STM, SEM, EDS, WDS, and XPS. Selected case studies and applications from diverse fields.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 2 copies. Attach a course syllabus to each.

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

2. Course prefix, number and complete title: HORT 332 Horticulture Landscape Graphics

3. Course description (not more than 50 words): Graphic representation of landscape design, demonstrations of technique, examination of drawing examples & drawing production; acquaint students with basic hand graphics techniques for visual think and presentation-quality landscape drawings.

4. Prerequisite(s): Junior or senior classification Cross-listed with n/a

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? 2 Indicate the number of students enrolled for each academic period it was taught: 04C 28, 06C 25

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, B.A. Horticulture

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 332 HORT LANDSCAPE GRAPHICS
    Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
    0 1 0 2 0 2 0 1 0 6 0 5 0 0 0 5 1 5 2 0 0 7 0 8 0 0 3 6 3 2
    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

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
OAB/AS-504
Syllabus
HORT 332 – HORTICULTURE LANDSCAPE GRAPHICS

LECTURER: CASEY KRUEGER

OFFICE HOURS: Tuesday and Thursday, 9:30 - 11:00 a.m. HFSB 406
Open Door Policy or otherwise by Appointment
EMAIL: clkrueger@ag.tamu.edu   OFFICE: 458-0917   CELL: (210) 912-6172
Cell phone number is for emergencies only.

Course Prerequisites: none

Course Objectives: HORT 332 is a two credit-hour studio course which will introduce the
graphic representation of landscape design. Studio time will be devoted to
demonstrations of technique, examination of drawing examples, & drawing
production. Assignments will acquaint students with basic hand-graphics
techniques for “visual thinking” and for presentation-quality landscape drawings.

Publications, New York, NY ($24.95). Handouts will be provided from time to
time to supplement the text.

Required Studio Supplies:

1. T-square, 30”
1. Adjustable triangle, 10” with inking edge
1. Engineering scale (12”)
1. Compass with @ least 4” radius
1. Circle template, from 1/16” to 2” or 3”
1. “Nest” of French curves (3 pieces)
1. Small dusting brush
1. Pencil sharpener, battery-operated
1. Pink Pearl brand eraser
1. Eraser shield
1. Box drafting dots, or 1 roll drafting tape
1. Lead holder
1. Tube (contains 2 leads) of H leads
1. Lead pointer
3. “314” pencils
2. HB pencils
13. Prismacolor pencils
4. Chartpak AD markers
2. Pens for sketching
3. Drafting pens
1. Roll 18” canary-colored trace paper
1. Watson-Guptill Sketchbook (MSC Bookstore – on order)
4. Sheets vellum, 18” X 24” or 18” roll
12. sheets drawing paper (provided)
The approximate total cost of your graphics supplies is $148.50. We'll talk about how to lower this cost in our first meeting. Some items may not be necessary. Lockers are available in Room 117 for storing your supplies throughout the semester. You may bring a lock to lock your supplies, just make sure to remove before the end of the semester.

**Grades:** 1,500 points will be divided as follows:

- Exercise #1 – lettering 100
- Exercise #2 – pencil strokes 100
- Exercise #3 – pencil sketching 100
- Exercise #4 – pencil sketching 100
- Exercise #5 – pen sketching 100
- Exercise #6 – pen sketching 100
- Mid-Term Exam 100
- Exercise #7 – drafting basics 100
- Exercise #8 – conceptual plan 100
- Exercise #9 – scaled plan 100
- Exercise #10 – section/elevation 100
- Exercise #11 – anim. sec/elev 100
- Exercise #12 – one-point persp. 100
- Exercise #13 – two point persp. 100
- Final Exam 100

Total: 1,500

The final grade will be determined as follows:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,343-1,500 pts.</td>
<td>1,193-1,342</td>
<td>1,043-1,192</td>
<td>893-1,042</td>
<td>0-892</td>
<td></td>
</tr>
</tbody>
</table>

**Make-Up Assignments and Make-Up Exams:** Please do not miss studio. Make up assignments and make-up exams will only be given for official University Excused Absences (http://student-rules.tamu.edu/). Notify me within 24hrs after a university-excused absence from studio. I would prefer you call or speak to me directly relative to an excused absence. This will give you the opportunity to make up missed assignments & exams. Students missing studio for any other reason are responsible for obtaining assignments and exercises from classmates.

**Late Assignments:** All exercises are due at the beginning of the class period. Late assignments or exercises will not be accepted except in the case of University Excused Absences (http://student-rules.tamu.edu/). Students are expected to complete all assignments individually, unless instructed otherwise.

**Changes in Schedule:** The instructor reserves the right to change the order and content of lectures as necessary. Exercises, assignments and exam dates (excluding the final) may be changed by the instructor, but at least 5 days notice will be given.

**Student Comments:** I am extremely receptive to student comments, both positive and negative. Otherwise, I can never improve the course or improve as a teacher. See me for verbal comments, leave me a note on the podium before class starts, send me a note in the mail, or e-mail me at elkrueger@ag.tamu.edu.
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, lecture outlines and content on the course website. Materials may be downloaded or photocopied for personal use only, and may not be given or sold to other individuals.

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

Americans with Disabilities Act (ADA): The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of Cain Hall or call 845-1637.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignment for next meeting</th>
<th>Exercise due/ Exercise assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction, Intro. to Graphics supplies,</td>
<td>Reid, Chapter 1.</td>
<td></td>
</tr>
<tr>
<td>Week 2</td>
<td>Lettering &amp; Landscape Design</td>
<td>Handout</td>
<td>None/Exercise 1</td>
</tr>
<tr>
<td>Week 3</td>
<td>Guest Lecturers</td>
<td></td>
<td>Exercise 1/</td>
</tr>
<tr>
<td>Week 4</td>
<td>The Elements of Drawing: Pencil</td>
<td>Outside next meeting</td>
<td>None/Exercise 2</td>
</tr>
<tr>
<td>Week 5</td>
<td>Quick Sketching with Pencil</td>
<td></td>
<td>Exercise 2/ Exercise 3</td>
</tr>
<tr>
<td>Week 7</td>
<td>Quick Sketching with Pen</td>
<td>Bring 314 &amp; HB pencils, sharpener, &amp; sketching pen. For next meeting, study Reid, chapter 2.</td>
<td>Exercise 4/ Exercise 5</td>
</tr>
<tr>
<td>Week 8</td>
<td>Drafting Techniques / Mid-Term Exam</td>
<td>Bring all drafting gear to studio today. For next mtg., study Reid, Chapter 4, pp. 52-59, &quot;Conceptual Diagramming&quot;</td>
<td>None/Exercise 5</td>
</tr>
<tr>
<td>Week 9</td>
<td>The Concept Plan</td>
<td>For next mtg., study Reid, Chapter 5.</td>
<td>Exercise 5/ Exercise 6</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Assignment for next meeting</td>
<td>Exercise due/ Exercise assigned</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Week 11</td>
<td>Plan Drawing, cont’d (1) Grade exercise 8 at beginning of class. (2) Do Exercise 9 in class.</td>
<td><em>For next mtg., study Reid, pp 87-93.</em></td>
<td>Exercise 7/ Exercise 8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(REMEMBER! When you have finished inking, you must copy your drawing onto 18” X 24” vellum for color rendering.)</td>
<td></td>
</tr>
<tr>
<td>Week 12</td>
<td>Color Rendering &amp; Shadowing. In class, you will render &amp; shadow your drawing on vellum. Turn in at end of class (Ex. 10).</td>
<td><em>For next mtg., study Reid, Chapters 6 &amp; 7.</em></td>
<td>Exercise 8/ Exercise 9</td>
</tr>
<tr>
<td>Week 13</td>
<td>Section Drawing</td>
<td><em>For next mtg., study Reid, Chapter 8, pp. 155-163; 167-172 &amp; 188-197.</em></td>
<td>Exercise 9/ Exercise 10</td>
</tr>
<tr>
<td>Week 14</td>
<td>Perspective Drawing</td>
<td>Exam Review TBA.</td>
<td>Exercise 10/ Exercise 11 in class</td>
</tr>
<tr>
<td>Week 15</td>
<td>Final Exam-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 2 copies. Attach a course syllabus to each.

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

2. Course prefix, number and complete title HORT 442 Horticulture Landscape Design II

3. Course description (not more than 50 words) Introduce computer-aided-drafting (CAD) to produce site layout, grading and planting plan, and construction details for small-scale landscape design; advanced design principles and practices in their historical context, includes design and drafting of hardscape details, manipulation of earth forms, ecological urban park design to traditional garden design.

4. Prerequisite(s) HORT 203, HORT 432 and HORT 308 or approval of Instructor. Cross-listed with N/A

5. Is this a variable credit course? ☐ Yes ☐ No If yes, from _______ to _______. Cross-listed courses require the signatures of both department heads.

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? __2__ Indicate the number of students enrolled for each academic period it was taught. 04C 5, 06C 10

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, B.A. Horticulture

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 442 HORT LANDSCAPE DESIGN II

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

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

    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

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

HORT 442 - HORTICULTURE LANDSCAPE DESIGN II

LECTURER: CASEY KRUEGER
OFFICE HOURS: Tuesday and Thursday, 9:30 - 11:00 a.m. HFSB 406
Open Door Policy or otherwise by Appointment
EMAIL: clkrueger@ag.tamu.edu OFFICE: 458-0917 CELL: (210) 912-6172
Cell phone number is for emergencies only.

Course Prerequisites: HORT 203 and HORT 308, and HORT 432, or approval of instructor.

Course Objectives: HORT 442 - Landscape Design II will introduce the student to computer-aided-drafting (CAD) as a tool for producing the site layout, grading plan, planting plan, and construction details for a small-scale landscape design. The class, which is conducted in a studio environment, will also cover advanced design principles and practices, in their historical context. Projects will range from the design and drafting (both computer & hand graphics) of hardscape details to the manipulation of earth forms to ecological urban park design to traditional garden design. Projects will require that the student combine knowledge from HORT 432 and this class to produce a complete set of landscape drawings, from early sketch studies to the final construction details for a small-scale site.


