8. Other Items

New Course – from UCC November 14, 2008 Meeting

**BIOL 467. Integrative Animal Behavior. (3-0). Credit 3.** Examines how behavior contributes to survival and reproduction, and how evolutionary history and ecological circumstance interact to shape the expression of behavior; focus on integrative nature of behavior: how the interaction of evolutionary processes, mechanistic constraints, and ecological demands determine behavioral strategies. Prerequisite: Any one of the following: BIOL 214, 357, 388, 405, 434, 466, or approval of instructor.

New Courses – from UCC December 11, 2008 Meeting

**VIST 270. Computing for Visualization I. (3-0). Credit 3.** Introduction to the theory and practice of visual computer based problem solving; system tools; problem solving principles and practice; basics of software interaction and interface organization; development concepts and principles useful in digital art and visualization production. Prerequisite: MATH 151.

**VIST 486. Introduction to Game Design. (3-0). Credit 3.** Computer game design; emphasis on interactive storytelling, game play and interface design; history of computer games, review of selected games; analysis of rules of play and simple game prototype development. Prerequisite: Junior or senior classification.

Change in Courses – from UCC December 11, 2008 Meeting

**ARCH 331. Foundation Structures.**

Lecture and lab hours

<table>
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<th>From:</th>
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<tr>
<td>(3-0) Credit 3.</td>
<td>(2-2) Credit 3.</td>
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**THAR 145. Basic Theatrical Design.**

Course number

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<td>THAR 145.</td>
<td>THAR 245.</td>
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**VIST 271. Computing Environments.**

Course title

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<tr>
<td>Computing Environments.</td>
<td>Computing for Visualization II.</td>
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</table>
Course description, prerequisites

From: Introduction to the theory and practice of visual computer based problem solving; system tools; scripting; high level programming constructs; interactive programming and interface design; development concepts and principles useful in digital art and visualization production. Prerequisites: CPSC 206 or approval of the Chair of the Visual Studies Option.

To: Continuation of Computing for Visualization I; concepts of object oriented programming; emphasis on principles and techniques useful for three dimensional visualization and real time graphic display. Prerequisite: MATH 152; VIST 270.
Texas A&M University

Departmental Request for a New Course
Undergraduate • Graduate • Professional

Submit original form and attach a course syllabus.

1. This request is submitted by the Department of Biology

2. Course prefix, number and complete title of course: BIOL467, Integrative Animal Behavior

3. Course description (not to exceed 50 words): Examines how behavior contributes to survival and reproduction, and in turn how evolutionary history and ecological circumstance interact to shape the expression of behavior. The major focus will be the integrative nature of behavior: how the interaction of evolutionary processes, mechanistic constraints, and ecological demands determine behavioral strategies.

4. Prerequisite(s): BIOL214, 357, 388, 405, 434, 466 or consent of instructor

5. Is this a variable credit course? ☑ Yes ☐ No

6. If yes, from _______ to _______

7. Is this a repeatable course? ☑ Yes ☐ No

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

9. If yes, this course may be taken _______ times.

10. Has this course been taught as a 489/689? ☑ Yes ☐ No

11. Indicate the number of students enrolled for each academic period it was taught. 07C-20; 08C-17

12. 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)

   BA and BS BIOL, BMCB, MBIO, ZOOL

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

14. Prefix Course # Title (excluding punctuation) Admin. Unit Acad. Year FICE Code

<table>
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<th>Lect.</th>
<th>Lab</th>
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<th>Admin. Unit</th>
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</table>

15. Approval recommended by:

   Head of Department Date

   Chair, College Review Committee Date

16. Submitted to Coordinating Board by:

   Dean of College Date

   Date

   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201.
Curricular Services – 11/07

Received OCT 07 2008
BIOL 467 Integrative Animal Behavior

Day: MWF
Time: 3:00-3:50 pm
Location: HECC 201
Number of Credits: 03 Credits

Instructor:
Dr. Gil Rosenthal
Department of Biology
Room 204, Butler Hall
Phone: 979-255-6119
Email: grosenthal@mail.bio.tamu.edu
http://www.bio.tamu.edu/users/rosenthal/
Office hours: by appointment

E-mail will be the primary means of communication for the course. Check your email often!

Course Pre-requisites: Any one of the following: BIOL214, 357, 466, 388, 405, 434 or consent of instructor

Course description: This lecture-based course examines how behavior contributes to survival and reproduction, and in turn how evolutionary history and ecological circumstance interact to shape the expression of behavior. The major focus of the course will be the integrative nature of behavior: the interaction of evolutionary processes, mechanistic constraints, and ecological demands involved in selecting for a set of behavioral strategies. Readings will be drawn from contemporary reviews and the primary literature.

