Agenda
Agenda
Graduate Council Meeting
May 5th, 2011
1:30 p.m.
310 Jack K. Williams Building

1. Approval of April 2011 minutes.

2. New Courses:
   a. BIOL 609 Molecular Tools in Biology
   b. ENGR 600 Engineering Graduate Study Abroad
   c. HORT 609 Plants for Landscape Design II
   d. OCNG 659 Ocean Observing Applications

3. Special Consideration Item:
   a. College of Architecture, Department of Landscape Architecture and Urban Planning request to Change the Name of the Master of Science in Land Development and Minor Curricular Modification

4. Discussion Item:
   a. Rule 12.4.3 – Dr. Autenrieth and committee
Minutes
Graduate Council Meeting Minutes
April 7, 2011
310 Jack K. Williams Administration Building
1:30 p.m.

In attendance: Dave Wentling, Mark Zoran, Catherine Roueche-Herdman, Julie Wilson, Scott Miller, Nancy Duran, Robin Autenrieth, Dave Reed, Dick Haney, L. Feigenbaum, Sam Kirkpatrick, Kevin Barge, Patricia Hurley, R. Saravanan, Sue Bloomfield, Cathleen Loving, Nicole Wilkins and recording secretary Suzie Brynildsen.

1. Approval of March 3, 2011 minutes. The minutes were approved as written.

2. Election of new Vice-Chair of Graduate Council. By unanimous vote - Dr. Robin Autenrieth was elected Vice-Chair of Graduate Council.

3. New Course Requests:
The below listed new course requests were approved by Graduate Council.
a. CVEN753 Damage Mechanics of Solids and Structures
b. EDCI 605 Qualitative Research Methods in Curriculum and Instruction
c. EDCI 686 Research Methods in EDCI: I
d. EDCI 687 Research Methods in EDCI: II
e. EDCI 688 Research Methods in EDCI: III
f. HLTH 644 Health Education Theory
g. HLTH 646 Health Education Training
h. MARB 668 Evolutionary Biology
i. MATH 620 Algebraic Geometry I
j. MEEN 616 Surface Science
k. MEEN 656 Introduction to Mechanical and Physical Properties of Thin Films
l. MEMA 634 Damage Mechanics of Solids and Structures
m. MSEN 616 Surface Science
n. MSEN 656 Introduction to Mechanical and Physical Properties of Thin Films
o. WGST 645 Queer Theory

Course Changes:
The below listed course change requests were approved by Graduate Council.
1. CSCE 667 Seminar in Human-Centered Computing and Information
2. EDCI 665 Science Curriculum
3. EPSY 605 Effects of culture, Diversity, and Poverty on Children and Youth
4. EPSY 632 Research in Second Language Education

Special Consideration Items:
The below listed Special Consideration items were approved by Graduate Council.
1. College of Education and Human Development request to delete the Career Development Education doctoral program from the TAMU programs of study.
2. College of Education and Human Development request for prefix change for graduate courses in the Bilingual Program from EPSY to BIED.

4. Discussion Item:
Revision of procedures and guidelines -Chair/Vice Chair Terms and UCC/GC Alignment. Dr. Zoran stated Dr. Sarah Bednarz had provided Graduate Council with documents for consideration. Dr. Zoran, noting Dr. Bednarz was not in attendance at this meeting, said that these documents were basically the Faculty Senate Executive Committee guidelines on reporting committees. In recent discussions with UCC (University Curriculum Committee) it was discussed that the title be changed to Undergraduate Curriculum Committee. That title change would then change some of the duties of that committee. One of those potential changes would be the possibility of eliminating their oversight of the Veterinary Professional Degree. Exactly where that responsibility will move is under discussion. It is being discussed at higher levels and Graduate Council has been asked by the Provost’s Office to not discuss or make any decisions on where the Vet School professional curriculum will be overseen. Until Graduate Council hears about the decision we will not discuss Dr. Bednarz’s item of changing the scope of our focus relative to how the Undergraduate Curriculum Committee changes. GC will not vote on this today, but Dr. Zoran would like GC members to consider once GC receives clarification that GC revisit these guidelines. Dr. Zoran said that he had spoken to the Executive Committee of Faculty Senate and they are open to whatever changes Graduate Council suggests. The Executive Committee said either work with UCC or within GC and come up with guidelines how GC might be restructured or changed and update GC guidelines. These changes/updates will be passed on to the Executive Committee. Faculty Senate will then consider the proposed changes.
Dr. Zoran suggested that GC members take a look at page one of Dr. Bednarz’s documents – under the “Chair Person Election.” It currently reads, “The council will elect its chair person from among its voting members.” Dr. Zoran said he would like to change that to say that the chair and vice-chair should be elected annually - serving a maximum of three-years. Voting annually is what is consistent with what Faculty Senate says GC should do. After a lengthy discussion among Graduate Council members a motion was made and seconded for the Chair of Graduate Council, Dr. Zoran, to write a document to go forward to the Executive Committee of Faculty Senate recommending a policy change for Graduate Council for a two year term for elected chair and vice-chair positions with an election being held every two years and with a two term limit for those positions. Dr. Zoran said he would check with Executive Committee and come back to the council with their recommendation.
New Course Requests
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

1. Request submitted by (Department or Program Name):
   Department of Biology

2. Course prefix, number and complete title of course:
   BIOL 609: Molecular Tools in Biology

3. Catalog course description (not to exceed 50 words):
   Interactive lecture course in molecular biology for beginning graduate students, introduces students to tools and methodologies used in prokaryotic and eukaryotic molecular labs; students will learn how to choose the appropriate experimental technique for a given scientific question; virtual experiments will reinforce the applications and introduce useful bioinformatics tools.

4. Prerequisite(s):  
   Cross-listed with:  
   Stacked 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 this course be repeated within the same semester?  □ Yes  ☑ No

7. 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)
   P.h.D. and M.S. in biology and microbiology

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

9. Prefix  Course #  Title (excluding punctuation)
   BIOL 609  Molecular Tools in Biology

   Lect. Lab SCH CIP and Fund Code Admin. Unit Accr. Year FICE Code
   0 5 0 0 0 3 0 2 0 2 0 4 0 0 0 4 0 1 2 1 3 0 3 6 3 2

   Approval recommended by:
   Department Head or Program Chair (Type Name & Sign)  Date
   Chair, College Review Committee  Date

   Department Head or Program Chair (Type Name & Sign)  Date
   Dean of College  Date

   Submitted to Coordinating Board by:
   Chair, GC or UCC  Date

   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845 8201 or sandra.williams@tamu.edu.
Curricular Services – 3/10
BIOL 603 Molecular Tools in Biology

Instructors:
Brian Perkins
BSBE 118C
bperkins@mail.bio.tamu.edu

Michael Benedik
BSBE 306C
benedik@tamu.edu

Class Time and Location: MWF, 11:10-12:00, BSBW 025

Course Description: This is a one-semester interactive lecture course in molecular biology for beginning graduate students. The course will introduce students to the tools and methodologies widely used in prokaryotic and eukaryotic molecular biology labs and provide background to many of their available applications. Students will learn how to choose the appropriate experimental technique for a given scientific question. Virtual experiments will reinforce the applications and introduce useful bioinformatics tools.

Grades: A total of 330 points will be available in the class:
10 homework assignments at 13 pts each = 130 pts
4 research papers of 50 pts each = 200 pts
Grading scheme: A=280-330; B=250-279; C = 220-249; D = 180-219; F < 180

Attendance: Attendance at every lecture is expected but not recorded.

Grade Release: Family Educational Rights and Privacy Act of 1974 (FERPA), does not permit faculty or staff to report grades by phone or e-mail. Grades will be available online via Vista/Blackboard. To access this site:
Log on to http://elearning.tamu.edu
Choose the TAMU logon option
Logon with your NetID and password (same as Neo)
Choose the appropriate course.