Required Studio Supplies:

1 T-square, 30” or 36”
1 Adjustable triangle, 10” with inking edge
1 Engineering scale (12”)
1 Compass with @ least 4” radius
1 Circle template, from 1/16” to 2”
1 “Nest of French curves” (3 pieces)
1 Small dusting brush
1 Tape measure, 25’
1 Magnetic compass
1 Pencil sharpener, battery-operated
1 Pink Pearl brand eraser
1 Eraser shield
1 Box drafting dots, or 1 roll drafting tape
1 Lead holder
1 Tube (contains 2 leads) of H leads
1 Lead pointer
2 “314” pencils
Required Studio Supplies (cont'd):

2 HB pencils
13 Prismacolor pencils.
4 Chartpak AD markers
2 Pens for sketching. Black ink only.
3 Drafting pens.
1 Roll 18" canary-colored trace paper
1 Sketchbook
6 Sheets vellum, 18" X 24" (no title block)

We'll talk about how to lower this cost in our first meeting. Some items may not be necessary.
Some of these supplies may need to be replenished throughout the semester. Lockers are
available in Room 117 for storing your supplies throughout the semester. You may bring a lock
to lock your supplies, just make sure to remove before the end of the semester.

Grades:

<table>
<thead>
<tr>
<th></th>
<th>Project 1</th>
<th>Project 2</th>
<th>Exam</th>
<th>Project 3</th>
<th>Project 4</th>
<th>Project 5</th>
<th>Project 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential arrival sequence</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Small Landscape Theme Plan</td>
<td></td>
<td></td>
<td></td>
<td>CAD Exercise – Plot Plan</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Term</td>
<td></td>
<td></td>
<td></td>
<td>Master Plan – Residence</td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Property Design</td>
<td></td>
<td></td>
<td></td>
<td>CAD Exercise – Residential</td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Points:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The final grade will be determined as follows:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>895-1,000</td>
<td>795-894</td>
<td>695-794</td>
<td>595-694</td>
<td>0-594</td>
</tr>
</tbody>
</table>

Make-Up Assignments and Make-Up Exams: Please do not miss studio. Make up assignments and make-up exams will only be given for official University Excused Absences (http://student-rules.tamu.edu/). Notify me within 24hrs after a university-excused absence from studio. I would prefer you call or speak to me directly relative to an excused absence. This will give you the opportunity to make up missed assignments & exams. Students missing studio for any other reason are responsible for obtaining assignments and exercises from classmates.

Late Assignments: All projects are due at the beginning of the class period. Late assignments will not be accepted except in the case of University Excused Absences (http://student-rules.tamu.edu/). Students are expected to complete all assignments individually, unless instructed otherwise.

Changes in Schedule: The instructor reserves the right to change the order and content of lectures as necessary. Exercises, assignments and exam dates (excluding the final) may be changed by the instructor, but at least 5 days notice will be given.

Student Comments: I am extremely receptive to student comments, both positive and negative. Otherwise, I can never improve the course or improve as a teacher. See me for verbal
comments, leave me a note on the podium before class starts, send me a note in the mail, or e-mail me at clkrueger@ag.tamu.edu.

**Copyrighnts**: 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, lecture outlines and content on the course website. Materials may be downloaded or photocopied for personal use only, and may not be given or sold to other individuals.

**Aggie Code of Honor**: "An Aggie does not lie, cheat, or steal or tolerate those who do."
Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: [www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/)

**Americans with Disabilities Act (ADA)**: The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of Cain Hall or call 845-1637.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic or Project</th>
<th>Notes to Self (e.g., meeting place)</th>
<th>Assignment for Next Meeting</th>
<th>Exer. Due/ Exer. Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic 1</td>
<td>Introduction</td>
<td></td>
<td>(1) Study Booth pp. 238-274</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Lecture – Design Process &amp; Form Composition (2) Discuss Monday</td>
<td></td>
<td>(2) Review “Design Process”</td>
<td></td>
</tr>
<tr>
<td>Topic 2</td>
<td>Field Work for Project 1</td>
<td>Meet at 3204 Cougar Trail at 11:30. Bring: Tape measure, sketch pads, compass, dig. camera</td>
<td>Study Booth pp. 274-318</td>
<td>Begin Project 1</td>
</tr>
<tr>
<td></td>
<td>Martha’s Bloomers in Navasota</td>
<td>Regular class hours. Meet: 11:30. Bring: dig. camera</td>
<td>Plant Ideas for Project 1</td>
<td></td>
</tr>
<tr>
<td>Topic 3</td>
<td>(1) Elevation and Perspective (2) Plant Material for Project 1</td>
<td></td>
<td>(1) Study Booth pp. 318-342 (2) Plan &amp; Elev. on trash (3) Plant research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Plant Review (2) Studio Time</td>
<td>Perspective – ??? some time early on.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 4</td>
<td>(1) Class Critiques of Project 1</td>
<td></td>
<td>Final Drawings: Plan, Elev. Or Perspective on 18” X 24” vellum</td>
<td>Project 1 Due</td>
</tr>
<tr>
<td></td>
<td>(1) Class Critiques of Project 1 (2) Assign Project 2</td>
<td></td>
<td></td>
<td>Project 1 Due</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Begin Project 2</td>
</tr>
<tr>
<td>Topic 5</td>
<td>Studio time / plant review</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Lecture: Form &amp; Space – Lines of Force (2) Meet individ. for Project 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Topic or Project</td>
<td>Notes to Self (e.g., meeting place)</td>
<td>Assignment for Next Meeting</td>
<td>Exer. Due/Exer. Assigned</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------------------</td>
<td>-------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Topic 6</td>
<td>Studio Time – Project 2 – Review Project 1</td>
<td>Bring Project 2 - preliminary plans and drafting supplies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meet with Client for Project 3. Site measurements &amp; analysis.</td>
<td>Meet at site – Plot trees Traditions Visual Notes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 7</td>
<td>Class Critiques of Project 2</td>
<td>Final Drawings: Plan, Elev. Or Perspective on 18” X 24” vellum</td>
<td></td>
<td>Project 2 Due</td>
</tr>
<tr>
<td></td>
<td>Class Critiques of Project 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 8</td>
<td>CAD Project 3 (1)Perspectives (2) Studio</td>
<td>Meet in computer lab</td>
<td></td>
<td>Begin Project 3</td>
</tr>
<tr>
<td></td>
<td>(1) CAD Project 3 (2) Plant lists – Project 2</td>
<td></td>
<td></td>
<td>Project 3 Due Begin Project 4</td>
</tr>
<tr>
<td>Topic 9</td>
<td>Field Trip – Peckerwood Gardens</td>
<td>Meet at Peckerwood Gardens – <a href="http://www.peckerwoodgarden.com">www.peckerwoodgarden.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review Project 2 – Lecture: (1) Sales - Bidding (2) Guest Lecture</td>
<td>Take off from old design pricing sheet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 10</td>
<td>(1) Lecture: Sun &amp; Wind Human Space (2) Lecture: Irrigation</td>
<td>Meet at site – Project 4 241 Stuttgart circle, C.S. Texas 77845 Bring: Tape measure, sketch pads, compass, and dig. camera</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Lecture: Planting Design (2) Studio</td>
<td>Picture Show – Landscapes in action.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 11</td>
<td><strong>Guest Lecturers</strong></td>
<td>Please do not be late!!!!!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Studio Time - Bidding</td>
<td>Bring all of Project 4 to work on. Have design ready for take off/bidding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 12</td>
<td><strong>Guest Lecturer</strong></td>
<td>Please do not be late!!!!!</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Presentation of Project 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Studio / Comp. Lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 13</td>
<td>Studio / Comp. Lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td><strong>Thanksgiving</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov. 24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 14</td>
<td>Studio / Comp. Lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Studio / Comp. Lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 15</td>
<td>Final Exam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project 5 Due</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional

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

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

2. Course prefix, number and complete title: HORT 454 Special Event Design and Production

3. Course description (not more than 50 words): Role of event planners, production managers, designers, and decorators within traditional event management practices; analyze how artistic components are used in visual styling to achieve a specific purpose; impact of collaborative planning, effective research, and strong communication skills, social psychological and economic influences as they relate to event planning.

4. Prerequisite(s): Junior or senior classification. Cross-listed with: n/a

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? 4 Indicate the number of students enrolled for each academic period it was taught. 04C 21, 06A 18, 05C 15, 06A 10

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, B.A. Horticulture

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 454 Spec Event Design & Plan

    Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
    01 02 02 01 19 06 04 00 01 16 15 20 07 08 00 36 32

    Do not complete shaded area.

Approval recommended by:

[Signatures of Department Head, College Chair, Review Committee Chair, Dean of College]

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

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
OA/AS-504
SYLLABUS
HORT 454
SPECIAL EVENT DESIGN AND PRODUCTION
CREDITS 2
Lecture/Lab Tuesday 5:30pm – 8:00pm   Room 108 HFSB

Instructor: Jim Johnson, Distinguished Lecturer
Office: HFSB 211; Phone: 979-845-3841  e-mail jl-johnson@tamu.edu

Office Hours: Tuesday and Thursday 9:30am – 10:30am

Course Description
Students will examine the critical role of event planners, production managers, designers, and decorators within traditional event management practices. The class will analyze how artistic components are used in the visual styling of an event design to achieve a specific purpose. The impact of collaborative planning, effective research, and strong communication skills on event planning and execution will be studied. Social, psychological and economic influences as they relate to the concept of the event will be studied. We will see how the selection of ideas, products, services and pricing relate to the clients goals, objectives and chosen venue.

Course Objectives
1. Recognize Design Styles of historical and regional nature
2. Identify the Elements and Principles of Design
3. Gain an understanding of the relationship between the core disciplines of event design and how they interact
4. Recognize the importance of establishing a Design Team at the beginning of design development
5. Apply theoretical and practical skills
6. Develop a Design and Event Vocabulary
7. Execute a professional contract for Design and Décor at a Special Event
8. Function as a member of a real Event Team for a real Event held at semester’s end.
9. Explore a variety of employment positions within the discipline of Event Design and Décor.

Evaluation and Grading
1. Satisfactory completion of lab designs and projects = 50%
2. Term Project: Special Event Design Plan = 25%
3. Participation in the class Special Event = 25%
4. Total = 100% (or points)
5. Attitude and record of absences will be considered in final grade computation
6. Schedule any lab make-up with instructor – due to availability of flowers.