Course requirements:
• Attend all lectures and discussion sections. Contact instructor if you must miss/have missed class due to illness or extraordinary personal problems. When possible, let me know of any dates you know are coming up (religious holidays, extracurricular activities) at the beginning of the semester.
• Participate actively in discussions. Each day, one student will be responsible for leading the paper discussion with pertinent points about the assigned topic.
• Short problem sets, involving quantitative methods on each topic, to be handed out after some lectures and due back by the next lecture.
• Take-home, open-book exams: a midterm and a final hour exam, each as follows: answer four questions clearly and concisely in about 10 min each.
• Term paper, written in Behavioral Ecology format, on a topic to be chosen in consultation with the instructor, 12-15 double-spaced pages excluding figures and references. A referenced topic list is due Oct. 15, an oral presentation of the paper is due the last week in November, and the final paper is due at the end of the semester.

Late assignments will be downgraded a letter grade for each day late unless a University approved excuse is submitted. Late exams will be downgraded a letter grade for each 15 minutes late.

Course goals: The goal of this course is to provide a sophisticated understanding of
animal behavior from both mechanistic and evolutionary perspectives, and more generally to encourage thinking about biology as a conceptually unified discipline. Students will also learn how to critically evaluate and discuss original research papers as well as improve their skills at oral and written expression.

**Grading:** Letter grades will be assigned based upon midterm (20%) and final examinations (20%), participation (20%), research paper (25%), and oral presentation (15%).

**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 Cain Hall or call 845-1637.

**Academic Integrity Statements**

**AGGIE HONOR CODE**

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

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

For additional information please visit [http://www.tamu.edu/aggiehonors/](http://www.tamu.edu/aggiehonors/)

**LECTURES AND READINGS**

Please download paper yourself unless specified and read **by the lecture for which it's assigned.**

**Date Topic Reading**

1

Mon

Aug 27

Course organization; introduction to animal behavior

2

Wed

Aug 29 Adaptationism


3

Fri Aug

31

Genes, environment, and behavior.

Marler, P. 1991. The Instinct to Learn. **PROVIDED BY INSTRUCTOR.**

4

Mon

Sep 03

Modern comparative methods

Ryan, M. J. 1995. Phylogenetics in behavior: some cautions and expectations. **PROVIDED BY INSTRUCTOR.**

5

Wed

Sep 05

GUEST LECTURE: Matt Dugas, OU

Mock, DW and LS Forbes. 1995. The evolution of parental
optimism. TREE 10:130-134.

6
Fri Sep
07
Optimal foraging and the
ideal free distribution
Foraging: A Selective Review of Theory and Tests. The
Quarterly Review of Biology, 52, 137-154.

7
Mon
Sep 10
Cognitive constraints on
foraging
Dukas, R. 2002. Behavioural and ecological consequences
of limited attention. Phil. Trans. Roy. Soc. B 357: 1539-
1547.

8
Wed
Sep 12
Foraging: optimizing
nutritional balance
Pompilio, L., Kacelnik, A. & Behmer, S. T. 2006. State-
Dependent Learned Valuation Drives Choice in an

9
Fri Sep
14
GUEST LECTURE: Ginger
Carney
TBD

10
Mon
Sep 17 Predator/prey coevolution
Vermeij G 1994. The evolutionary interaction among
species: selection, escalation, and coevolution. Annu Rev

11
Wed
Sep 19
Warning coloration,
cognition, and predator/prey
relationships
favors mimicry of a less toxic model in poison frogs. Nature,
440, 208-211.

12
Fri Sep
21
GUEST LECTURE: Seth
Coleman
Coleman, S. W., Patricelli, G. L. & Borgia, G. 2004. Variable
female preferences drive complex male displays. Nature,
428, 742-745.
Mon
Sep 24
Introduction to animal communication I

Wed
Sep 26 Animal communication II
Rosenthal, G. G. Spatiotemporal aspects of visual signals in animal communication. PROVIDED BY INSTRUCTOR.