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

ACADEMIC INTEGRITY:

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

Academic misconduct, a violation of the Texas A&M Honor System, involves any of the following offenses: cheating, fabrication, falsification, multiple submissions, plagiarism, and complicity in any of these offenses. For explanations and examples of what constitutes academic dishonesty visit the Office of the Aggie Honor System homepage: http://www.tamu.edu/aggiehonor/

COPYRIGHT: The materials used in this course are copyrighted. This includes, but is not limited to: syllabi, lecture notes, quizzes, exams, in-class materials, review sheets and problem sets. You do not have the right to copy course materials without the express permission of the instructor. You may not sell copies of lecture notes or distribute them to commercial services.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Instructor</th>
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<tbody>
<tr>
<td><strong>Week 1</strong></td>
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<tr>
<td>Aug 30</td>
<td>Recombinant DNA: chromosomes and genetic structure</td>
<td>Perkins</td>
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<td>Sept 1</td>
<td>Properties of nucleic acids</td>
<td>Perkins</td>
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<td>Sept 3</td>
<td>Review and discussion (Homework #1 Due)</td>
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<td><em>Berget et al (1977) PNAS</em></td>
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<td><strong>Week 2</strong></td>
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<td>Sept 6</td>
<td>Bioinformatics: Gene Analysis</td>
<td>Benedik</td>
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<td>Sept 8</td>
<td>Bioinformatics: Database analysis and discovery tools</td>
<td>Benedik</td>
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<tr>
<td>Sept 10</td>
<td>Review and discussion (Homework #2 Due)</td>
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<td><strong>Week 3</strong></td>
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<td>Sept 13</td>
<td>Bacterial hosts and genotypes, common enzymes</td>
<td>Benedik</td>
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<td>Sept 15</td>
<td>Subcloning, ligations, restriction maps</td>
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<td>Sept 17</td>
<td>Review and Discussion (Homework #3 due)</td>
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<td><em>Cohen et al. (1972) PNAS</em></td>
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<td><strong>Week 4</strong></td>
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<td>Sept 20</td>
<td>Plasmid vectors, replication and selections</td>
<td>Benedik</td>
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<td>Sept 22</td>
<td>Recombination systems and outcomes</td>
<td>Benedik</td>
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<td>Sept 24</td>
<td>Review and discussion (Homework #4 due)</td>
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<td><em>Baba et al. Mol Syst Biol. 2006</em></td>
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<td><strong>Week 5</strong></td>
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<td>Sept 27</td>
<td>Polymerase chain reaction (PCR) I – principles and primer design</td>
<td>Perkins</td>
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<td>Sept 29</td>
<td>Polymerase chain reaction (PCR) II – RT-PCR and qPCR</td>
<td>Perkins</td>
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<td>Oct 1</td>
<td>Review and discussion (Homework #5 due)</td>
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<td><strong>Week 6</strong></td>
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<td>Oct 4</td>
<td>Libraries (BACs, PACs, YACs)</td>
<td>Benedik</td>
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<td>Oct 6</td>
<td>Clone mutagenesis: site directed, random, directed evolution</td>
<td>Benedik</td>
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<td>Oct 8</td>
<td>Review and discussion (Homework #6 due)</td>
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<td><strong>Week 7</strong></td>
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<td>Oct 11</td>
<td>Genetic mapping and positional cloning</td>
<td>Perkins</td>
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<td>Oct 13</td>
<td>Microarrays</td>
<td>Tag</td>
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<tr>
<td>Oct 15</td>
<td>Review and discussion (Homework #7 due)</td>
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Week 8
Oct 18  Sequencing and Next Generation sequencing  Benedik
Oct 20  Metagenomics  Benedik
Oct 22  Review and discussion (Homework #9 due)

Week 9
Oct 25  Loss of function strategies  Perkins
Oct 27  Gene targeting, insertional mutagenesis  Perkins
Oct 29  Review and discussion (Homework #8 due)

Week 10
Nov 1   Protein expression (prokaryotes)  Benedik
Nov 3   Gene fusions for expression studies and purification  Benedik
Nov 5   Review and discussion (Homework #10 due)

Week 11
Nov 8  Protein expression (eukaryotes)  Perkins
Nov 10  Cell culture and delivery systems  Perkins
Nov 12  Review and discussion (Homework #11 due)

Week 12
Nov 15  Protein detection: antibody structure and western blotting  Perkins
Nov 17  Protein-protein interactions: yeast two hybrid and phage display  Perkins
Nov 19  Review and discussion (Homework #12 due)

Week 13
Nov 22  Proteomics: Mass spec and protein identification  Lockless
Nov 24  XXX
Nov 26  No class - Thanksgiving

Week 14
Nov 29  Microscopy  Perkins
Dec 1   Fluorescence  Perkins
Dec 3   Review and discussion (Homework #13 due)

Dec 6   Last day of class (redefined day)
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
* Submit original form and attach a course syllabus.

1. Request submitted by (Department or Program Name): Dwight Look College of Engineering
2. Course prefix, number and complete title of course: ENGR 600 Engineering Graduate Study Abroad
3. Catalog course description (not to exceed 50 words):
For students in approved study abroad and reciprocal educational exchange programs.

4. Prerequisite(s): Graduate classification in engineering; admission to approved program abroad; approval of study abroad coordinator
Cross-listed with:
Stacked with:
Cross-listed courses require the signature of both department heads.

5. Is this a variable credit course? Yes ☑ No ☐ If yes, from 1 to 15
6. Is this a repeatable course? Yes ☑ No ☐ If yes, this course may be taken 2 times.
Will this course be repeated within the same semester? Yes ☑ No ☐

7. 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)

All graduate degree programs in the Dwight Look College of Engineering

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

9. Prefix: ENGR
   Course #600
   Title (excluding punctuation): Engineering Graduate Study Abroad
   Lec Lab Scr CIP and Unit Code: 15 0 0 15 3 0 9 9 9 9 9 9 9 9 9 0 9 6 5 1 1 - 1 2 0 0 3 6 3 2

Approval recommended by:
Robin Autenrieth, Chair, College/Department
Date 3/10/11
Department Head or Program Chair (Type Name & Sign)

Department Head or Program Chair (Type Name & Sign) Date
(if cross-listed course)

Submitted to Coordinating Board by:
Chair, GC or UCC Date

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 3/10
March 30, 2011

MEMORANDUM

TO: Sandra Williams  
Associate Director, Curricular Services

THROUGH: Dr. Karen Butler-Purry  
Associate Vice President, Office of Graduate Studies

THROUGH: Dr. David Reed  
Chair, Graduate Council

FROM: Dr. Robin Autenrieth  
Chair, Graduate Instruction Committee & Associate Dean for Graduate Programs  
Dwight Look College of Engineering

SUBJECT: New Course Request – ENGR 600: Engineering Graduate Study Abroad

To accommodate all graduate students in the Dwight Look College of Engineering who participate in reciprocal educational exchange programs (REEPs), we would like to request a new graduate course at the college level. ENGR 600 “Engineering Graduate Study Abroad” will act as a holding course for REEP students when they study abroad.

Attached you will find the new course request form. Thank you for your consideration of this request.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

1. Request submitted by (Department or Program Name): Department of Horticultural Sciences

2. Course prefix, number and complete title of course: HORT 609 Plants for Landscape Design II

3. Catalog course description (not to exceed 50 words):
Identification and use of indigenous and introduced landscape plants; plants for special uses in urban environments; emphasis on plants' ornamental attributes, cultural requirements, and adaptability in urban and suburban environments. Not open to students who have completed HORT 308.