Required Texts
Allen, Judy, The Business of Event Planning (available at MSC Bookstore W. campus)
Johnson, McKinley, Benz, Flowers: Creative Design (available in class or bookstores)
**Weekly Schedule**

**Topic 1**  Orientation; Letter from Mr. J. Assignment to research a design style.

**Topic 2**  A Look at the History of Design Styles

**Topic 3**  Design Theory: Elements and Principles of Design (*Floral design*)

**Topic 4**  Special Event Vocabulary – Communication skills;

**Topic 5**  Who Does What? The Design Team-each member’s role  *Guest Speaker*

**Topic 6**  Creativity (*Floral Design*). Discussion.

**Topic 7**  Interviewing the Customer/ Listening, Responding; *Guest Speaker* (*Floral Design*)

**Topic 8**  Establishing the Purpose of the Event, Guest Speakers –

**Topic 9**  Where do we begin? The Plan. Writing a proposal/contract; *Guest Speaker*

**Topic 10**  FIELD TRIP (in your own cars) to Party Time Rentals – 1816 Ponderosa Drive, College Station, (979-696-5555)

**Topic 11**  Order all flowers, materials, props, etc. Begin preparations.

**Topic 12**  Finish props, double-check all details for the Event; *(Floral design)*

**Topic 13**  *Make a Thanksgiving centerpiece* for the Thanksgiving dinner

**Topic 14**  Evaluate the Event. *(Floral Design)*

---

*Ameriicans 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 to 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 he Department of Student Life, services for students with disabilities in Room 126 of Koldus Building, or call 845-1637.”
**Aggie Code of Honor:** "An Aggie does not lie, cheat, or steal or tolerate those who do."

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

Departmental Request for a New Course  
Submit original form and 2 copies. Attach a course syllabus to each.***

1. This course is submitted by the Department of  
   Rangeland Ecology and Management

2. Course prefix, number and complete title of course:  
   RLEM 430 Advanced Restoration Ecology:

3. Course description (not more than 50 words):  Ecological Restoration is a relatively new, dynamic discipline  
   that relies heavily on fundamentals of ecology; therefore, students in natural resources disciplines will practice  
   translating and and communicating key ecological concepts to advanced case studies in  
   ecological restoration; such practice shall enhance these skills for professional applications.

4. Prerequisite(s)  
   RENR 205 and RLEM 320 or RLEM 420  
   Cross-listed with

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

6. Is this a repeatable course?  
   Yes  X No  
   If yes, this course may be taken  
   times.

7. Will the course be repeated within the same semester/term?  
   Yes  X No

8. Has this course been taught as a 489/689?  
   Yes  X No  
   If yes, how many times?

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.  

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLEM</td>
<td>430</td>
<td>ADV RESTORATION ECOLOGY</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>Academic Year</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>0</td>
<td>030560005650708010366</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 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.
Advanced Restoration Ecology: Current Concepts and Emerging Issues
RLEM 430
Room XXX ANIN
TTh XX:XX – XX:XX

Instructors: Dr. Georgianne W. Moore, Assistant Professor
Dept. Rangeland Ecology and Management
325 Animal Industries Building
Phone: 845-3766; gmoore@tamu.edu
http://rangeland.tamu.edu/people/gmoore/

Dr. William E. Rogers, Assistant Professor
Dept. Rangeland Ecology and Management
305 Animal Industries Building
Phone: 845-0317; wer@tamu.edu
http://rangeland.tamu.edu/people/wer/

Office Hours
Dr. Moore: MW 11:10-12:10
Dr. Rogers: MW 2:00-3:00pm
Office Hours
MW 11:10-12:10 or by appt.
MW 2:00-3:00pm or by appt.

Prerequisites: 1) RENR 205 and 2) RLEM 320 or RLEM 420; or 3) by instructor approval

Required Reading: Weekly readings from scholarly journals. Available on Web CT.

Course Goal: Ecological Restoration is a relatively new, dynamic discipline that relies heavily on fundamentals of ecology; therefore, students in natural resources disciplines will practice translating and communicating key ecological concepts to advanced case studies in Ecological Restoration; such practice shall enhance these skills for professional applications.

Course Learning Objectives:
1) Relate Restoration Ecology to current management practices and applications
2) Constructively critique the methods, results and interpretation of scientific publications
3) Translate and communicate scientific concepts to applications pertinent to restoration practitioners
4) Demonstrate clear, concise writing suitable for a professional audience
5) Extend key concepts to solve novel land management problems
6) Acknowledge novel concepts are often complex and dynamic and that assimilation of new information is a part of lifelong learning

Student Evaluations:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>20</td>
</tr>
<tr>
<td>1-P Papers</td>
<td>30</td>
</tr>
<tr>
<td>Term Paper</td>
<td>30</td>
</tr>
<tr>
<td>Learning Journal</td>
<td>10</td>
</tr>
<tr>
<td>Oral Presentation</td>
<td>10</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

Attendance Policy
Class attendance is required. See University Rule 7 for policy on excused and unexcused absences. In-class assignments missed as a result of unexcused absences are due the following class period after you return; however, past-due assignments are not eligible to receive full credit (except in cases of University excused absences), and will be accepted at the instructors’ discretion. See “Basis for Grading Assignments” for details.
Class Participation
Active class participation is an integral part of this course and should be viewed as important practice for your professional career. Your class participation grade is derived from active participation in class discussions, meaningful peer review, and satisfactory completion of in-class assignments. Please read and understand the descriptions for how these activities are graded, and feel free to ask an instructor for clarification if you have questions. Instructors reserve the right to add accountability for reading via “reading quizzes”, if necessary.

Aggie Honor Code
“An Aggie does not lie, cheat, or steal or tolerate those who do.”

Americans with Disabilities Act (ADA) Policy Statement
The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of Cain Hall or call 845-1637.
<table>
<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Assignments Completed</th>
<th>Assignments Turned In</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tuesday Jan 16</td>
<td>Course Introduction &amp; Overview</td>
<td>Young et al (2005); Hobbs &amp; Norton (1995)</td>
<td>1Q</td>
<td>1Q</td>
</tr>
<tr>
<td>1</td>
<td>Thursday Jan 18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Tuesday Jan 23</td>
<td>Ecosystem Function</td>
<td>TBA</td>
<td>1Q, SA, OL</td>
<td>1Q</td>
</tr>
<tr>
<td>2</td>
<td>Thursday Jan 25</td>
<td>Ecosystem Function</td>
<td>&quot;P1&quot;, LJ</td>
<td></td>
<td>&quot;P1&quot;</td>
</tr>
<tr>
<td>3</td>
<td>Tuesday Jan 30</td>
<td>Succession</td>
<td>(self-design, assembly rules)</td>
<td>1Q, SA, OL</td>
<td>1Q</td>
</tr>
<tr>
<td>3</td>
<td>Thursday Feb 1</td>
<td>Succession</td>
<td>P2, PR, LJ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tuesday Feb 6</td>
<td>State and Transition Models</td>
<td>D Briske</td>
<td>P1r, P2r, 1Q, SA, OL</td>
<td>P1r, P2r, 1Q</td>
</tr>
<tr>
<td>4</td>
<td>Thursday Feb 8</td>
<td>State and Transition Models</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Tuesday Feb 13</td>
<td>Island Biogeography &amp; Recruitment Limitation</td>
<td>Jim Brown</td>
<td>P3r, 1Q, SA, OL</td>
<td>P3r, 1Q</td>
</tr>
<tr>
<td>5</td>
<td>Thursday Feb 15</td>
<td>Island Biogeography &amp; Recruitment Limitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Tuesday Feb 20</td>
<td>Niche Theory</td>
<td>TBA</td>
<td>P4r, 1Q, SA, OL, TP</td>
<td>P4r, 1Q, TP (outline)</td>
</tr>
<tr>
<td>6</td>
<td>Thursday Feb 22</td>
<td>Niche Theory</td>
<td>P5, PR, LJ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Tuesday Feb 27</td>
<td>Genetic Diversity</td>
<td>(local seed source, ecotype specificity)</td>
<td>P5r, 1Q, SA, OL</td>
<td>P5r, 1Q</td>
</tr>
<tr>
<td>7</td>
<td>Thursday Mar 1</td>
<td>Genetic Diversity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Tuesday Mar 6</td>
<td>Competition and Herbivory</td>
<td>TBA</td>
<td>P6r, 1Q, SA, OL, TP</td>
<td>P6r, 1Q, TP (Draft1)</td>
</tr>
<tr>
<td>8</td>
<td>Thursday Mar 8</td>
<td>Competition and Herbivory</td>
<td>P7, PR, LJ</td>
<td></td>
<td>LJ</td>
</tr>
<tr>
<td>9</td>
<td>SPRING BREAK</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>SPRING BREAK</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Tuesday Mar 20</td>
<td>Mutualism and Facilitation</td>
<td>TBA</td>
<td>P7r, 1Q, SA, OL</td>
<td>P7r, 1Q</td>
</tr>
<tr>
<td>10</td>
<td>Thursday Mar 22</td>
<td>Mutualism and Facilitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Tuesday Mar 27</td>
<td>Diversity-Productivity and Diversity-Stability Theory</td>
<td>D Tilman</td>
<td>P8r, 1Q, SA, OL</td>
<td>P8r, 1Q</td>
</tr>
<tr>
<td>11</td>
<td>Thursday Mar 29</td>
<td>Diversity-Productivity and Diversity-Stability Theory</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**RLEM 430 SCHEDULE – Spring 2007**

<table>
<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Assignments Completed</th>
<th>Assignments Turned In</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Tuesday Apr 3</td>
<td>Abiotic Disturbances</td>
<td>Fire, Hurricanes, Tsunamis</td>
<td>P9r, SA, OL, TP</td>
<td>P9r, 1Q, TP (Draft2)</td>
</tr>
<tr>
<td>12</td>
<td>Thursday Apr 5</td>
<td>Abiotic Disturbances</td>
<td></td>
<td>P10, PR, LJ</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Tuesday Apr 10</td>
<td>Biotic Disturbances</td>
<td>Disease, Invasive species</td>
<td>P10r, 1Q, SA, OL</td>
<td>P10r, 1Q</td>
</tr>
<tr>
<td>13</td>
<td>Thursday Apr 12</td>
<td>Biotic Disturbances</td>
<td></td>
<td>P11, LJ</td>
<td>LJ</td>
</tr>
<tr>
<td>14</td>
<td>Tuesday Apr 17</td>
<td>Oral Presentations</td>
<td></td>
<td>OP</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Thursday Apr 19</td>
<td>Oral Presentations</td>
<td></td>
<td>OP</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Tuesday Apr 24</td>
<td>Oral Presentations</td>
<td></td>
<td>OP</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Thursday Apr 26</td>
<td>Oral Presentations</td>
<td></td>
<td>OP</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Tuesday May 1</td>
<td>Course Synthesis</td>
<td></td>
<td>TP</td>
<td>TP (Final)</td>
</tr>
</tbody>
</table>

*In case of extenuating circumstances, this syllabus is subject to change; you will be notified promptly if changes are necessary.