Fri Sep
28 Learning and communication

Mon
Oct 01 Evolutionary game theory TBD

Wed
Oct 03 Fighting and assessment

Fri Oct
05
Allometries and agonistic displays

Mon
Oct 08
Sexual selection I: evolution of traits and preferences

Wed
Oct 10
Sexual selection II: sensory drive and neural constraints on mate choice

Fri Oct
12 MIDTERM EXAM

21
Mon
Oct 15
Sexual selection III: Sperm
competition: PAPER
TOPICS DUE
TBD
22
Wed
Oct 17
Sexual conflict and sexual
selection I
Holland B, Rice WR. 1998. Perspective: chase-away sexual
selection: antagonistic seduction versus resistance.
Evolution 52:1-7, and reply by Rosenthal and Servedio
1999.
23
Fri Oct
19
Sexual conflict and sexual
selection II
Resolve Sex-Linked Sexual Antagonism. Science, 310,
119-121.
24
Mon
Oct 22 Alternative mating strategies
polymorphism in the swordtail Xiphophorus nigrensis:
testing the prediction of equal fitnesses. American Naturalist
25
Wed
Oct 24 Evolution of parental care
26
Fri Oct
26 Parent-offspring conflict
14, 249-264.
27
Mon
Oct 29 Maternal allocation
Limbourg TC, Mateman AC, Andersson S, Lessels CM
2004. Female blue tits adjust parental effort to manipulated
male UV attractiveness. Proc. R. Soc. Lond. B
28
Wed
Oct 31 Evolution of mating systems
selection, and the evolution of mating systems. Science,
197, 215-223.
29
Fri Nov
Sex allocation theory and
sex change
mode and speciation: the viviparity-driven conflict

Mon
Nov 05
Sex change and sexual
conflict
TBD

Wed
Nov 07
Kin selection and helpers at
the nest.
Balshine-Earn et al. 1998. Paying to stay or paying to
breed? Field evidence for direct benefits of helping behavior
in a cooperatively breeding fish. Behav. Ecol. 9: 432-438

Fri Nov
09
Mechanisms of kin
recognition
Gilbert, O. M., Foster, K., Mehdiiabadi, N. J., Strassmann, J. E.,
and Queller, D. C. 2007. High relatedness maintains
multicellular cooperation in a social amoeba by controlling

Mon
Nov 12 The evolution of cooperation.
Sachs, J. L., Mueller, U. G., Wilcox, T. P., and Bull, J. J.
2004. The Evolution of Cooperation, Quarterly Review of

Wed
Nov 14 Interspecific cooperation
Bshary R & Grutter AS 2006. Image scoring and cooperation

Fri Nov
16
Models of interspecific
cooperation
Freckleton, R. P., Côté, I. M. 2002. Honesty and cheating in
cleaning symbioses: evolutionarily stable strategies defined

Mon
Nov 19 Eusociality TBD

Wed
Nov 21
NO CLASS - HAPPY THANKSGIVING
Fri Nov
23 Presentations I
Mon
Nov 26 Presentations II
Wed
Nov 28 Presentations III
Fri Nov
30 FINAL HOUR EXAM
37
Mon
Dec 03
Humans and behavioral ecology; FINAL PAPERS DUE
SUGGESTED READINGS
to be placed on reserve in Evans Library
Texas A&M University
Departmental Request for a New Course
Undergraduate ♦ Graduate ♦ Professional

1. This course is submitted by the Department of Visualization

2. Course prefix, number and complete title of course: VIST 270. Computing for Visualization I

3. Course description (not more than 50 words): Introduction to the theory and practice of visual computer based problem solving; system tools; problem solving principles and practice; basics of software interaction and interface organization; development concepts and principles useful in digital art and visualization production.

4. Prerequisite(s) Math 151 (Engineering Mathematics I).

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? ______

8. This course will be:
   a. Required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      Bachelor of Environmental Design, Visual Studies Option
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

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

10. 

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (exclude punctuation)</th>
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<tr>
<td>VIST</td>
<td>270</td>
<td>COMPUTING FOR VISUAL I</td>
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<th>Admin. Unit</th>
<th>Academic Year</th>
<th>FICE Code</th>
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<td>Level 2</td>
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</table>

Approval recommended by:

Head of Department [Signature] [Date]

Chair, College Review Committee [Signature] [Date]

Dean of College [Signature] [Date]

Submitted to Coordinating Board by:

Dean of College [Signature] [Date]

Director of Academic Support Services [Signature] [Date]

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8836.

OAR/AS-04/07
MEMORANDUM:

The Undergraduate Curriculum Committee of the Department of Computer Science and Engineering evaluated the courses VIST 270, VIST 271, and VIST 486 that have been proposed or changed by the Department of Visualization in a meeting on Friday, January 23, 2009.