4. Prerequisite(s): HORT 201, HORT 306, BOTN 101, HORT 606, or approval of instructor.

Cross-listed with: 
Stacked with: HORT 308

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 this course be repeated within the same semester? Yes ☐ No ☑

7. 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)

MAg, M.S., Ph.D. in Horticulture and MLA in Landscape Architecture

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

9. Prefix Course # Title (excluding punctuation)
   HORT 609 Plnts For Landscape Design II

   Lect Lab SCH CRIP and Exam Code
   0 3 0 2 0 4 0 1 0 6 0 1 0 0 0 5 1 5 2 0 1 2 - 1 3 0 0 3 6 3 2

   Approval recommended by:

   Department Head or Program Chair (Type Name & Sign) Date
   Dr. David Reed 4/11/2011

   Department Head or Program Chair (Type Name & Sign) Date
   Dr. David Reed 4/11/2011

   Submitted to Coordinating Board by:

   Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 3/10
HORT 609 PLANTS FOR LANDSCAPE DESIGN II
Course Syllabus, Spring 2012

Instructor: Dr. Michael Aloysius Arnold (http://aggie-horticulture/faculty/arnold.html)
Lecture: HFSB 102, Monday and Wednesday, 11:30 AM - 12:20 PM, stacked with HORT 308
Laboratories: One of five available laboratory times at the Nursery/Floriculture Field Lab should be arranged immediately at the start of classes. Available times are Tuesday 10:00 AM - 12:00 PM, Tuesday 1:00 PM - 3:00 PM, Tuesday 3:00 PM - 5:00 PM, Wednesday 1:00 PM - 3:00 PM, or Wednesday 3:00 PM - 5:00 PM.

Note that most laboratory sessions will meet in temporary classrooms at the TAMU Horticultural Gardens. However, laboratories may meet in several locations including HFSB (see a campus map) and FSLB on some occasions. Laboratory locations will be announced in preceding lectures or laboratory sessions. These alternative laboratory locations are necessary for students to obtain first hand observations of live plant specimens. If no location is announced students should report to the Nursery/Floriculture Field Lab at the TAMU Horticultural Gardens for that week’s laboratory.

Offices and telephone numbers:

Dr. Michael Arnold, HFSB 207, 845-1499. Home telephone number is 690-0265, emergencies only, not after 8:00 PM nor before 7:00 AM.

Messages:

Messages may be left in Dr. Arnold’s or the lab instructor’s mailboxes in HFSB 201, 979-845-1499, or via email for Dr. Arnold at ma-arnold@tamu.edu.

Office Hours:

Office hours for Dr. Arnold will be held for one hour prior to each lecture, 10:30 AM - 11:30 AM Monday and Wednesday, or by appointment (979-845-1499 or ma-arnold@tamu.edu).

Course Description:

HORT 609. Plants For Landscape Design II. (2-2). Credit 3. II. Identification and use of indigenous and introduced landscape plants; plants for special uses in urban environments; emphasis on plants’ ornamental attributes, cultural requirements, and adaptability in urban and suburban environments. Prerequisite: HORT 201, HORT 306, BOTN 101, HORT 608, or approval of instructor. Not open to students who have completed HORT 308.

Course Objectives: Students will be expected to develop understanding and skill in the following areas:

(1) Identification of selected landscape plant species on the basis of leaf, stem, fruit, flower, dormant twig, bark and whole plant characteristics.
(2) Ecological roles of selected plants in cultivated landscape environments.
(3) Basic knowledge of ornamental characteristics and environmental adaptability of important native and introduced plant species relating to their use in specific landscape situations.

(4) Correct usage of scientific names and terminology to describe plant taxa.

(5) Develop a working knowledge of potential limitations and hazards associated with the use of certain plant species in the landscape.

(6) Ability to obtain cultural and descriptive information on plant materials from literature and human resources.

(7) Ability to incorporate appropriate plants into landscape designs to maximize the chances for achieving the desired design goals within the environmental constraints of varied sites.

Lecture:

No electronic devices (laptop computers, palm pilots, raspberries, translators, calculators, cell phones, etc.) may be used during any lectures, exams, quizzes, or laboratory quizzes unless specifically requested in advance by student services on the student's behalf or approved by the instructor.

Examination Procedures:

Course grade:

Each student's grade will be based on a total of 3000 points for the semester. A standard grading scale will be utilized. However, the instructor reserves the right to curve individual exam or course grades upward if an individual or the class performance warrants such action. In no case will the curving of grades result in a worse grade than was earned using the standard scale enumerated herein. Do not count on a curved grading scale for the course. After teaching plant materials courses for over fifteen years, the instructor has curved only three exams. In order for an individual grade to be considered for curving up to the next highest grade, a student must be within 1% (30 points) of the next highest grade and have not missed more than two labs and/or lectures (as evidenced by missed examinations, lecture quizzes, lab quizzes, or bonus point opportunities). If the student has missed more than two labs and/or lectures, then their grade will not be eligible for curving up. This will apply to both excused and unexcused absences.

Each student's grade will be based on a total of 3000 points for the semester. A standard grading scale will be utilized. The tentative grading scale for the course is:

- 2700 (90%) to 3000 points (100%) = A
- 2400 (80%) to 2699 points (89%) = B
- 2100 (70%) to 2399 points (79%) = C
- 1800 (60%) to 2099 points (69%) = D
- 0 (0%) to 1799 points (<60%) = F

Point breakdown by grading testing instrument:

<table>
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<tr>
<th>Instrument</th>
<th>Points</th>
<th>Approximate % course total</th>
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<tr>
<td>Lecture exam I</td>
<td>250</td>
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<tr>
<td>Lecture exam II</td>
<td>250</td>
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<tr>
<td>Lecture quizzes (10 quizzes)</td>
<td>200 (20 each)</td>
<td>6.7%</td>
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<tr>
<td>Lecture final</td>
<td>500</td>
<td>16.7%</td>
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Lecture subtotal  1200  40.0 %
Proposal for individual project  100  3.3 %
Individualized application project  200  6.7 %
Field trips  300  10.0 %
Recitation subtotal  600  20.0 %
Laboratory quizzes  900 (100 each)  30.0 %
(9 of 11 required)
Laboratory final  300  10.0 %
Laboratory subtotal  1200  40.0 %
Course total  3000  100 %

Lecture:

Lecture Exams:

Lecture exams will emphasize ornamental/horticultural information concerning growth habit, ecological considerations, ornamental and cultural attributes, origin, availability and commercial value and use of selected plant taxa in the landscape. Lecture exams will encompass materials presented in lecture, reading assignments in the textbook or from the class website, and handouts. Students are expected to have read the sections of the required text relating to the topics and species covered in lecture. Weekly plant lists will be provided as handouts in lecture or posted on the class website (http://aggie-horticulture.tamu.edu/syllabi/308/home/frameset.htm). All taxa covered will be fair game for the lecture exams. Only the indicated taxa for laboratories (about 20 new taxa will be added each week to the cumulative total) will be covered on laboratory identification quizzes. Lecture exams will be cumulative, but emphasize the material covered since the previous exam. Lecture exams and the lecture final will consist of multiple choice, fill in the blank, lists of requested information, true/false, matching, labeling, design suggestions and/or short essay questions. The lecture final will generally be more comprehensive in nature than the first two lecture exams. No cell phones, computers, translators, or other electronic devices are allowed during any lecture or lab examination or quiz. All work is expected to be independent, no group work is allowed unless expressly permitted by the instructor.

Three lecture exams will be given on the tentative dates indicated below:
Exam 1 = 250 points. Monday, February 21, 2011, in class.
Exam 2 = 250 points. Monday, April 4, 2011, in class.
Final = 500 points. Wednesday, May 11, 2011, 10:30 AM - 12:30 PM.