**Detailed Schedule for Weeks 2-12**

**Before Tuesday’s Class:**
- Read assigned scientific literature
- Write one question (1Q)

**During Tuesday’s Class:**
- Bring copy of assigned readings
- Turn in 1Q at beginning of class and revised one-page paper (P#r) from previous week
- Overview and class discussion of assigned readings (go over several 1Q’s together)
- Small group discussion of assigned readings
- Complete short-answer questions (SA)
- Write Outline (OL) for a one-page paper (P#)
- Present group outlines to entire class

**Before Thursday’s Class:**
- Write one-page paper (P#) based on this week’s readings

**During Thursday’s Class:**
- Bring copy of assigned readings
- Turn in P# at beginning of class for peer review
- Critique each other’s paper and provide constructive feedback
- Whole class discussion of "new" case study
- Write in Learning Journal
Basis for Grading Assignments and Class Participation

Codes and Definitions:

1Q - A single question written upon personal reflection of the reading assignments that you wish to address in Tuesday’s whole class discussion. These will be due at beginning of class each Tuesday, weeks 2 – 12. These are assigned grades of 0, 1 or 2: 0 for incompletion, 2 for satisfactory completion, or 1 for unsatisfactory completion (either late or indicates reading was not completed). These 1-Q’s are important class components because they fuel initial discussions and provide feedback to instructors and fellow students.

SA - Short-answer questions provided by instructor will be completed in small group discussions. These will be graded weekly for completion and kept in a Learning Journal. Discussion Notes are meant to focus in-class discussions, keep them on-task, and to seed ideas for Outlines.

OL - Outlines are the product of small group discussions in class and are to be used as starting points for P# Papers (see below). These will be presented to class by a representative group member. The purpose for Outlines is to use your peers to generate high-level concept ideas for your 1-P Papers. The reason for presenting these out-loud in class is to share your group’s ideas and to provide feedback to instructors.

P# - These one-page papers are due at beginning of class each Thursday, weeks 2 – 12, to provide for peer review. Following peer review, you are required to edit your one-page papers and turn revised papers in the next class period. These are assigned grades of 0 to 10. Instructors will periodically assess your edited papers to ensure you are applying feedback towards writing improvement. The papers provide opportunities to practice to improve your writing skills in preparation for writing the Term Paper.

PR - Peer review skills are critical for professional development because you learn to distinguish good writing, and more importantly, you learn steps to improve your own writing. You are expected to adhere to guidelines for constructive feedback and courtesy.

LJ - Learning Journals are 3-ring binders used to organize coursework and to keep record of your progress towards a big-picture understanding of the Ecological Restoration discipline. In tandem, your Learning Journal will also help you and your instructors track progress toward improved writing. Over the early part of your careers, these Learning Journals provide useful tools to reflect upon basic concepts that inform current restoration strategies.

TP - Term Papers will comprehensively apply course topics to a particular restoration case study, chosen by the students. Specific instructions and expectations will be provided later in the semester.

OP - At the end of the term, students will present their term papers orally in class via PowerPoint presentations. Specific instructions and expectations will be provided later in the semester.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Soil & Crop Sciences
   
2. Course prefix, number and complete title of course: AGRO 304 Plant Breeding
   
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: Plant Breeding • Improvement of crops by hybridization and selection; special breeding methods and techniques applicable to naturally self-pollinated, cross-pollinated and asexually reproduced plants.
   
5. Complete proposed course title and proposed course description (not to exceed 50 words): Same as above.

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>AGRO</td>
<td>304</td>
<td>PLANT BREEDING</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>03</td>
<td>02</td>
<td>04</td>
<td>01 11 04 00 00 05 26 20 00 03 63 2</td>
<td></td>
<td></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>AGRO</td>
<td>304</td>
<td>PLANT BREEDING</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>03</td>
<td>00</td>
<td>03</td>
<td>01 11 04 00 00 05 26 20 07 08 00 36 32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Approval recommended by: __________________________
   Date 7-21-06

   Chair, College Review Committee __________________________
   Date 8-16-06

   Head of Department __________________________
   Date __________________________

   Dean of College __________________________
   Date __________________________

   Submitted to Coordinating Board by: __________________________
   Date __________________________

   Effective Date __________________________

   To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
   OAR/AS-504
Agronomy 304-Plant Breeding
Syllabus

Lecture hours: MWF 9:10-10:00 a.m.; room 224 Heep

Credit hours: 3

Professor: Dr. Steve Hague
Assistant Professor, Cotton Breeding
Department of Soil and Crop Sciences
Cotton Improvement Laboratory
Turk Road
phone: 845-2459 or 845-1328
fax: 862-1209

Agronomy 304 is designed to provide undergraduate students with an understanding of the role of genetics in plant improvement, genetic manipulation of plant characters, methodologies used in improving crop species for the benefit of mankind, and the role of germplasm preservation in insuring against genetic erosion. The course will be taught as three lecture hours/week. Lectures are designed to supplement the textbook and assigned reading material.

Prerequisite: AGRO 105 and junior classification, or approval of instructor.

Required Course Materials:

Breeding Field Crops, 4th edition
By J.M. Poehlman and D.A. Sleper

Grading system:

<table>
<thead>
<tr>
<th>Exam</th>
<th>% of final grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 major lecture exams</td>
<td>50</td>
</tr>
<tr>
<td>Comprehensive final</td>
<td>25</td>
</tr>
<tr>
<td>Unannounced lecture quizzes</td>
<td>15</td>
</tr>
<tr>
<td>Research paper</td>
<td>10</td>
</tr>
</tbody>
</table>

Grading scale:

90 - 100: A
80 - 89: B
70 - 79: C
60 - 69: D
< 60: F

Late research papers will be penalized 10% per day.

The “make up” policy follows university regulations. Class assignments and exams may be made up only if the absence was “university excused.” See the Student Rules at Texas A&M University for descriptions of excused absences. http://student-rules.tamu.edu/rule7.htm
Aggie Honor Code

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

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

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

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

Lecture topics:

1. Introduction
   - Historical dates and events in the development of the science of plant breeding
   - When, where, and success of plant breeding

2. Chromosome and gene structure

3. Reproduction
   - Meiosis and mitosis
   - Megasporogenesis
   - Microsporogenesis
   - Flower morphology
   - Self Vs. cross pollination in plants
   - Asexual reproduction systems
   - Pollination control in plants

4. Mendelian genetics
   - Definitions
   - Symbols used in plant breeding
   - G. Mendel
   - Segregation and independent assortment
   - Gene action
   - Qualitative and quantitative characterization
     - Pascal's triangle
   - Gene recombination
   - Linkage
   - $X^2$ (Chi Square)
   - Other gene action
     - Pleiotropy
     - Epistasis
     - Expressivity
     - Thresholds
     - Heritability

5. Sources of variation and the U.S. germplasm collection and storage system

6. Cultivated plant populations
Lecture topics (cont’d):

7. Quantitative inheritance
   - Gene action
   - Heritability Vs. environmental variation
   - Genetic equilibrium
8. Deviations from normal
   - Ploidy levels
   - Mutations
   - Fertility regulation
     - incompatibility
     - sterility
9. Basis of breeding self-pollinated crop species
10. Methods of breeding self-pollinated crop species
11. Basis of breeding cross-pollinated crop species
12. Mating systems in breeding cross-pollinated species
13. Methods of breeding cross-pollinated species
14. Protecting cultivars
    - Minimum distance
    - Essentially derived
    - UPOV
    - PVP
    - Patent
15. Breeding methods used in apomictics
16. Molecular biological techniques used in plant breeding

* Note: The last 15 minutes of each Friday’s lecture will be reserved for discussion of any topic pertaining to plant breeding that class members choose to discuss. If there are no questions nor profitable discussion then the time will be filled with normal lectures. I encourage class members to bring questions of interest to the floor for discussion during this time period.

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 Change in Course  
Undergraduate • Graduate • Professional  
* Submit original form and 2 copies *  

1. This request is submitted by the Department of Nutrition and Food Science  

2. Course prefix, number and complete title of course: NUTR 405 Nutritional Treatment of Disease  

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:  
   Nutritional intervention in pathological conditions, based on biochemical, physiological and psychological effects of disease state; application of diet therapy principles and nutritional assessment.  

5. Complete proposed course title and proposed course description (not to exceed 50 words):  
   Nutritional intervention in pathological conditions, based on biochemical, physiological and psychological effects of disease state; current research in clinical nutrition.  

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>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 405</td>
<td>NUTRITION TRTMNT DISEASE</td>
<td>03 03 04 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>03 63 2</td>
</tr>
</tbody>
</table>

b) Changed to:  

<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>Acad. Year</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 405</td>
<td>NUTRITION TRTMNT DISEASE</td>
<td>03 02 04 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>03 63 2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approval recommended by:</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael J. McNamara</td>
<td>8/16/06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Head of Department</th>
<th>Date</th>
<th>Chair, College Review Committee</th>
<th>Date</th>
<th>Dean of College</th>
<th>Date</th>
<th>Submitted to Coordinating Board by:</th>
<th>Date</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director of Academic Support Services</td>
<td>Date</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

OARAS-504
NUTR 405 Nutritional Treatment of Disease

Credit: 4 (3 hours lecture and 2 hours lab)

Course Description: Nutritional intervention in pathological conditions, based on biochemical, physiological and psychological effects of disease state; application of diet therapy principles and nutritional assessment.

Prerequisites: NUTR 444; BICH 410; ZOOL 319 or registration therein; senior classification or approval of instructor.