The proposed course VIST 270, Computing for Visualization I, gives an introduction to C++ that is geared towards applications in computer graphics. The changed course VIST 271, Computing for Visualization II, gives an introduction to object oriented programming in C++ with 3D computer graphics applications.

We appreciate that the two courses are structured such that each one of them does not have too much overlap with any course in computer science. However, we recognize that the topics covered in the union of VIST 270 and VIST 271 is mostly a subset of the topics covered in the union of CPSC 121, Introduction to Program Design and Concepts, and CPSC 441, Computer Graphics. Apparently, the courses are aimed at students with a lower level of technical skills. Therefore, the Department of Computer Science and Engineering does not object to the creation of these courses.

In the area of computer games, one can distinguish three types of courses including (a) the design of computer games, (b) the technical development of computer games, and (c) the artistic development of computer games. The three types of courses have nearly disjoint content. The proposed course VIST 486 belongs to the category (a), focusing on the initial idea of the computer game, the design of the rules of the game, and the visual interface. Little programming is required for such a course.

By contrast, our Computer Game Development course (CPSC 489, currently taught for the second time and intended to become part of the CS/CE catalogue by Spring 2010) belongs to the category (b). Our course focuses on the development of the computer game engine. It requires a high level of programming skills and practices collaboration in medium- to large-sized teams.

The Undergraduate Curriculum Committee concluded that there is little overlap between the proposed course VIST 486 Introduction to Game Design and the course CPSC 489 Computer Game Development. In fact, the courses nicely complement each other and students can probably take both courses. The Department of Computer Science and Engineering might even request at a later point to cross list VIST 486. We anticipate the support of the Department of Visualization when we make our Computer Game Development course permanent.

Best regards,

Andreas Klappenecker
UGCC Chair, Department of CSE

301 H.R. Bright Building
3112 TAMU
College Station, TX 77843-3112

Tel. 979.845.5534 Fax. 979.847.8578
http://www.cse.tamu.edu
Course Title: VIST 270. Computing for Visualization I

Description: VIST 270. Computing for Visualization I. (3-0). Credit 3. l.
Introduction to the theory and practice of visual computer based problem
solving; system tools; problem solving principles and practice; basics of
software interaction and interface organization; development concepts and
principles useful in two-dimensional digital art and visualization production.

Prerequisites: Math 151 (Engineering Mathematics I).

Introduction: Understanding the technical basis for computer-based visualization allows the
student to venture beyond the limitations of existing software applications. VIST
270, Computing for Visualization I, introduces the fundamentals of visualization
management and developmental techniques. Emphasis will be placed on 2D
concepts and techniques. These principles provide the background for higher
level coursework, personal exploration/practices, and basic research within the
context of visualization and/or real-time graphics.

Objectives: The learning objectives for the course are as follows:

- To introduce the history, theory and terminology relevant to computing, de-
sign and visualization.
- To become familiar with the visualization computing environment, tools,
practices and procedures.
- To introduce computing problem solving concepts and procedures.
- To explore the basics of 2D graphics programming using a high level
language and graphics library.
- To understand useful mathematical and data organizations useful in
computer graphics programming.

Course topics and calendar: Topics for the course are listed below. Other material may be presented
depending on class interaction and problem contexts. Project assignments
related to topic areas discussed during the lectures.

Week 1: Course introduction; software installation; The camera model; color
spaces in the digital environment
Week 2: Structuring the solution; the object and behavior paradigm
Week 3: Introduction to and use of standard graphic libraries; debugging
strategies; window management
Week 4: Controlling and organizing decisions; accessing and reusing
structures
Week 5: Coordinate spaces; data types; color specification; drawing
primitives; Viewing the 2D world
Week 6: Primitive transformations; defining distances, intersections and
overlap tests
Week 7: Structuring and accessing geometric data
Week 8: Creating patterns using transformations
Week 9: Animation principles; transforming patterns through time and
space; interaction techniques for modifying patterns in real time
Week 10: Texturing objects; selecting objects for modification
Week 11: Introduction to scripting; running scripts; variables and expressions
Week 12: Properties of the digital image; channels and compression techniques; creating conversion filters
Week 13: Structuring decisions interactively; converting multiple images using image characteristics
Week 14: Techniques for logical organization; structuring concepts and techniques

**Grading and Evaluation:**
Weekly assignments will be given during the course of the semester. Each assignment is intended to reinforce the concepts and principles discussed during the lecture.