Lecture Quizzes and Take-Home Assignments:

Past tracking of students' attendance at lecture and their performance on exams consistently indicated that good attendance tended to equate with good exam scores. Hence, ten unannounced quizzes and/or short take-home assignments will be made at the instructor’s discretion during the semester. Each quiz/assignment will be worth 20 points each (200 total points for the ten quiz/assignments) toward the final semester point total. Students must be present to take the quiz or personally hand in the assignment. Students are not permitted to take extra copies of, or make copies of, take home assignments for fellow
students who are not present during the day the assignment or quiz was made. Take-home assignments must be turned in at the beginning of the next lecture (or other date and time as specified by the instructor). **Late quizzes and assignments will not be accepted.** Quizzes will be based on questions from the previous lectures, assigned readings, or students will be asked to apply acquired skills and knowledge in problem solving scenarios. Assignments will be made that will enhance information gathering skills, incorporate current events into the course, or integrate plant materials use with landscape/interiorscape design concepts. A medical excuse, as defined in the university handbook, or a field trip or function that is a university approved absence are required to avoid zero points on missed quizzes or assignments. **All work is expected to be independent, no group work is allowed unless expressly permitted by the instructor.**

**Individualized Application Project:**

Each student in HORT 609 will be required to complete a two phased individualized application project. These project are designed to either enhance the student’s skills in practical large scale applications of the skills acquired in the course related to specification of plants for landscape designs or to permit students to develop additional expertise in communicating an in-depth information learned through literature searches or research efforts related to specific landscape plant materials topics. Examples would include such projects as, developing a detailed planting design and plants specifications for a large scale landscape design project (for example a planting design level plans and materials specifications for all or a large portion of an MLA student’s thesis design project), or the development of an extension bulletin or similar type of outreach educational materials for publication (after internal department review) on an in-depth landscape design or plant materials topic. Such topics will be selected on an individual basis with the student in consultation with the instructor. A preliminary proposal outlining the specific topics to be included in the project will be required before each student begins their project. This proposal will be worth 100 points toward the final course grade and must be completed prior to the first lecture exam. The project worth 300 points toward the final course grade will be due by Friday of the last full week of classes for the semester, but students are encouraged to complete it prior to this date.

**Field Trips:**

Three field trips will be organized for Fridays in the semester. These field trips will be held to familiarize the students with examples of various applications of the plant materials studied during the semester in real world settings. The finalized dates for the field trips will be announced early in the semester to allow students to coordinate the dates with their other course responsibilities. If an unavoidable course conflict arises, the student is responsible for notifying the instructor well in advance of the date. In such case, a fully referenced term paper (12 pt double spaced text with no more than 1 inch margins) of at least 10 pages in length (not including the bibliography) on a suitable substitute topic will be assigned in place of the field trip and due prior to or upon the day of the field trip. In the case of illness, a medical doctor's excuse will be required by class the Monday following the field trip and the term paper will be due one week after the field trip. Participation in each field trip will count 100 points toward the final grade (300 points total for the three field trips).

**Laboratory:**

**Announced Quizzes:**

Eleven weekly plant identification quizzes will be given beginning the second week of classes. Each quiz will be worth 100 points. Each individual's best 9 quizzes (of 11 possible) will count toward
the final grade. The two dropped quiz grades are to allow for the possibility of an absence during a laboratory quiz, whether the absence is excused or not. Unexcused absence during a quiz will result in zero points for that quiz. Excused absences in excess of the two drop quizzes must be obtained prior to the quiz or an official medical doctor's excuse from the student health center on campus will be required to be presented to the course instructor (Dr. Arnold) within 24 hours of the quiz. If additional excused absences are approved, the 900 point total for quizzes will be based on the average performance achieved on those quizzes that were taken. Prorated quiz grades will be assigned for students only if there have been three or more excused absences for laboratory quizzes. If more than four total excused or unexcused quizzes are missed, an incomplete may be assigned for the course at the instructor's discretion.

The first quiz will test your knowledge of the correct writing of scientific and common names of plants and identification of morphological traits of plants discussed in the initial laboratory and assigned lecture readings. Each of the succeeding quizzes will consist of 10 plants or cuttings (10 points per plant). Students will be expected to know the scientific (family, genus, specific epithet, and subtaxa if covered; 8 points) and common name (2 points) of each plant species (10 points total). Each misspelled word will count one point off. Leaving off appropriate punctuation (single quotes, hyphens, periods, etc.) counts as a spelling error.

Bonus plants may be added to quizzes at the discretion of the laboratory instructors, if in their judgment adverse weather conditions or other factors have made identification of the regular 10 plants or cuttings difficult. Bonus plants can only be used to increase students' quiz totals, not decrease them. Note that the same species/cultivar may occur more than once on a given quiz. Quiz material is cumulative throughout the semester. In addition to the names of plants that we have formally covered in laboratories, bonus questions may include family names or the genus name for a closely related species to those that we have formally studied in laboratory.

Laboratories and quizzes will be held rain or shine, so dress appropriately and bring pencils (ink will run if wet). Cuttings and/or potted specimens of the species covered for the week will be placed in the temporary classroom at the TAMU Horticulture Gardens prior to the first laboratory each week. These specimens will be retained in the classroom or the greenhouse at the gardens for the remainder of the work week and one additional work week (assuming the specimens remain intact). After this time students will need to go to the greenhouse, nursery or landscape locations of the specimens to study them or access the plant images on the Plant Picture Pages section of the class website. Laboratory instructor's decisions on laboratory quizzes are final. Print legibly (print, no script), illegible answers count as incorrect answers.
Laboratory grading for scientific and common names on laboratory quizzes:
Each plant is worth 10 points, which are awarded as follows:

**Straight species:**

<table>
<thead>
<tr>
<th>Family</th>
<th>Species</th>
<th>Common Name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aceraceae</td>
<td><em>Acer rubrum</em></td>
<td>Red Maple</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Subspecies, variety, or forma of a species:**

<table>
<thead>
<tr>
<th>Family</th>
<th>Species</th>
<th>Common Name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bignoniaceae</td>
<td><em>Chilopsis linearis</em> subsp. <em>arcuata</em></td>
<td>West Texas Desert Willow</td>
<td>2</td>
</tr>
<tr>
<td>Malvaceae</td>
<td><em>Malaviscus arboreus</em> var. <em>mexicanus</em></td>
<td>Giant Turk’s Cap</td>
<td>2</td>
</tr>
<tr>
<td>Caprifoliaceae</td>
<td><em>Viburnum plicatum</em> f. <em>tomentosum</em></td>
<td>Doublefile Viburnum</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cultivar of a species:**

<table>
<thead>
<tr>
<th>Family</th>
<th>Species</th>
<th>Common Name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bignoniaceae</td>
<td><em>Chilopsis linearis</em> ‘Dark Storm’</td>
<td>Dark Storm Desert Willow</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cultivar of a subspecies, variety or forma:**

<table>
<thead>
<tr>
<th>Family</th>
<th>Species</th>
<th>Common Name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabaceae</td>
<td><em>Gleditsia triacanthos</em> var. <em>inermis</em> ‘Skyline’</td>
<td>Skyline Thornless Common Honeylocust</td>
<td>2</td>
</tr>
</tbody>
</table>

Common names must include all words in the common name in the correct order to receive credit for the common name. One point will be deducted for each misspelled word, total points will not go below zero.

Leaving out the “X” on intergeneric hybrids, “x” on intrageneric hybrids, or single quotation marks on cultivars counts as a 1 point spelling error each.

Leaving out the subtaxa designations (“subsp.”, “var.”, or “f.”), or indicating them improperly, counts as a 1 point spelling error.

**Laboratory Final:**

The lab final will each consist of 30 potted plants or cuttings, with each plant being graded as described on the quizzes. The lab final will be worth 300 points toward the final grade. The lab final will be given during the last regularly scheduled lab periods. Decisions on the lab final by the laboratory instructors are definitive. Be aware that the laboratory final will likely include a greater proportion of the plants from the last few plant lists than from the first ones as these latter lists contain the material that has not been as thoroughly tested at that time.