Competencies: At the completion of the course, the student will be able to
1. Describe the role of nutrition in development and progression of pathophysiology of various disorders and changes in nutrient needs and dietary intake for treatment of disease.
2. Identify approaches to nutritional treatment of disease, according to current research by using peer-reviewed journals and other reliable sources.
3. Work in teams to communicate information on nutrition in the treatment of disease to peers.
4. Evaluate dietary intake and nutritional needs of individuals who have been diagnosed with a chronic disease or problem that is related to dietary intake and nutrition and develop recommendations for them, according to principles of nutritional treatment of disease.


Journal Articles: Published papers available on-line through TAMU Library and databases, such as ScienceDirect and MedLine

Evaluation: Mid-term exams (2 x 100) 200 points
Final exam – comprehensive 100 points
Patient evaluation/research paper 100 points
Team Case Studies (3 x 50) 150 points
Passport – Required (15-point penalty for non-submission)

Total 550 points

[A = ≥ 90%; B = 89-80%; C = 79-70%; D = 69-60%; F = ≤ 60% total points]

Professor: Karen S. Kubena, Ph.D., R.D.
Policies for Class:

- Make-up exams are not given except in conjunction with a University-excused absence (see Academic Rule 7.1 on TAMU website). A separate exam is written for those students who take a make-up exam.

- Assignments and papers are due by 5 PM on the due date. All papers must be typed. Late papers will drop one letter grade for each day late.

University or Department Policies:

- "An Aggie does not lie, cheat, or steal or tolerate those who do."
  Academic dishonesty and plagiarism are the subjects of the Aggie Honor System that has been in place since September 2004. **Know the code!** Definitions of academic misconduct are shown on the Aggie Honor System website at [http://www.tamu.edu/aggiehonor/definitions.php](http://www.tamu.edu/aggiehonor/definitions.php). Because of the serious nature of penalties under the new system, you are strongly encouraged to become familiar with the Aggie Honor System. [http://www.tamu.edu/aggiehonor](http://www.tamu.edu/aggiehonor)

- 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 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 at 845-1637.

Course Topics/Calendar

- **Week 1**  
  Lecture (1.5 hr) - Overview of course
  Lecture (1.5 hr) - Gastrointestinal (GI) function
  Lab (2 hr) - Formation of teams

- **Week 2**  
  Lecture (3 hr) – Nutrition in Upper GI Disease
  Lab (1 hr lecture) – Nutrition in Upper GI Disease

- **Week 3**  
  Lecture (1.5 hr) – Nutrition in Metabolic Stress
  Lab (1 hr lecture) – Nutrition in HIV/AIDS
  Lecture (1.5 hr) – Nutrition in Cancer

- **Week 4**  
  Lecture (3 hr) – Nutrition in Intestinal Disease
  Lab (1 hr lecture) – Case #1 Team Preparations
Week 5  Lecture (3 hr) – Nutrition in Malabsorption  
        Lab (2 hr) – Case Study #1 Team Discussions  
        [REVIEW SESSION TBA]

Week 6  Lecture (3 hr) – Nutrition in Diabetes Mellitus  
        Lab (2 hr) – Exam I

Week 7  Lecture (1.5 hr) – Nutrition in Diabetes Mellitus  
        Lab (2 hr) – Case Study #2 Team Preparations  
        Lecture (1.5 hr) – Nutrition in Gallbladder Disease

Week 8  Lecture (1.5 hr) – Nutrition in Pancreatic Disease  
        Lab (2 hr) – Case Study #2 Team Discussions  
        Lecture (1.5 hr) – Nutrition in Hyperlipidemia

Week 9  Lecture (1.5 hr) – Nutrition in Hyperlipidemia  
        Lab (1 hr lecture) – Nutrition in Hypertension  
        Lecture (1.5 hr) – Nutrition in Hypertension

Week 10 Lecture (3 hr) – Nutrition in Chronic Obstructive Pulmonary Disease and Cystic Fibrosis  
        Lab (1 hr lecture) – Nutrition in Hepatitis and Alcoholism

Week 11 Lecture (1.5 hr) – Nutrition in Hepatic Failure  
        Lab (2 hr) – Case Study #3 Team Preparations  
        Lecture (1.5 hr) – Nutrition and Renal Disease  
        [REVIEW SESSION TBA]

Week 12 Lecture (3 hr) – Nutrition and Renal Disease  
        Lab (2 hr) – Exam II

Week 13 Lecture (1.5 hr) – Nutrition and Hematology  
        Lab (1 hr) – Case Study #3 Team Discussions  
        Thanksgiving Day

Week 14 Lecture (3 hr) – Obesity and Weight Management  
        Lab (1 hr) – Obesity

Week 15 Lecture (1.5 hr) – Treatment of Obesity  
        [REVIEW SESSION TBA]

Final Examination

7/12/06
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and 2 copies •

1. This request is submitted by the Department of  **HORTICULTURAL SCIENCES**

2. Course prefix, number and complete title of course: **HORT 422 Citrus and Subtropical Fruits**

3. Change requested:
   a) Prerequisite(s): From **Hort 319 or Approval of instructor**  To **Approval of Instructor**
   b) Withdrawal (reason)
   c) Cross-list with **stacked with HORT 622**
   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 422 Citrus and Subtropical Fruits**. History, taxonomy, planting, irrigation, soil management, pruning, hardiness, packing, processing, post harvesting physiology and marketing of citrus and other subtropical practices.

5. Complete proposed course title and proposed course description (not to exceed 50 words): **HORT 422 Citrus and Subtropical Fruits**. Various types of citrus: identification, culture, processing, marketing, and economic future; prepares students to function in a continuously changing production environment in production areas.

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>HORT</td>
<td>422</td>
<td>CITRUS &amp; SUBTROP FRUITS</td>
</tr>
</tbody>
</table>

   Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | FICE Code |
   020203011103000051520003632

   b) Changed to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT</td>
<td>422</td>
<td>CITRUS &amp; SUBTROP FRUITS</td>
</tr>
</tbody>
</table>

   Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | FICE Code |
   03000301110300005152000708003632

   Approval recommended by:

   [Signature]
   [Name]
   [Date]

   [Signature]
   Chair, College Review Committee
   [Date]

   Head of Department (if cross-listed course)
   [Signature]
   [Name]
   [Date]

   Submitted to Coordinating Board by:
   [Signature]
   Dean of College
   [Date]

   Director of Academic Support Services
   [Signature]
   [Date]

   Effective Date

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
HORT 422 Citrus and Subtropical Fruits
Course Syllabus, Fall 2006

Instructor: Dr. Bhimu Patil, Vegetable and Fruit Improvement Center, Department of Horticultural Sciences, Texas A&M University, TX
Phone: 979-862-4521, Fax: 979-862-4522; E-mail: b-patil@tamu.edu

Lecture: Tuesday and Thursday, 2:20-3:35 PM (concurrent with HORT 622)
This course will be offered simultaneously on TTVN (Trans Texas Video Network) to three different locations.

Course Description:
HORT 422: Citrus and Subtropical Fruits is a 3 credit hour course. The course encompasses the various types of citrus, including oranges, lemons, limes, grapefruit and mandarins and also avocados and olives. It covers the identification, culture, processing, marketing, and economic future. By understanding the complete production of these fruits, students can prepare themselves to function in a continuously changing production environment in production areas.
Prerequisite: approval of instructor.

Overview of Course:
The course will be taught as 2 lecture periods (concurrent with Hort 622). Lecture topics will include history, subtropical fruit industry, interaction with climate, frost and freeze hazards, classification, rootstocks, propagation, planting, training, pruning, nutrition, IPM, diseases and pests, weed control, insect and graft transmissible disease, molecular breeding, harvesting, post harvest and functional components. The course will have major emphasis on citrus and avocado and olive will also be covered. Field visit to packing shed, juice plant, citrus and avocado, citrus nursery and orchards.

Instructor's Office Hours: Office hours: Wed: 1:30-2:30 PM or arranged by appointment, and also through phone and email.

Required Text: Davies, F.S. and L.G. Albrigo. 1994. Citrus. CAB International, Wallingford, UK. The Web will be used as a supplemental source of information for this course. Lecture outlines, course images, etc. are contained here.
Aggie Horticulture Online: Aggie Horticulture is a World Wide Web server connected online through Internet. Aggie Horticulture is accessible from any computer on campus (or anywhere in the world!) having Internet client software (for example, Explorer or Netscape). Students will use Aggie Horticulture as a tool for accessing electronic databases of horticultural information and will develop assignments for posting on the Internet.
Course Grade:
Each student's grade will be based on total of 1000 points for the semester. A standard grading scale will be utilized. The tentative grading scale for the course is:

<table>
<thead>
<tr>
<th>Points</th>
<th>% course total</th>
</tr>
</thead>
<tbody>
<tr>
<td>900-1000</td>
<td>A</td>
</tr>
<tr>
<td>800-899</td>
<td>B</td>
</tr>
<tr>
<td>700-799</td>
<td>C</td>
</tr>
<tr>
<td>600-699</td>
<td>D</td>
</tr>
<tr>
<td>Below 600</td>
<td>F</td>
</tr>
</tbody>
</table>

Grading Breakdown

<table>
<thead>
<tr>
<th>Exam/Assignments</th>
<th>Points</th>
<th>% course total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid term exam</td>
<td>300</td>
<td>30</td>
</tr>
<tr>
<td>Final Exam</td>
<td>300</td>
<td>30</td>
</tr>
<tr>
<td>Term papers</td>
<td>400</td>
<td>40</td>
</tr>
</tbody>
</table>

Make-Up Exams:
Make-up exams/missed essay due dates will only be allowed for official University Excused Absences [http://student-rules.tamu.edu/]. Instructor must be informed personally within 24 hours of missing the exam/exercise due date.

Late Assignments/term paper:
Late term papers are subject to penalty except in cases of official University Excused Absences [http://student-rules.tamu.edu/].

Changes in Schedule:
The instructor reserves the right to change the order and content of lectures as necessary. Exam dates (review paper due dates) (excluding the final) may be changed by the instructor, but at least 5 days notice will be given.