Assignments will be graded based upon:
- **Completion:** completing the assignment, handed in on time
- **Programmatic requirements:** fulfilling the specific points/issues to be addressed in the assignment
- **Project quality:** problem solving with clarity, robustness and versatility
- **Coding practices:** good coding practices include documentation, visual clarity and organization

Unscheduled quizzes may be given at any time, so the student should be prepared. Exams and the final will cover concepts, processes and techniques discussed in the lectures and the required readings. While a significant amount of detail will be covered, the intent of the exams is not to challenge your short term memory, but your understanding of the course content, concepts and techniques.

Your final grade will be based upon the following:
- Assignments/problem sets: 45%
- 2 Exams: 30%
- Comprehensive final examination: 20%
- Class participation/ quizzes: 5%
- 100%

Final grades will be calculated based on the following scale:
- 100% - 90%: A
- 89% - 80%: B
- 79% - 70%: C
- 69% - 60%: D
- 59% - 0%: F

Late student work will be accepted only for reasons specified in the Texas A&M University Student Rules, Section 7.1.
Attendance: The University views class attendance as the responsibility of the individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at http://student-rules.tamu.edu/.

Required Texts: C++ Primer Plus (5th Edition)
Stephen Prata
Sams

OpenGL: A Primer (3rd Edition)
Edward Angel
Addison Wesley


Texas A&M University VIST 270: Computing for Visualization [T. Larsen]

Costs: No costs are expected beyond the text books.

Contact Information: Terry R. Larsen
Office: Langford ARCA 328
Office Hours: MTWRF 9:00-10:30
Telephone: 979.845.7068
Email: trl@archone.tamu.edu
SPECIAL NOTES

American Disabilities Act: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118 or call 846-1637.

Copyright: 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, lab problems, in-class materials, review sheets and additional problem sets and the contents of the class Web site. Because these materials are copyrighted, you do not have the right to copy the handouts, unless you are expressly granted permission. You have permission to make printouts of the on-line class notes and the class web site strictly for your use in this class.

Plagiarism: In this course, we want to encourage collaboration and the free interchange of ideas among students and in particular the discussion of reading and writing assignments and review questions, approaches to solving them, etc. However, we do not allow plagiarism, which, as commonly defined, consists of passing off as one's own the ideas, words, writings, etc. that belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one form of scholastic dishonesty. If you have questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section on Scholastic Dishonesty.

Aggie Honor Code: "An Aggie does not lie, cheat or steal or tolerate those who do"

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Texas A&M University
Departmental Request for a New Course
Undergraduate ♦ Graduate ♦ Professional
• Submit original form and attach a course syllabus. •

1. This course is submitted by the Department of Visualization

2. Course prefix, number and complete title of course: VIST 486. Introduction to Game Design

3. Course description (not more than 50 words): Computer game design; emphasis on interactive storytelling, game play and interface design; history of computer games; review of selected games; analysis of rules of play and simple game prototype development.

4. Prerequisite(s) Junior or Senior classification. Cross-listed with

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

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

7. Has this course been taught as a 489/689? □ Yes □ No

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 Arts in Visualization or Bachelor of Science in Visualization Sciences

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)
    VIST 486 INTRO TO GAME DESIGN

    Lect. Lab SCH Subject Matter Content Code Admin. Unit Academic Year FICE Code
    0 3 0 0 0 3 0 0 3 0 4 0 0 0 3 2 9 3 8 0 9 - 1 0 0 0 3 6 3 2

Level 4

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

Questions regarding this form should be directed to Sandra Williams at 845-8836.
OAR/AS-04/07

18 of 47 D
MEMORANDUM:

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The proposed course VIST 270, Computing for Visualization I, gives an introduction to C++ that is geared towards applications in computer graphics. The changed course VIST 271, Computing for Visualization II, gives an introduction to object oriented programming in C++ with 3D computer graphics applications.

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Best regards,

Andreas Klappenecker
UGCC Chair, Department of CSE

301 H.R. Bright Building
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Tel. 979.845.5534 Fax. 979.847.8578
http://www.cse.tamu.edu
Texas A&M University
Departmental Request for a New Course
Undergraduate ♦ Graduate ♦ Professional
Submit original form and attach a course syllabus.

1. This course is submitted by the Department of  Visualization

2. Course prefix, number and complete title of course:  VIST 486, Game Design.

3. Course description (not more than 50 words): Introduction to computer game design, with emphasis on interactive storytelling, game play and interface design; includes history of computer games, review of selected games, analysis of rules of play and simple game prototype development.