Laboratory final exams will be given on the tentative dates indicated below:
Final = 300 points. Tuesday April 26 or Wednesday April 27, 2011. during lab period.
Makeup Policy:

Makeup examinations or lecture quizzes (see quiz section) will be granted only for excused absences (prior approval of the instructor, excuse from the student health center, or verifiable medical doctor's excuse if the student is out of town, student generated excuses will not be accepted). Two opportunities for dropped lab quizzes are provided during the laboratories. **Makeups for lecture exams must be scheduled within twenty four hours of the originally scheduled exam time.** Failure to contact the instructor (Dr. Arnold) within this twenty four hour period with a valid medical excuse will result in a zero for that examination, exceptions will be granted only if hospitalization is required.

**Required Textbook:**


**Supplementary lecture materials:**

Official plant lists will be posted on the class home page accessible at http://aggie-horticulture.tamu.edu/syllabi/308/home/frameset.htm, these will be the official lists of plants covered during the semester. Copies of the lecture presentations are available on the same web site as PowerPoint presentations. Color images and a synopsis of critical plant characteristics may also be available on the Plant Pictures Pages. Taxa can be accessed via this searchable database. One way that the plants can be accessed is by list (week) of coverage in on the search page. I will try to keep these updated during the semester. Any additional reading materials will be provided as linked pdf files on the course website. The above materials all carry the same copyright reservations as materials presented in the text and syllabus.

**Laboratories:**

Laboratories will be conducted as on-campus field trips during the laboratory periods. We will walk to landscape locations of plant materials on or near the Texas A&M University campus. Labs will originate from either the Nursery / Floriculture Field Lab at the Texas A&M University Horticultural Gardens, the Floriculture Greenhouses on main campus, or the Horticulture/Forestry Sciences Building. Dress for mild hiking conditions (long pants, hiking boots or tennis shoes, and appropriate coats, gloves, raincoats, etc. for cool or wet weather). Students will be notified of where the labs will meet in lecture or the previous lab, if no notification is given the labs will meet in the temporary classroom at the Texas A&M University Horticultural Gardens. All work is expected to be independent.

**A map to the Horticultural Gardens is available at:**

http://aggie-horticulture.tamu.edu/greenhouse/hortgardens/directions.html
Attendance:

*Attendance in both lecture and laboratory is mandatory.* Due to the nature of the material, slides and fresh plant samples, it is necessary for students to attend lectures and labs. Unexcused absences (without prior approval of the instructor or a doctor's excuse from student services or a verifiable medical doctor's excuse if you are out of town) during quizzes and exams will result in zeros for that quiz or exam. *Students are expected to attend the laboratory section in which they are officially enrolled,* unless prior permission is obtained from both the course instructor (Dr. Arnold) and the laboratory instructor(s) involved. See the sections on laboratory quizzes, lecture quizzes/assignments, and exam policies for information specific to attendance and these examination procedures. *Use of personal computers is not permitted during lectures or laboratories,* unless such use is documented as needed by disability services. The available desktop is too small so screens obscure views, computers can distract the user and surrounding students during lecture, and the typing can be annoying. *Cell phones should be turned off during lectures and laboratory periods.* If a person's cell phone rings, they are expected to turn it off or leave. No text messaging is permitted during class. *Audio or video recording or transmission of lectures or laboratories in any manner is prohibited.* Students are permitted to take pictures of the plant specimens in laboratories, but audio or video recording of labs is not permitted and unwanted photographing of laboratory instructors or fellow students is prohibited.

Cheating and Plagiarism:

"An Aggie Does Not Lie, Cheat or Steal or Tolerate Those Who Do." *Cheating in any form during quizzes, take-home assignments, or exams, will result in a zero for that examination and possible other disciplinary actions up to and including expulsion per current TAMU Student Rules.* Students observed giving or receiving answers during a quiz, exam, or assignment will receive a zero on that examination instrument. In the event of a repeat offense, an F will be assigned for the course. Copying or plagiarism (including failure to cite sources) on the assignments will result in a zero for the assignment. *Cheating and plagiarism defrauds the instructor and fellow students, is a violation of the TAMU honor code, and will not be tolerated.* In compliance with TAMU policy, all infractions will be reported via the Aggie Honor Code system (http://www.tamu.edu/aggiehonor/) and may result in more severe disciplinary actions than outlined above. Resources for students to clarify what is cheating, plagiarism, or academic dishonesty can be accessed on the web at http://www.tamu.edu/aggiehonor/student.html.

Suggested Inclusions from Speaker of the TAMU Faculty Senate:

*Copyright / plagiarism statement:*

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

As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated.

If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty."
Americans With Disabilities Act [ADA] Policy Statement:

"The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, services for students with disabilities in Room 126 of the Koldus Building, or call 845-1637."

Study Hints For HORT 609:

- Learn to identify approximately 25 to 30 species covered each week within the week that they are covered. This will not only enhance performance on lab quizzes, but reinforce the lectures with the identification features of each species.
- Copies of lecture slides (PowerPoint format) will be available on the class website (http://aggie-horticulture.tamu.edu/syllabi/308/home/frameset.htm) along with the course syllabus; other plant materials information is also available on the Plant Picture Pages (http://landscapeplants.tamu.edu/index.html).
- Go back and review what the twigs of deciduous plants look like after they loose their leaves in the fall or as the leaves expand and mature in the spring.
- Make flash cards with the species' common name and identification features on one side and the scientific name on the other side to aid identification skills and to learn the correct spelling of scientific and common names.
- Make lists of species with similar cultural, ornamental, ecological, and identification characteristics.
- Pay attention to family names, they are often clues to distinguishing among broad categories of species and provide hints on ecological requirements of unfamiliar taxa.
- Organize a study group. Students who participate in study groups and routinely attend lectures and labs consistently earn better grades.
- Study the specimens provided in the laboratories in a timely manner. Fresh specimens can deteriorate rapidly in hot weather (this can be a particular problem early in the fall semester or late in the spring).
- Do not wait till the last minute to study. This course contains much information and the plants take time to learn. It can be likened to learning a foreign language, if you keep up it is easy, if you once fall behind it is very difficult.
- There is a great deal of information to learn about the individual taxa in addition to the general concepts. Learning this detailed information is critical to proper use of the plants in landscape designs, however, it is often useful to think about what are the general characteristics or requirements for the majority of trees and shrubs. Then emphasis studying how an individual taxon differs from the "typical shrub or tree" for a give group. For instance, most trees and shrubs will grow well in a moist well drained slightly acidic fertile soil. Now for instance with most Rhododendron spp., one must have moist well drained acidic soils or they develop micronutrient deficiencies, hence they have an absolute requirement rather than being adapted to a broader range of soil conditions. Conversely, with Texas Mountain Laurel, Sophora secundiflora, plants have a tolerance for alkaline soils, but will also work on the more ideal soils which Rhododendron spp. inhabit. This tolerance to a particularly challenging soil condition would be important to remember. Similar typical versus atypical traits and responses can be envisioned for other plant characteristics. Essentially, remember what makes a given taxon unique, either good or bad, plus or minus in use or adaptation.
- Start early on your individual projects, fewer time conflicts with other course's projects and exams are likely to occur early in the semester than near the end. Do not procrastinate.
- Spend time outside the lab and lecture periods studying the plants, it takes time, there is no substitute for hard work! It is expected that students will spend two to three hours outside of class or lab for each hour spent in lecture or lab. The garden classroom and greenhouse is open weekdays from approximately 8:00 AM to 5:00 PM and sometimes the hours extend past those times. Please keep in mind that specimens will be cleared out for room cleaning and returned to the greenhouse, nursery, or storage cooler Friday afternoon so that they will be in good shape for Monday morning. Students are welcome in the lab any time during the work week that there is not a formal laboratory session underway in the room. The outdoor plantings at the TAMU Horticultural Gardens are open seven days a week, 365 days a year, during daylight hours.