Facilitators for Trans-Texas Video Conference Sites:

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Location</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Shad Nelson</td>
<td>361-593-3691</td>
<td>Kingsville</td>
<td><a href="mailto:shad.nelson@tamuk.edu">shad.nelson@tamuk.edu</a></td>
</tr>
<tr>
<td>Dr. Mani Skari</td>
<td>956-968-2132</td>
<td>Weslaco</td>
<td><a href="mailto:m-skaria@tamu.edu">m-skaria@tamu.edu</a></td>
</tr>
</tbody>
</table>

Date | Lecture topics
--- | ---------------
Topic 1 | Introduction, Production and Subtropical Fruit Industry
| Interaction with Climate and Frost and Freeze Hazards
| Classification & Cultivars
Topic 2 | Rootstocks
| Propagation
| Breeding
Topic 3 | Planting, Training and Pruning
| Nutrition and Mineral Deficiencies

F:\Hort422patil1.doc
<table>
<thead>
<tr>
<th>Topic 5</th>
<th>Soil, Salinity and Nutrition</th>
<th>Presentation slides</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Water Relations</td>
<td></td>
</tr>
<tr>
<td>Topic 6</td>
<td>Weed Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Harvesting</td>
<td></td>
</tr>
<tr>
<td>Topic 7</td>
<td>Postharvest Handling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>Topic 8</td>
<td>Mid Term Exam</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Citrus Health Benefits</td>
<td></td>
</tr>
<tr>
<td>Topic 9</td>
<td>Virus and Virus-like Diseases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Citrus Diseases (Continued)</td>
<td></td>
</tr>
<tr>
<td>Topic 10</td>
<td>Citrus Diseases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arthropod pests</td>
<td></td>
</tr>
<tr>
<td>Topic 11</td>
<td>Citrus Economics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Field trip</td>
<td></td>
</tr>
<tr>
<td>Topic 12</td>
<td>Field trip</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avocado Production</td>
<td></td>
</tr>
<tr>
<td>Topic 13</td>
<td>Olive production and processing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student Presentation</td>
<td></td>
</tr>
<tr>
<td>Topic 14</td>
<td>Student Presentations</td>
<td></td>
</tr>
<tr>
<td>Topic 15</td>
<td>Student Presentations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Final Exam</td>
<td></td>
</tr>
</tbody>
</table>

**Aggie Code of Honor:** "An Aggie does not lie, cheat, or steal or tolerate those who do." Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: [www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/)

**Copyrights:** Please note that all handouts and supplements used in this course are copyrighted.

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

**Directions:** An institution shall use this form to propose a new bachelor’s or master’s degree program. In completing the form, the institution should refer to the document *Standards for Bachelor’s and Master’s Programs*, which prescribes specific requirements for new degree programs. Note: This form requires signatures of (1) the Chief Executive Officer, certifying adequacy of funding for the new program; (2) a member of the Board of Regents (or designee), certifying Board approval, and (3) if applicable, a member of the Board of regents or (designee), certifying that criteria have been met for staff-level approval. Note: An institution which does not have preliminary authority for the proposed program shall submit a separate request for preliminary authority. That request shall address criteria set in Coordinating Board rules Section 5.24 (a).

**Information:** Contact the Division of Academic Affairs and Research at 512/427-6200 for more information.

---

**Administrative Information**

1. **Institution:** Texas A&M University

2. **Program Name** – Show how the program would appear on the Coordinating Board’s program inventory (e.g., *Bachelor’s of Business Administration degree with a major in Accounting*):

   Bachelor of Arts and Bachelor of Science degree with major in University Studies

3. **Proposed CIP Code:** 30.9999.xx

   The degree should be classified as having an interdisciplinary major, but we would prefer that it be distinguished from the existing interdisciplinary studies programs offered by the College of Education.

4. **Brief Program Description** – Describe the program and the educational objectives:

   • The University Studies degree would be an innovative interdisciplinary degree with an area of concentration and two minors, at least one of which is in a different college from that of the area of concentration. The degree would serve two main groups of students: first, students who are in good academic standing (GPA of 2.0 or above) but who are unable to find or gain access to a major of interest and (b) students who specifically seek a broad interdisciplinary education or a specific interdisciplinary combination of coursework that is unavailable through existing degree programs.

   • Educational objectives: to provide students with an interdisciplinary academic degree that will prepare them for a successful life and career or for graduate school. To help insure that university study degrees are coherent and meaningful programs, students will submit a degree proposal explaining the rationale for the concentration and minors they propose which will have to be reviewed and approved by the department or college offering the area of concentration before the student is accepted into the University Studies program.
5. **Administrative Unit** – Identify where the program would fit within the organizational structure of the university (e.g., *The Department of Electrical Engineering within the College of Engineering*):

Advising and other support would be provided by Texas A&M’s Department of General Academic Programs, which has been providing academic support for undergraduate students, but has not been, up until now an academic administrative unit, as recognized by the Coordinating Board. Other support, evaluation of student proposals, including some advising, support of students in the concentration, and review of degree proposals, would be provided by the department offering the student’s area of concentration.

In the Coordinating Board’s program inventory, the program could be listed as being administered by the Department of General Academic Programs or it could be shown as being administered by each academic College in the university—since each college will offer at least one area of concentration.

6. **Proposed Implementation Date** – Report the first semester and year that students would enter the program:

   Fall 2007

7. **Contact Person** – Provide contact information for the person who can answer specific questions about the program:

   Name: Doug Slack

   Title: Professor of Wildlife Science

   E-mail: d-slack@tamu.edu

   Phone: 979 845 5707
Program Information

University Studies Degree

Executive Summary

The following document is the proposal/description of the University Studies degree put together by a working subcommittee of the Texas A&M University faculty senate. Because this document describes the rationale and intent of the degree so clearly, we are including it as the executive summary for this proposal.

Draft Proposal for An Interdisciplinary Degree

This proposal is in response to the report of the Undergraduate Program Task Force, chaired by Dean Jerry R. Strawser. The Strawser Task Force was asked to evaluate opportunities for undergraduate students in good academic standing who could not find an appropriate academic home. In many instances these students were not able to continue to upper division level courses because of grade-point barriers or were not able to transfer to another appropriate college because of grade point restraints.

The Strawser Report (March 2006), which is available on-line at the Faculty Senate Web Site, specifically identifies five student groups that would be served by this degree plan. In all cases the students are in good academic standing (grade-point average > 2.0).

a. General Studies students who are unable to find an academic major of interest.
b. Students currently enrolled in a major field of study, but do not meet College or Department requirements to continue in that major because of academic requirements for upper division courses and are required to change majors or transfer to another field of study.
c. Students who wish to change colleges or departments because of different interests, but are unable to enroll in a desired field of study because of capacity or inability to meet transfer standards that exceed those for maintaining good academic standing.
d. Students who initially chose an inappropriate major and desire to transfer to a desired field of study, but are prohibited because of capacity or inability to meet transfer standards.
e. High achieving students who are truly generalists and seek a broad, interdisciplinary education.

The proposal presented here recognizes the pressures faced by both students and academic units on the Texas A&M University campus. The problem, as identified in the Strawser Report (2006), was to provide "a reasonable course of study and a greater degree of options for students who are in good academic standing at Texas A&M University. [The problem] is not creating a course of study for students who would
otherwise not qualify for admission to Texas A&M University. Our target audience is students who qualified for admissions based on normal university standards but are not able to pursue their desired course of study.” In addition, students who truly seek an interdisciplinary degree that broaches Department and College barriers may find barriers to innovative degree plans.

On the other hand academic units, Colleges and Departments, may face capacity constraints that mitigate against unfettered growth. Indeed, within Departments, academic standards for upper division courses may curtail enrollment in these courses despite a student being in good academic standing.

The following proposal for a University Studies Degree follows the long-term approaches outlined in a combination of Sections B.1 and B.2 of the Strawser Report (March 2006). The University Studies Degree presented herein outlines a course of study that is both interdisciplinary and accessible to all students who are in good academic standing (i.e., a GPR of at least a 2.0). In the end, we believe that the draft proposal for a University Studies Degree presented here will “(1) reduce the number of students involuntarily enrolled in General Studies, and (2) [will] provide expanded academic opportunities for students unable to obtain access to their desired major” (Strawser Report, 2006), and (3) will provide a logical home for students seeking an innovative interdisciplinary degree.

The following is a summary of the current approach of the ad hoc committee on the University Studies Degree. The degree will consist of:

- TAMU Core curriculum
- An area of concentration
- Two minors, at least one of which is in a different college from that of the area of concentration. This last requirement is to ensure that the degree is truly interdisciplinary.
- Free electives, so that the total number of hours is at least 120.

**Specifics:**

1. Areas of Concentration. These areas will be 21--24 hours, with a minimum of 12 hours in residence at the 300-400 level. Normally, at least two courses will be at the 400 level. If a proposal for an area of concentration has fewer than two such courses, a case must be made for an exception. Areas of concentration will be developed by departments (or, if interdisciplinary, by colleges). The route for an area of concentration to be approved is from the department, to the college, to the University Curriculum Committee, and then to the Faculty Senate. When an area of concentration is proposed, the proposal will specify whether the degree in University Studies will be a B.A. or a B.S. Colleges will develop guidelines as to whether a proposed area of concentration leads to a B.A or B.S.

2. Minors. The requirement for courses to constitute a minor in a University Studies degree will be the same as is currently required for a minor: 15-18 hours, with at least 6 hours in residence at the 300-400 level. All minors currently offered are acceptable in the University Studies Degree, however, later changes in currently existing minors
must be approved (see point 7, below). New minors will go through the same channels as above to be approved in the University Studies Degree.

3. Access to the degree. The aim is to have the vast majority of concentrations and minors accessible to students who are in good academic standing. Therefore, except under extenuating circumstances, all proposed areas of concentration will have as their entrance requirement that the student have at least a 2.0 overall GPR, at least a 2.0 in specified prerequisite material, and have an application accepted (see point 4). Examples of extenuating circumstances are: limited resources available, or (for a performing art) an audition required. However, every college must offer at least one area of concentration and at least one minor whose only entrance requirement is that a student must have at least a 2.0 in overall GPR and at least a 2.0 in specified prerequisite material.