4. Prerequisite(s) None. Junior or senior classification. Cross-listed with _____________. Cross-listed courses require the signatures of both department heads.

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

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

7. Has this course been taught as a 489/689?  ■ Yes  o No  If yes, how many times?  3  Indicate the number of students enrolled for each academic period it was taught. 29 (2007a), 10 (2008a), 13 (2008c)

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 Environmental Design, Visual Studies option

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

10. 

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
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<tbody>
<tr>
<td>V I Z A 4 8 6 G A M E D E S I G N</td>
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</table>

Approval recommended by:

Head of Department  11/12/08

Chair, College Review Committee  11/24/08

Head of Department (if cross-listed course)  Date

Submitted to Coordinating Board by:

Dean of College  Date

Director of Academic Support Services  Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8836.
OAR/AS-04/07
Course Title: VIST 486. Introduction to Game Design

Description: VIST 486. Introduction to Game Design. (3-0). Credit 3.
Computer game design; emphasis on interactive storytelling, game play and interface design; history of computer games; review of selected games; analysis of rules of play and simple game prototype development.

This course will give an introduction to the principles and methodologies behind the rules and play of games. Starting from a look at some significant and influential games over several years, students will study how games function to create experiences, including rule design, play mechanics, game balancing, and the integration of visual, audio and textual elements into the game experience. Students will be taken through several steps of designing a game, starting from developing a story for the game to designing the game play and interface, developing concept art and possibly a mock-up or prototype. Students will also review and analyze existing games and literature related to game studies.

Introduction: Students will learn the basic principles of game design, including story, game play & mechanics and interface design. Students will also study existing games and learn how to review and analyze games. At the end of the course, students will be able to come up with their own idea for a game, develop the storyline and rules for the game, and implement a basic game prototype to illustrate their idea.

Prerequisite(s): Junior or Senior Classification

Objectives: The learning objectives for the course are as follows:
- To learn the basic principles of game design, including story, game play & mechanics and interface design.
- To study existing games and learn how to review and analyze games.
- To create a concept for a game, develop the storyline and game rules.
- To execute a basic game prototype based on previously defined concepts.

Course topics and calendar: Topics for the course are listed below. Other material may be presented depending on class interaction and problem contexts. Project assignments related to topic areas will be completed during the lab portion of the course.

Week 1: Course Introduction:
- what is a game?
- Purposes of a game
- advantages/disadvantages of computer based games
- brief history of computer games

Week 2: Taxonomy of computer games
- action games
- strategy games
- adventure games
Week 3: Taxonomy of computer games (continued)
  - construction/management games
  - puzzle games
  - educational games

Week 4: Classification of computer games, game genres
  - man against nature
  - combative/strategy
  - physical/biological simulation
  - business simulation

Week 5: Reviewing and analyzing games
  - trace memory
  - halflife

Week 6: Reviewing and analyzing games (continued)
  - simcity
  - global agenda

Week 7: Basic game prototype development
  - pre-production
  - production
  - milestones
  - testing
  - maintenance

Week 8: Game rule design, interaction between rules
  - what is a rule?
  - why rules anyway?
  - overview of major play rules
  - keeping the player(s) engaged – the learning experience

Week 9: Game rule design, interaction between rules (continued)
  - why too many rules are not a good idea
  - consistency/flexibility of play
  - the learning experience

Week 10: Game rules and game play
  - rule/game play interaction
  - effect of the number of players

Week 11: Basic interface design
  - what is a good interface?
  - Principles of a good interface
  - how the interface affects the game design/play

Week 12: Basic interface design (continued)
  - game structure and the interface
  - the game designer and interface designer
  - visual organization of the screen space
  - visual and audio collaboration
Week 13: Storyboards and other forms of presenting game ideas
   - what is a storyboard?
   - planning the visual component
   - creating the storyboard

Week 14: Student Game review

Grading and Evaluation:
Your grade will be based upon the following items:
   - Game review assignments: 15%
   - Short game design exercises: 30%
   - Game design project: 20%
   - Final game design project: 25%
   - Class participation: 10%
   - 100%

Final grades will be calculated based on the following scale:
   - 100% - 90%: A
   - 89% - 80%: B
   - 79% - 70%: C
   - 69% - 60%: D
   - 59% - 0%: F

Late student work will be accepted only for reasons specified in the Texas A&M University Student Rules, Section 7.1.