Bonus Point Opportunities:

- As described under quizzes and attendance sections.
- Bonus questions may be included on some exams.
- Plant Materials Games will be held during one or more lecture periods.
- Students must be present, whether an absence is excused or not, to receive credit for bonus points. These are meant to be an extra incentive to students who are actually in attendance and are not a part of the required examinations for the course. Missing these however does document an unexcused absence if a medical or other excuse deemed valid by the instructor is not available for that day.
- Bonus points during lecture and laboratory often total 5 to 10% of the total points for the course. This means there is a potential for a built in 5 to 10% curve that can be earned throughout the semester. These points are only available to those in attendance during that period, regardless of if it is an excused absence or not. Bonus points must be earned and are another mechanism to encourage attendance and participation.

Extra Credit Work:

- Extra credit work will not be assigned, put your efforts into the assigned work.
Acknowledgment of the terms of this class as stated in the above syllabus

I, the undersigned, acknowledge that I have read and understand the terms of this HORT 609 course syllabus (as stated in the preceding syllabus) and that I agree to abide by the terms of this syllabus. All terms of this syllabus are subordinate to published TAMU policies and all federal, state, and local laws and ordinances. Subordination of one or more clauses in this syllabus does not render the remaining ones unenforceable.

Print your name: __________________________________________________________

Sign your name: __________________________________ Date __________________
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
* Submit original form and attach a course syllabus.

Form Instructions:

1. Request submitted by (Department or Program Name): College of Geosciences

2. Course prefix, number and complete title of course: OCNG 659: Ocean Observing Applications

3. Catalog course description (not to exceed 50 words): Conceptualization, design, and construction of oceanographic observing systems; practical experience with the Texas Automated Buoy System including system design, instrumentation setup and calibration, telecommunication systems, and data management.

4. Prerequisite(s): MS or PhD in OCNG or related field by permission of instructor

5. Is this a variable credit course? Yes □ No □

6. Is this a repeatable course? Yes □ No □

7. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      MS or PhD student in the College of Geosciences
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      MS or PhD student in the College of Geosciences

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

9. Prefix Course # Title (excluding punctuation) OCNG 659 OCEAN OBSERVING APPLICATION

   Lect. Lab SCH CIF and Fund Code Admin. Unit Acad. Year FICE Code
   0 3 0 0 3 4 0 0 6 0 7 0 0 0 2 2 1 4 0 1 1 - 2 0 0 3 6 3 2

   Approval recommended by: date

   Department Head or Program Chair (Type Name & Sign) Date

   Department Head or Program Chair (Type Name & Sign) Date
   (if cross-listed course)

   Submitted to Coordinating Board by:

   Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 3/10
COURSE SYLLABUS

OCNG 659: OCEAN OBSERVING APPLICATIONS

Fall 2011
Days: TBA, Room: TBA, Time: TBA
TTVN to Galveston Campus (GAL) (if interest allows)

Credit Hours: 3

Instructor:
Dr. Norman Guinasso
979-862-2323 ext. 114
Guinasso@tamu.edu

Objective:
To provide practical and hands-on training of oceanographic instrumentation setup, deployment, and recovery. Particular emphasis on time series applications and real-time systems.

Course description:
The course is designed to instruct the student to conceptualize, design, and construct observational oceanographic systems. The student progresses from instrumentation setup and calibration, through moored or floating system design, to the construction and use of telecommunication systems to report observations in real time. The course intends to provide practical and hands-on experience by using an existing ocean observing system, the Texas Automated Buoy System, as a training ground. The student is required to design and implement a class project for credit. At least one field trip will be made to service oceanographic instrumentation.

Prerequisites:
Graduate level.

Grading:
The student will be graded on a semester project relating to ocean observing systems and a written midterm and final exam. Weighting is (50% project, 25% midterm, and 25% final). Grades will be based on the following grading system: 90-100%=A, 80-89%=B, 70-79%=C, 60-69%=D, <60=F.
Attendance in class is expected. Excused absences will be granted based on University Policies as set forth in the student rules.

Course Topics/Calendar:

Operation
Week 1. Introduction to Oceanographic instrumentation
Week 2. Digital Data and Instrumentation Setup
OCNG 659: Ocean Observing Applications Course Syllabus

Dr. Norman Guinasso

Page 2

Week 3. Calibration and Refurbishment
Week 4. Binary to ASCII; Data extraction

**System Design and Construction**
Week 5-6. Mooring materials and design
Weeks 7-8. Buoy design and testing

**Communications (Linking instruments with telecomm)**
Week 9-10. Telephone Communication Systems
Week 11. Underwater Modems
Weeks 12-13. Satellite communication

**Real-time Systems**
Week 14. Real-time Quality control procedures & Real-time data dissemination

**List of assignments: Weekly reading assignments.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Reading Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 1</td>
<td>Introduction to Ocean Instrumentation</td>
<td>Data Acquisition and Recording Emory and Thompson Ch 1</td>
</tr>
<tr>
<td>Week 2 2</td>
<td>Introduction to Ocean Instrumentation</td>
<td>Data Acquisition and Recording Emory and Thompson Ch 1</td>
</tr>
<tr>
<td>3</td>
<td>Digital Data and Instrumentation Setup</td>
<td>SEASOFT V2: Seasave V7 CTD Real-Time Data Acquisition Software</td>
</tr>
<tr>
<td>Week 3 4</td>
<td>Digital Data and Instrumentation Setup</td>
<td>CTD data processing</td>
</tr>
<tr>
<td>5</td>
<td>Digital Data and Instrumentation Setup</td>
<td>Acoustic Doppler Current Profiler Principles of Operation: A Practical Primer</td>
</tr>
<tr>
<td>6</td>
<td>Digital Data and Instrumentation Setup</td>
<td>ADCP Underway data acquisition VMDAS, PLAN ADCP</td>
</tr>
<tr>
<td>Week 4 7</td>
<td>Instrument Calibration and Refurbishment</td>
<td>Instrument Manuals</td>
</tr>
<tr>
<td>8</td>
<td>Instrument Calibration and Refurbishment</td>
<td>Instrument Manuals</td>
</tr>
<tr>
<td>Week 5 9</td>
<td>Data Extraction, Binary to Ascii</td>
<td>Instrument Manuals</td>
</tr>
<tr>
<td>10</td>
<td>Buoy Design</td>
<td>Book, Berteaux, Coastal Ocean Buoy Engineering, 1991</td>
</tr>
<tr>
<td>Week 6 11</td>
<td>Buoy Design</td>
<td>Book, Berteaux, Coastal Ocean Buoy Engineering, 1991</td>
</tr>
<tr>
<td>12</td>
<td>Exam</td>
<td>xxx</td>
</tr>
<tr>
<td>Week 7 13</td>
<td>Mooring Design and Deployment</td>
<td>Mooring Design and Dymanics Users Guide: A Matlab Package, Dewey</td>
</tr>
<tr>
<td>Week</td>
<td>Mooring Design and Deployment</td>
<td>Mooring Design and Dynamics Users Guide: A Matlab Package, Dewey</td>
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<tr>
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<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>8</td>
<td>TABS Buoy Design</td>
<td>TABS Buoy Design-- Bender at al, 2007 and other papers</td>
</tr>
<tr>
<td>9</td>
<td>Data Systems</td>
<td>Tabs Buoy Data Systems, One shore Infrastructure, Buoy Computers</td>
</tr>
<tr>
<td>12</td>
<td>Real Time Systems, Shore based data management</td>
<td>Tabs system descriptive materials Handout</td>
</tr>
<tr>
<td>13</td>
<td>Real Time Systems, Shore based data management</td>
<td>Tabs system descriptive materials Handout</td>
</tr>
<tr>
<td>14</td>
<td>Real Time Systems, on line data bases</td>
<td>Tabs system descriptive materials Handout</td>
</tr>
<tr>
<td>18</td>
<td>Data Communication Systems</td>
<td>ARGOS, Globalstar, NOAA GOES and other materials, papers and handouts</td>
</tr>
<tr>
<td>20</td>
<td>Real Time Systems, Automated Data Dissemination</td>
<td>Tabs system descriptive materials Handout</td>
</tr>
<tr>
<td>23</td>
<td>Real Time Systems</td>
<td>Tabs system descriptive materials Handout</td>
</tr>
<tr>
<td>24</td>
<td>Exam</td>
<td>xxx</td>
</tr>
</tbody>
</table>

**Textbook:**
Oceans 2020: Science, Trends, and the Challenge of Sustainability (Paperback) by Intergovernmental Oceanographic Commission, International Council of Scientific Unions Scientific Committee on Ocean Research, John G. Field (Editor), Gotthilf Hempel (Editor), C. P. Summerhayes (Editor)

Coastal and Oceanic Buoy Engineering, Henri O. Berteaux, Published by H. O. Berteaux, P.O. Box 182, Woods Hole, MA 02543.