4. Entrance into the University Studies program Initially, participation in the program is to be limited to undergraduate students enrolled at Texas A&M at the time of application to the program. A student must submit an admission application specifying the area of concentration and the minors, explaining why these form a coherent degree. The application must be approved by the department offering the area of concentration (or by the college, if the concentration crosses departments in a college). So that there will be sufficient time for reviews of the proposals, the committee recommends that the student submit the proposal (between 500 and 1000 words in length) no later than the 30th class day of a long semester and no later than the 10th day of first summer session. A critical review of the proposal, holding it to rigorous, high standards, is central to the ultimate success of the program. Given these expectations of high standards, it is anticipated that a proposal not initially approved may undergo revision and be resubmitted. It is suggested that after the program has been in operation for a period of not less than two years, the issue of freshman and transfer student admission directly into the program be considered in light of the additional knowledge of the demands and loads imposed upon colleges/departments by the program.

5. Advising. Advising for a student in the University Studies program will be in the department (or college) of the area of concentration. The University will recognize departments (or colleges) serving students in an area of concentration in a manner similar to the way that the University currently recognizes departments serving their majors.

6. Diploma. The diploma will state that the degree is a B.A. or B.S. in University Studies, but will not give the area of concentration or minors. These will, however, be stated on the student's transcript. The student's diploma will be awarded at the graduation ceremony of the college which contains the area of concentration.

7. Minors and areas of concentration will be tied to the student's catalog of record, requiring that changes in minors and concentrations must be documented through the same process as the original approval.

8. Office of University Studies. An Office of University Studies will be created, as part of the General Academics Program., and will serve to coordinate the University Studies
program, keeping track of all students in the program.

9. The expectation is that the resources necessary for this program will be provided by the Provost. The subcommittee felt that it was not in its charge to determine how the program was will be funded.


Members of the Faculty Senate Committee – University Studies Degree

Dr. Kriss Boyd, Associate Dean, General Academic Program
Dr. Greg Cobb, Associate Professor, Horticultural Sciences
Dr. Richard Curry, Associate Professor, Hispanic Studies
Dr. John Fike, Former Speaker, Faculty Senate; Associate Professor, Engineering Technology and Industrial Distribution; Co-chair University Studies Degree Committee
Dr. Jo Howze, Associate Dean of Engineering
Dr. Martyn Gunn, Former Speaker, Faculty Senate; Professor, Biochemistry and Biophysics
Dr. Jimmie Killingsworth, Professor, English
Dr. Robert Knight, Associate Professor, Rangeland Ecology and Management; Chair, University Curriculum Committee
Dr. Martha Louder, Former Speaker, Faculty Senate; Associate Dean of Mays Business School
Dr. Paul Meyer, Assistant Provost
Dr. Lynn Ruoff, Clinical Associate Professor, Veterinary Integrative Biosciences
Dr. Douglas Slack, Speaker, Faculty Senate; Regents Professor, Wildlife and Fisheries Sciences
Dr. Tom Vogel, Associate Professor, Mathematics; Co-chair University Studies Degree Committee
Dr. Mark Weichold, Former Speaker, Faculty Senate; Associate Provost and Dean of Undergraduate Programs
I. **Need**

*Note: Complete I.A and I.B only if preliminary authority for the program was granted more than four years ago. This includes programs for which the institution was granted broad preliminary authority for the discipline.*

A. **Job Market Need** – Provide short- and long-term evidence of the need for graduates in the job market.

National data consistently show that college graduates are better prepared for the workforce than non-college graduates. Part of the goal of this program is to provide a pathway to graduation for students in good academic standing who are unable to declare an academic major of interest. Beyond the benefit that a bachelor’s degree will afford students, the specific relation between a student’s interdisciplinary program of study and the job market will depend on the actual degrees developed by students. As described elsewhere, we consider advising, and the review process for considering and approving student degree programs to be key to ensuring that students complete degrees that prepare them for the job market and their future careers. Among the faculty participating in the development of this degree, there is some optimism that many of the students completing this interdisciplinary program will complete programs specifically tailored to their career aspirations.

B. **Student Demand** – Provide short- and long-term evidence of demand for the program.

Several Texas A&M studies in recent years have looked at the problem of access to majors (See attached Report of the Undergraduate Program Task Force, also known as the Strawser Report). It is estimated that somewhere between 300 and 3000 undergraduate students at Texas A&M University have taken xx hours and are in good academic standing (GPA’s over 2.0), without having been admitted to a major in which they can graduate. Some of these students find other majors they can graduate in, but many should be attracted to this degree.

C. **Enrollment Projections** – Use this table to show the estimated cumulative headcount and full-time student equivalent (FTSE) enrollment for the first five years of the program. (*Include majors only and consider attrition and graduation.*)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headcount</td>
<td>200</td>
<td>400</td>
<td>550</td>
<td>700</td>
<td>800</td>
</tr>
<tr>
<td>FTSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. **Quality**
A. **Degree Requirements** – Use this table to show the degree requirements of the program. *(Modify the table as needed; if necessary, replicate the table for more than one option.)*

The degree will consist of:

- TAMU Core curriculum
- An area of concentration
- Two minors, at least one of which is in a different college from that of the area of concentration. This last requirement is to ensure that the degree is truly interdisciplinary.
- Free electives, so that the total number of hours is at least 120.

**Specifics:**

Areas of Concentration. These areas will be 21--24 hours, with a minimum of 12 hours in residence at the 300-400 level. Normally, at least two courses will be at the 400 level. If a proposal for an area of concentration has fewer than two such courses, a case must be made for an exception. Areas of concentration will be developed by departments (or, if interdisciplinary, by colleges). The route for an area of concentration to be approved is from the department, to the college, to the University Curriculum Committee, and then to the Faculty Senate. When an area of concentration is proposed, the proposal will specify whether the degree in University Studies will be a B.A. or a B.S. Colleges will develop guidelines as to whether a proposed area of concentration leads to a B.A or B.S.

Minors. The requirement for courses to constitute a minor in a University Studies degree will be the same as is currently required for a minor: 15-18 hours, with at least 6 hours in residence at the 300-400 level. All minors currently offered are acceptable in the University Studies Degree, however, later changes in currently existing minors must be approved. *(See Appendix 1 for a list of existing undergraduate minors.)* New minors will go through the same channels as above to be approved in the University Studies Degree.

<table>
<thead>
<tr>
<th>Category</th>
<th>15 Semester Credit Hours</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education Core Curriculum <em>(bachelor's degree only)</em></td>
<td>43</td>
<td></td>
</tr>
</tbody>
</table>
Not applicable. Courses would be existing courses. All concentrations and minors will be listed in the university undergraduate catalog. Concentrations will go through the same university approval process that minors go through now.

C. Faculty – Use these tables to provide information about Core and Support faculty. Add an asterisk (*) before the name of the individual who will have direct administrative responsibilities for the program. (Add and delete rows as needed.)

Not Applicable. Existing Texas A&M University faculty will teach in the program. The main area where we estimate new resources will be needed is in the area of advising. Those resources will be made available.

D. Library – Provide the library director’s assessment of library resources necessary for the program. Describe plans to build the library holdings to support the program.

Not applicable.

E. Facilities and Equipment – Describe the availability and adequacy of facilities and equipment to support the program. Describe plans for facility and equipment improvements/additions.

Not applicable.

F. Accreditation – If the discipline has a national accrediting body, describe plans to obtain accreditation or provide a rationale for not pursuing accreditation.

III. Costs and Funding

Five-Year Costs and Funding Sources - Use this table to show five-year costs and sources of funding for the program.

<table>
<thead>
<tr>
<th>Five-Year Costs</th>
<th>Five-Year Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel^1</td>
<td>$0</td>
</tr>
<tr>
<td>Facilities and Equipment</td>
<td>$0</td>
</tr>
<tr>
<td>Library, Supplies, and Materials</td>
<td>$0</td>
</tr>
</tbody>
</table>
New Program Request Form for
Bachelor’s and Master’s Degrees
Page 10

<table>
<thead>
<tr>
<th>Other 2</th>
<th>$0</th>
<th>Other 4</th>
<th>$0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Costs</td>
<td>$0</td>
<td>Total Funding</td>
<td>$0</td>
</tr>
</tbody>
</table>

1. Report costs for new faculty hires, graduate assistants, and technical support personnel. For new faculty, prorate individual salaries as a percentage of the time assigned to the program. If existing faculty will contribute to program, include costs necessary to maintain existing programs (e.g., cost of adjunct to cover courses previously taught by faculty who would teach in new program).
2. Specify other costs here (e.g., administrative costs, travel).
3. Indicate formula funding for students new to the institution because of the program; formula funding should be included only for years three through five of the program and should reflect enrollment projections for years three through five.
4. Report other sources of funding here. In-hand grants, “likely” future grants, and designated tuition and fees can be included.
Appendix 1. Existing undergraduate minors

**Agriculture and Life Sciences**

- Agricultural Communications and Journalism
- Agricultural Economics and Agribusiness
- Agronomy
- Biochemistry
- Bioenvironmental Sciences
- Entomology
- Environmental Soil Science
- Forestry
- Genetics
- Horticulture
- Park and Natural Resources
- Poultry Science
- Rangeland Ecology and Management
- Tourism Resource Management
- Wildlife and Fisheries Sciences

**Architecture**

- Art and Architectural History
- Global Art, Design and Construction
- Urban and Regional Planning

**Business**

- Business

**Education**

- Coaching
- Creative Studies
- Dance
- Outdoor Education

**Engineering**

- Aerospace Engineering
- Computer Science
- Electrical Engineering
- Nuclear Engineering
- Petroleum Engineering
- Radiological Health Engineering

**Geosciences**

- Earth Sciences
- Geography
- Geoinformatics
- Geology
- Geophysics
- Meteorology
- Oceanography

**Liberal Arts**
Africana Studies
• Anthropology
• Classical Studies
• Communication
• Comparative Cultural Studies – International
• Comparative Cultural Studies – United States
• Comparative Literature
• Economics
• English
• Film Studies
• French
• German
• Hispanic Studies
• History
• Journalism
• Linguistics
• Music
• Philosophy
• Professional Writing
• Psychology
• Religious Studies
• Russian
• Sociology
• Spanish
• Theatre Arts
• Women’s Studies

Science

• Biology
• Chemistry
• Mathematics
• Neuroscience
• Physics
• Statistics

Information from 2005-2006 Undergraduate Catalog.
## Signature Page

1. **Adequacy of Funding** – The chief executive officer shall sign the following statement:

   _I certify that the institution has adequate funds to cover the costs of the new program. Furthermore, the new program will not reduce the effectiveness or quality of existing programs at the institution._

   ________________________________  ________________
   Chief Executive Officer            Date

2. **Board of Regents Approval** – A member of the Board of Regents or designee shall sign the following statement:

   _On behalf of the Board of Regents, I certify that the Board of Regents has approved the program._

   ________________________________  ________________
   Board of Regents (Designee)        Date of Approval

3. **Board of Regents Certification of Criteria for Commissioner of Assistant Commissioner Approval** – For a program to be approved by the Commissioner or the Assistant Commissioner for Academic Affairs and Research, the Board of Regents or designee must certify that the new program meets the eight criteria under TAC Section 5.50 (b): The criteria stipulate that the program shall:

   (1) be within the institution’s current Table of Programs;
   (2) have a curriculum, faculty, resources, support services, and other components of a degree program that are comparable to those of high quality programs in the same or similar disciplines at other institutions;
   (3) have sufficient clinical or in-service sites, if applicable, to support the program;
   (4) be consistent with the standards of the Commission of Colleges of the Southern Association of Colleges and Schools and, if applicable, with the standards or discipline-specific accrediting agencies and licensing agencies;
   (5) attract students on a long-term basis and produce graduates who would have opportunities for employment; or the program is appropriate for the development of a well-rounded array of basic baccalaureate degree programs at the institution;
   (6) not unnecessarily duplicate existing programs at other institutions;
   (7) not be dependent on future Special Item funding
   (8) have new five-year costs that would not exceed $2 million.