Game review assignments will include reviewing games and literature on games and making in-class presentations. Short game design exercises will involve modifying existing games and designing simple 2D or board games; no implementation will be required. The game design project will require coming up with a game concept, developing a storyboard for the game and designing the game play and interface; a simple implementation may be required. The final project will be a group project which will require development of a story-line for a game, designing the game play and interface, creating concept art and a playable prototype to illustrate the game design.

Attendance:
The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at http://student-rules.tamu.edu/.

Required Texts: None

Optional Texts:
- Rules of Play: Game Design Fundamentals
  Katie Salen and Eric Zimmerman
  MIT Press, 2004
Chris Crawford on Game Design
Chris Crawford
New Riders Press, 2003
ISBN 0-13-146099-4

Chris Crawford on Interactive Storytelling by
Chris Crawford
New Riders Press, 2004

Game Design Course: Principles, Practice and Techniques by
Jim Thompson, Barnaby Berbank-Green and Nic Cusworth
John Wiley & Sons, 2007

Supplemental Readings: As assigned in class.

Costs: No additional costs for the course are anticipated.

Contact Information: Vinod Srinivasan, Ph.D.
Office: Langford C418
Office Hours: TBA
Telephone: 979.845.6874
Email: vinod@viz.tamu.edu
SPECIAL NOTES

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

Copyright: 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, lab problems, in-class materials, review sheets and additional problem sets and the contents of the class Web site. Because these materials are copyrighted, you do not have the right to copy the handouts, unless you are expressly granted permission. You have permission to make printouts of the on-line class notes and the class web site strictly for your use in this class.

Plagiarism: In this course, we want to encourage collaboration and the free interchange of ideas among students and in particular the discussion of reading and writing assignments and review questions, approaches to solving them, etc. However, we do not allow plagiarism, which, as commonly defined, consists of passing off as one’s own the ideas, words, writings, etc. that belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one form of scholastic dishonesty. If you have questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section on Scholastic 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/.
Texas A&M University

Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

1. This request is submitted by the Department of Architecture.


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

   Cross-listed courses require the signature of both department heads.
   d) Change in course title and description. Enter complete current course title and current course description; complete proposed course title and proposed course description in items 4 and 5.
   e) Change in credit/contact hours. Complete item 6b. Underscore change(s). Attach a course syllabus.

4. Complete current course title and current course description:

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

6. a) As currently in course inventory:

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   b) Change to:

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   | Level | 3  |

Approval recommended by: 31 Oct. 08

Head of Department Date

Chair, College Review Committee Date

Head of Department (in cross-listed course) Date

Dean of College Date

Submitted to Coordinating Board by:

Date

Dean of College

Submit to Coordinating Board by:

Date

Director of Academic Support Services Date

Questions regarding this form should be directed to Sandra Williams at 845-8836.

OAR/AS – 04/07

26 of 47 D
DEPARTMENT OF ARCHITECTURE
120 HOUR CURRICULUM
CHANGES TO APPROVED COURSE

ARCH 331. FOUNDATIONS STRUCTURES WAS CHANGED FROM ENDS 231.
ARCHITECTURAL STRUCTURES I BUT THE 3 CREDITS WAS IDENTIFIED AS 3
LECTURE/0 LAB.

THE SUBMITTED SYLLABUS WITH THE ORIGINAL CHANGE REQUEST SHOWED 3
CREDITS FROM 2 LECTURE/2 LAB.
ARCH 331. Foundations Structures

Instructor:  Prof. Anne B. Nichols  Office Hours:  1-2 pm MW,
            A413 Langford  11:00-12:30 am TR
            (979) 845-6540  anichols@tamu.edu  (and by appointment M-R)

Catalogue Description:  Introduction to the physical principles that govern statics and strength of
materials through the design of architectural structures from a holistic view in the
context of architectural ideas and examples.  Introduction to construction, behavior,
and design considerations for simple and complex structural assemblies; computer
applications.  Concurrent enrollment in ARCH 305.  Prerequisites:  MATH 142 or
equivalent, PHYS 201.

Goals:  ARCH 331 is the study of structural design concepts that influence the development of
architectural space and form.  In all construction, the component parts of a structure
must be assigned definite physical sizes, constructed of specific materials and designed
to resist various load combinations.  The course is divided into three parts:  Statics,
Strength of Materials, and Design.  Statics involves the study of external forces and
the effects of these forces on bodies or structural systems in equilibrium (at rest or
moving with a constant velocity).  Strength of Materials involves analytical methods
for determining the strength, stiffness (deformation characteristics), and stability of the
various load-carrying members.  Design involves planning, assessing, and meeting
structural requirements of parts or the whole which are prescribed by building codes
and material structural design specifications.