Selected equipment manuals and reprints.

**Resources:**
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
Copyright and Plagiarism Policy

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If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Students Rules, student-rules.tamu.edu, under the section "Scholastic Dishonesty."

Know the Code. Aggie Code of Honor:
http://www.tamu.edu/aggiehonor/
Special Consideration Items
MEMORANDUM

DATE: April 12, 2011

TO: Faculty Senate, Texas A & M University

THROUGH: Dr. Jorge Vanegas, Dean, and College of Architecture

FROM: Dr. Forster Ndubisi, Department Head, Landscape Architecture and Urban Planning

SUBJECT: Request to Change the Name of the Master of Science in Land Development and Minor Curriculum modification

On behalf of the faculty in the Department of Landscape Architecture and Urban Planning in the College of Architecture, I respectfully submit the attached proposals for a change in the title of the degree and a request for minor curriculum modification for our graduate program in land development.

We propose to change the title of the degree, currently known as “Master of Science in Land Development” to “Master of Land and Property Development.” No new costs are incurred beyond those that the Department can bear through gradual replacement of printed materials bearing the program’s current name and minor curriculum change proposed in the attached document.
PROPOSAL ONE: TO CHANGE THE NAME OF THE MASTER OF SCIENCE IN LAND DEVELOPMENT DEGREE

On behalf of the faculty in the Department of Landscape Architecture and Urban Planning in the College of Architecture, I respectfully request to change the title of the degree, currently known as "Master of Science in Land Development" to "Master of Land and Property Development." The proposed change in the title of the graduate degree would achieve the following:

1) Bring the degree name into alignment with the mission and goals of the program as well as the skills and knowledge provided by the Texas A & M University experience;
2) Accurately reflect the content and breadth of knowledge in the courses offered by the program, and;
3) Provide a much needed branding identity for the program.

The current Master of Science in Land Development degree focuses on both the physical and financial aspects of land and property development. Course work provides students with the knowledge and skills needed to relate project design and venture structure to site ecology and market economy, and to stress both entrepreneurial interests of private enterprise and regulatory guidelines of public entities. The existing degree title, the Master of Science in Land Development (MSLD) does not adequately capture the educational experiences provided by the program.

A required university review of the MSLD program was conducted in December, 2009, by two external reviewers, Dr. Michael Anikeeff, Director of The Edward St. John Real Estate Program at Johns Hopkins University, and Dr. Margaret McFarland, Director of the Real Estate Development Program and the Colvin Institute of Real Estate Development at the University of Maryland. The reviewers noted in their final report (January 6, 2010) that:

"The brand identity for "land development" is a major issue facing the program. It might limit the program's appeal and leave it outside the mainstream of the burgeoning number of interdisciplinary development degrees being offered in Schools of Architecture and Planning. Land development is an "old-fashioned" term used narrowly to describe the land subdivision process, whereas development has taken on larger meaning to cover the whole process, including asset management, investment, redevelopment, market analysis - indeed all aspects of the real estate industry."

The proposed change addresses the concerns raised by the external reviewers. It is also consistent with the current program's emphasis and a key distinguishing feature of our degree program that distinguishes it from similar programs---the focus on the creation of property and land development value through the conceptualization of the design, delivery, and management of land and property assets. As noted earlier, the proposed name change has unanimous support of faculty in the land development program and the department. No new costs are incurred beyond those that the Department can bear through gradual replacement of printed materials bearing the program's current name.
PROPOSAL TWO: REQUEST FOR CURRICULUM CHANGE LAND DEVELOPMENT PROGRAM

INTRODUCTION

This proposal is a request for a change in the curriculum for the graduate program in land development in the Department of Landscape Architecture and Urban Planning consistent with the proposed request for a change in the name of the degree program from a Master of Science in Land Development (MSLD) degree to a Master of Land and Property Development (MLPD).

CONTEXT

As noted earlier, in December, 2009, the Master of Science in Land Development (MSLD) program was evaluated by two external reviewers, Dr. Michael Anikeeff, Director of The Edward St. John Real Estate Program at Johns Hopkins University, and Dr. Margaret McFarland, Director of Real Estate Program at the University of Maryland. During their visit to Texas A & M University (TAMU) over a three-day period in December (6-9), 2009, they met with numerous people including university administrators, students, faculty, former students, college department heads, and representatives of the College of Architecture research centers. They prepared a final report that was transmitted to the Head of the Department of Landscape Architecture and Urban Planning and the Dean of the College of Architecture, on January 6, 2010 by the TAMU Office of Graduate Studies.

The Anikeef and McFarland report concluded that the MSLD Program is positioned to be a major force in land development education nationally but it is not yet there. The report made recommendations that would move the MSLD Program toward becoming a major force in land and property education and research. This proposal was developed in response to five (5) key recommendations made in the report. These are:

1. **Program duration**: Extend program duration for graduate studies in land development from the current 18-month (45 credits) program to a 24-month program, with the summer months devoted to internships and specialty course work. This strengthens the program’s quality, ensures a smoother flow of course scheduling, and maintains consistency in the balance of faculty work load.

2. **Core curriculum**: Restructure curriculum by reducing core credit hours to 33 hours; incorporate core aspects of the development process in the core course work; and provide electives (12 hrs. minimum) focused on specialization.

3. **Specializations**: Establish specializations/tracks, building upon existing certificates in the college and business school as well as program strengths and potential such as international development.

4. **Capstone course**: Restructure the content, delivery, and time of offering the capstone, taking advantage of off-location resources, especially in the metropolitan areas.
5. Image/brand: Strengthen the visibility/image/brand of the MSLD program since the current name of the degree [land development] is outdated and defines very narrowly the breadth of the courses offered in the program. In short, it does not accurately capture the educational experiences offered by the program.

EXISTING MASTER OF SCIENCE IN LAND DEVELOPMENT CURRICULUM

The current course structure of Master of Science in Land Development (MSLD) degree (including the two 3 credit point ACCT 640 and FINC 635 leveling courses that must be taken but these credit points are not included in the MSLD degree), is presented in Table One. The description of the courses offered in the current MSLD program is listed in the appendix.

Table One: Existing MSLD Curriculum

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SECOND YEAR

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CREDIT POINTS

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a) A streamlining of the core courses (from existing courses in the current curriculum) that focuses on all aspects of the development process but limited to about 33 credit hours (instead of the current 39 credit hours);

b) A restructuring in the sequence of course delivery;

c) A 24-month MSLD program (rather than the current 18-month) with a summer months at the end of the first year devoted to internship;

d) A specific set of specialization courses and tracks that include courses offered in the existing college and pertinent university-wide certificates (12 credits). Elective courses allow students to incorporate a Graduate Certificate within their course of study thereby providing the student with a high standard of multidisciplinary studies necessary for a well rounded land and property professional. Notable certificates in the College of Architecture are in environmental management, facilities management, health systems design, historic preservation, sustainable urbanism, and transportation planning. As is the situation today, students will receive these certificates concurrent with the MLPD degree. Students may elect also to tailor their concentrations to suit their research interests;

e) A clear distinction between a professional and a research track;

f) A restructured capstone course that will be delivered at the end of the program’s professional track as well as a newly developed research track with a thesis [this restructured course is not included in this proposal];

g) A change in the name of the degree to reflect accurately the educational experiences provided by the TAMU experience.