   _On behalf of the Board of Regents, I certify that the new program meets the criteria specified under TAC Section 5.50 (b)._  

   ________________________________  ________________
   Board of Regents (Designee)        Date
University Studies Degree

Draft Proposal for An Interdisciplinary Degree

This proposal is in response to the report of the Undergraduate Program Task Force, chaired by Dean Jerry R. Strawser. The Strawser Task Force was asked to evaluate opportunities for undergraduate students in good academic standing who could not find an appropriate academic home. In many instances these students were not able to continue to upper division level courses because of grade-point barriers or were not able to transfer to another appropriate college because of grade point restraints.

The Strawser Report (March 2006), which is available on-line at the Faculty Senate Web Site, specifically identifies five student groups that would be served by this degree plan. In all cases the students are in good academic standing (grade-point average > 2.0).

a. General Studies students who are unable to find an academic major of interest.
b. Students currently enrolled in a major field of study, but do not meet College or Department requirements to continue in that major because of academic requirements for upper division courses and are required to change majors or transfer to another field of study.
c. Students who wish to change colleges or departments because of different interests, but are unable to enroll in a desired field of study because of capacity or inability to meet transfer standards that exceed those for maintaining good academic standing.
d. Students who initially chose an inappropriate major and desire to transfer to a desired field of study, but are prohibited because of capacity or inability to meet transfer standards.
e. High achieving students who are truly generalists and seek a broad, interdisciplinary education.

The draft proposal presented here recognizes the pressures faced by both students and academic units on the Texas A&M University campus. The problem, as identified in the Strawser Report (2006), was to provide “a reasonable course of study and a greater degree of options for students who are in good academic standing at Texas A&M University. [The problem] is not creating a course of study for students who would otherwise not qualify for admission to Texas A&M University. Our target audience is students who qualified for admissions based on normal university standards but are not able to pursue their desired course of study.” In addition, students who truly seek an interdisciplinary degree that broaches Department and College barriers may find barriers to innovative degree plans.
On the other hand academic units, Colleges and Departments, may face capacity constraints that mitigate against unfettered growth. Indeed, within Departments, academic standards for upper division courses may curtail enrollment in these courses despite a student being in good academic standing.

The following draft proposal for a University Studies Degree follows the long-term approaches outlined in a combination of Sections B.1 and B.2 of the Strawser Report (March 2006). The University Studies Degree presented herein outlines a course of study that is both interdisciplinary and accessible to all students who are in good academic standing (i.e., a GPR of at least a 2.0). In the end, we believe that the draft proposal for a University Studies Degree presented here will “(1) reduce the number of students involuntarily enrolled in General Studies, and (2) [will] provide expanded academic opportunities for students unable to obtain access to their desired major” (Strawser Report, 2006), and (3) will provide a logical home for students seeking an innovative interdisciplinary degree.

We are seeking broad university input on this proposal. Would the current proposal work in the context of your college, and if you feel that the proposal would not work, what changes would you suggest to make it work? We are eager for your input to this process.

The following is a summary of the current approach of the ad hoc committee on the University Studies Degree. The degree will consist of:

- TAMU Core curriculum
- An area of concentration
- Two minors, at least one of which is in a different college from that of the area of concentration. This last requirement is to ensure that the degree is truly interdisciplinary.
- Free electives, so that the total number of hours is at least 120.

Specifics:

1. Areas of Concentration. These areas will be 21--24 hours, with a minimum of 12 hours in residence at the 300-400 level. Normally, at least two courses will be at the 400 level. If a proposal for an area of concentration has fewer than two such courses, a case must be made for an exception. Areas of concentration will be developed by departments (or, if interdisciplinary, by colleges). The route for an area of concentration to be approved is from the department, to the college, to the University Curriculum Committee, and then to the Faculty Senate. When an area of concentration is proposed, the proposal will specify whether the degree in University Studies will be a B.A. or a B.S. Colleges will develop guidelines as to whether a proposed area of concentration leads to a B.A or B.S.
2. Minors. The requirement for courses to constitute a minor in a University Studies degree will be the same as is currently required for a minor: 15-18 hours, with at least 6 hours in residence at the 300-400 level. All minors currently offered are acceptable in the University Studies Degree, however, later changes in currently existing minors must be approved (see point 7, below). New minors will go through the same channels as above to be approved in the University Studies Degree.

3. Access to the degree. The aim is to have the vast majority of concentrations and minors accessible to students who are in good academic standing. Therefore, except under extenuating circumstances, all proposed areas of concentration will have as their entrance requirement that the student have at least a 2.0 overall GPR, at least a 2.0 in specified prerequisite material, and have an application accepted (see point 4). Examples of extenuating circumstances are: limited resources available, or (for a performing art) an audition required. However, every college must offer at least one area of concentration and at least one minor whose only entrance requirement is that a student must have at least a 2.0 in overall GPR and at least a 2.0 in specified prerequisite material.

4. Entrance into the University Studies program. Initially, participation in the program is to be limited to undergraduate students enrolled at Texas A&M at the time of application to the program. A student must submit an admission application specifying the area of concentration and the minors, explaining why these form a coherent degree. The application must be approved by the department offering the area of concentration (or by the college, if the concentration crosses departments in a college). So that there will be sufficient time for reviews of the proposals, the committee recommends that the student submit the proposal (between 500 and 1000 words in length) no later than the 30th class day of a long semester and no later than the 10th day of first summer session. A critical review of the proposal, holding it to rigorous, high standards, is central to the ultimate success of the program. Given these expectations of high standards, it is anticipated that a proposal not initially approved may undergo revision and be resubmitted. It is suggested that after the program has been in operation for a period of not less than two years, the issue of freshman and transfer student admission directly into the program be considered in light of the additional knowledge of the demands and loads imposed upon colleges/departments by the program.

5. Advising. Advising for a student in the University Studies program will be in the department (or college) of the area of concentration. The University will recognize departments (or colleges) serving students in an area of concentration in a manner similar to the way that the University currently recognizes departments serving their majors.

6. Diploma. The diploma will state that the degree is a B.A. or B.S. in University Studies, but will not give the area of concentration or minors. These will, however, be stated on the student's transcript. The student's diploma will be awarded at the graduation ceremony of the college which contains the area of concentration.
7. Minors and areas of concentration will be tied to the student's catalog of record, requiring that changes in minors and concentrations must be documented through the same process as the original approval.

8. Office of University Studies. An Office of University Studies will be created, as part of the General Academics Program, and will serve to coordinate the University Studies program, keeping track of all students in the program.

9. The expectation is that the resources necessary for this program will be provided by the Provost. The subcommittee felt that it was not in its charge to determine how the program was will be funded.


Members of the Faculty Senate Committee – University Studies Degree

Dr. Kriss Boyd, Associate Dean, General Academic Program
Dr. Greg Cobb, Associate Professor, Horticultural Sciences
Dr. Richard Curry, Associate Professor, Hispanic Studies
Dr. John Fike, Former Speaker, Faculty Senate; Associate Professor, Engineering Technology and Industrial Distribution; Co-chair University Studies Degree Committee
Dr. Jo Howze, Associate Dean of Engineering
Dr. Martyn Gunn, Former Speaker, Faculty Senate; Professor, Biochemistry and Biophysics
Dr. Jimmie Killingsworth, Professor, English
Dr. Robert Knight, Associate Professor, Rangeland Ecology and Management; Chair, University Curriculum Committee
Dr. Martha Louder, Former Speaker, Faculty Senate; Associate Dean of Mays Business School
Dr. Paul Meyer, Assistant Provost
Dr. Lynn Ruoff, Clinical Associate Professor, Veterinary Integrative Biosciences
Dr. Douglas Slack, Speaker, Faculty Senate; Regents Professor, Wildlife and Fisheries Sciences
Dr. Tom Vogel, Associate Professor, Mathematics; Co-chair University Studies Degree Committee
Dr. Mark Weichold, Former Speaker, Faculty Senate; Associate Provost and Dean of Undergraduate Programs
Texas A&M University
Proposed Minor Field of Study

Name of Minor Program: Animal Science
Department: Animal Science
College: Agriculture and Life Sciences
Will grant a minor □ Yes □ No Academic Year: 2007

A selection from among the following courses will constitute a minor field of study.

A. The following 12 hours of course work are required.

   ANSC 305  ANSC 320
   ANSC 307  ANSC 433

B. Select 4 hours from the following courses.

   ANSC 406
   ANSC 412
   ANSC 414
   ANSC 420
   ANSC 447

Please indicate further requirements such as grade point requirement, prerequisites, resident (if above the minimum 6 hours at the 300- to 400-level), capstone or methods courses.

Minimum of 16 hours required.

Minimum of 6 hours at 300- to 400-level

ANSC 107 and 108 are required with a grade of 'C' or better before minor is approved.

CHEM 229 or 227 required for ANSC 320

GENE 301 and STAT 301 required for ANSC 305

Reviewed and approved by:

[Signatures and dates]
Department Head/Program Director  Date  A&D Dean of College  Date