Table Two and Table Three depict the curricula of the professional and research tracks, respectively. For both tracks, the two 3 credit point ACCT 640 and FINC 635 leveling courses or equivalent must be taken before or in the first semester of enrollment but these credit points are not included in the MLPD degree.

**Table Two: Proposed MLPD Curriculum---Professional Track**

<table>
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**CREDIT POINTS**

| Sub Total | 24 | Sub Total | 21 | Sub Total | 1 |

**Total Credit Points: 45**

Table Three: Proposed MLPD Curriculum—Research Track

**FIRST YEAR**

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<th>Fall Semester</th>
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**SECOND YEAR**

<table>
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**CREDIT POINTS**

| Sub Total | 22 | Sub Total | 23 | Sub Total | 1 |

**Total Credit Points: 45**
In the research track, students are required to take a sequence of research method courses, CARC 601 (Foundation of Research in Planning and Design), CARC 602 (Research Methods in Planning and Design) and a total of 6 hours of research credits (LDEV 691). Students will be required to conduct a thesis. Three courses required for students in the professional tracks are optional. These are LDEV 685 (Directed Studies in Land Development), LDEV 672 (Public-Private Project Funding) and LDEV 688 (Capstone—Development Feasibility and Design II).
APPENDIX A: SUMMARY OF MSLD COURSES

Extract from TAMU Graduate Student Course Catalog—
Courses taught within the College of Architecture:

CARC 601: Foundations of Research in Planning and Design. (3-0) Credit 3.
Introduction to the research process and its application to problems in planning and design; presentation of philosophy and logic underlying the scientific method; critical analysis of planning and design literature according to each step of the research process: problem definition, hypothesis development, study design, analysis and interpretation of the findings (Graduate classification).

CARC 602: Research Methods in Planning and Design. (3-0) Credit 3.
Basic empirical research methods used in planning and design research: experimental, survey and case study designs; comparisons of the various methods; application of techniques in sample selection, data collection and analytic approaches (Graduate classification).

LDEV 661: Development and Environment. (3-0). Credit 3.
Land development in the context of environmental sustainability, human well-being and business profitability to foster a restorative economy; environmental easement and site analysis; state, federal and international regulatory issues; and human ecology and the future of land development. Prerequisite: Graduate classification.

LDEV 662: Land Development Law. (3-0) Credit 3.
Survey of real estate law with emphasis on Texas law; review of constitutional issues and basic legal concepts, including estates in land, contracts; private and public sector land use controls.

LDEV 663: Introduction to Project Management. (3-0) Credit 3.
Project management processes for planning, scheduling, cost estimating, resource leveling, cost control and post-completion evaluation; issues in project organizational environments, documentation, quality control safety. Prerequisite: Graduate classification.

LDEV 664: Market Analysis for Land Development (3-0) Credit 3.
Techniques and data sources for market analysis for development; analysis for housing development; trade area analysis and market analysis for retail development; analysis for office, industrial parks and for specialized development. Prerequisite: Graduate classification.

LDEV 665: Land Development Trends (3-0) Credit 3.
Exploration of current changes and tendencies observed in land and real estate development, both at the national and international level. Demographic variables, economic conditions, national and international migration patterns, international and domestic financial markets are analyzed to explain current land and real estate market conditions. Prerequisite: Graduate classification.

LDEV 667: Development and Design Economy (3-0) Credit 3.
Interface between the physical and financial dimensions in the design and development process to achieve building and project economics; creating a physical product and a financial venture...
that responds to social and environmental concerns and to market economy and feasibility analysis. Prerequisite: Graduate Classification

LDEV 668: Land Development Practice (2-2) Credit 3.
Strategies, methods and techniques of land development including: site selection criteria; urban infrastructure; market evaluation; conceptual arrangement of land uses and structures; conceptual design and regulatory considerations; lending institutions; location theories; value theories, regulatory agencies. Prerequisite: LDEV 667 or approval of instructor.

LDEV 671: Sustainable Development (3-0). Credit 3.
Sustainability perspectives about values, rights, property and what constitutes an optimum human environment; sustainability principles and case studies emphasizing on-the-ground, incentive-based land development that balances economic growth with environmental quality. Prerequisite: Graduate classification.

LDEV 672: Public-Private Project Funding (3-0). Credit 3.
Financing and related issues in public-private development projects; explores structuring, valuing and managing projects and investigates the interaction between suppliers, operators, lenders and contractors; introduction to financial tools: loans, credit, interest rates and financial models. Prerequisite: Graduate classification.

LDEV 673: International Development Planning (3-0). Credit 3.
International variations in urban growth and land development strategies: savings, aid and trade policy options for cities and regions; international co-development programs; application of planning and urban land development professions in contemporary global context. Prerequisite: Graduate classification.

LDEV 681: Seminar (1-0). Credit 1.
College of Architecture research activities pertaining to land and real estate development; preparation and presentation of required final paper for MS in Land Development examination. Prerequisite: Graduate classification in land development.

LDEV 684: Professional Internship Credit 1 to 12.
Professional practice under approved arrangement with public or private land or real estate development agencies in the United States or abroad. Prerequisites: Approval of committee chair and program coordinator.

LDEV 685: Directed Studies Credit 1 to 12
Individual and group problems dealing with application of strategic plan development theory in practice: opportunities to select international or domestic development projects of special interest. Prerequisite: Approval of instructor.

LDEV 687: Development Feasibility and Design (3-9). Credit 3.
Selected residential and non-residential development projects of varying size analyzed by student teams with respect to the following: economic feasibility and cash flow; site analysis; and design concept. Prerequisite: Approval of instructor.
LDEV 688: Development Feasibility & Design II (1-6) Credit 3
Plans and venture structures for selected residential and non-residential development projects of varying size analyzed by student multidisciplinary teams with respect to the following: economic feasibility and cash flow and site and design plans and costs. Prerequisite: LDEV 687 or approval of instructor

LDEV 689: Special Topics Credit 1 to 4.
Selected topics in an identified area of land development. May be repeated for credit. This course number is often used for a course before that course is approved and given a permanent number. Prerequisite: Approval of instructor.

LDEV 691: Research Credit 1 or more each semester
Research for and preparation of theses or dissertation: Doctoral dissertation or approval of committee chair

LDEV 693 Professional Study Credit 1

Courses taught outside the College of Architecture (currently required in the MSLD program)

Accounting concepts and relationships essential to administrative decisions; use of accounting statements and reports as policymaking and policy execution tools. Classification 6 students and non-business graduate students may enroll in this course. Prerequisite: Graduate classification. (Required MSLD program leveling course: Page 261 of the Graduate catalog)

FINC 635: Financial Management for Non-Business (3-0). Credit 3
External and internal factors affecting financial decision making in the firm; fundamental concepts of accounting and managerial economics
Prerequisite: ACCT 640 or equivalent or approval of instructor (Required MSLD program leveling course: Page 376 of the Graduate catalog)

FINC 670: Real Property Analysis (3-0). Credit 3.
Provides the economic and financial tools used to analyze real estate investments, new property developments and the redevelopment of existing properties. Prerequisite: Graduate classification

FINC 676: Commercial Real Estate Law (3-0). Credit 3.
Commercial real estate law including legal ownership interests in oil and gas law, real estate sales contacts, financing, instruments and closings, commercial leases and real estate regulations and taxation. Classification 6 students may not enroll in this course. Prerequisite: Graduate classification.