Objective:  To understand the significance, assumptions, applications, and limitations of the basic
principles of Statics and Strength of Materials as they apply to the design and analysis
of structural members and systems within the context of architectural planning and
design.


Reference:  ACI 318-02 Code and Commentary
            AISC 3rd ed.  Load and Resistance Factor Design
            AISC 9th ed.  Allowable Stress Design
            National Design Specifications for Wood

Timetable:  CREDIT 3.0  (2-2)  3:55-5:10 pm  Lecture  T,R
            (section 500)  5:10-5:30 pm  Lab  T,R

Grading:  The levels listed for graded work (projects, quizzes, exams) and pass-fail work
(assignments) must be met or exceeded to earn the course letter grade:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Graded work</th>
<th>Pass-fail work</th>
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<tbody>
<tr>
<td>A</td>
<td>A average (90-100%)</td>
<td>Pass for 90% or more of assignments</td>
</tr>
<tr>
<td>B</td>
<td>B average (80-89%)</td>
<td>Pass for 83% or more of assignments</td>
</tr>
<tr>
<td>C</td>
<td>C average (70-79%)</td>
<td>Pass for 75% or more of assignments</td>
</tr>
<tr>
<td>D</td>
<td>D average (60-69%)</td>
<td>Pass for 65% or more of assignments</td>
</tr>
<tr>
<td>F</td>
<td>F average (&lt;59%)</td>
<td>Pass for 0% or more of assignments</td>
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</tbody>
</table>
Graded work: This typically constitutes 6 quizzes, a learning portfolio (worth 1.5 quizzes) and a final exam (worth 4 quizzes). This equates to proportions of approximately 52% to quizzes, 13% to the learning portfolio, and 35% to the final exam.

Pass/fail work: This constitutes all practice assignments and projects, each with a value of 1 unit. Criteria for passing is at least 75% completeness and correctness along with every problem attempted. Percent effort expected for a problem in a practice assignment is provided on the assignment statement. This is considered a lab course and the assignments are required work with credit given for competency. The work is necessary to apply the material and prepare for the quizzes and exam. It is expected that this work will be completed with assistance or group participation, but all graded work is only by the individual.

Policy: 1) Attendance: Necessary. Required.* And subject to University Policy. See Part I Section 7 in Texas A&M University Student Rules: http://student-rules.tamu.edu/ Absences related to illness or injury must be documented according to http://shs.tamu.edu/attendance.htm including the Explanatory Statement for Absence from class for 3 days or less. Doctors visits not related to immediate illness or injury are not excused absences. Attendance is required for both lecture and lab.

2) Lecture: The lecture slide shows that correspond to the Notes (see #4) are to be viewed prior to lecture which will be reserved for review of the full lecture and assigned readings. The lecture shows are available on the class web page and Vista (see #8).

3) Lab and Textbook: Lab is a tutorial session and will consist of problem solving practice requiring the textbook. All assignments entail problem solving.

4) Notes: The notes and related handouts are available on the class web page at http://archone.tamu.edu/faculty/anichols/index_files/courses/arch331/index.html, or on Vista (see #8). A full set can be purchased from the TEES copy center located on the second floor of Wisenbaker Engineering Research Lab. They are listed under Anne Nichols, ARCH 331. COSC 321 notes are NOT EQUIVALENT.

5) Assignments: Due as stated on the assignment statements. University rules on late assignments related to excused absences apply. Assignments with incorrect formatting will be penalized.

6) Quizzes: Quizzes will be given at any time during the period. Make-up quizzes without an excuse will not be given. Practice quizzes will be posted electronically.

7) Grader: Tan Zhang .................(tan1984@neo.tamu.edu)

8) Vista: Vista is a web course tool for posting, reading messages and replying as well as recording scores and is accessed with your neo account. This will be used to post questions and responses by class members and the instructor, for posting scores and for e-mail. It can be accessed at http://elearning.tamu.edu/

9) Final Exam: The final exam will be comprehensive, and is officially scheduled for 1:00-3:00 PM, Tuesday, December 9.

10) Other Resources: The Student Learning Center provides tutoring in math and physics. See their schedule at http://slc.tamu.edu/tutoring.shtml

* Except for death in the family, medical or deans’ excuse, and natural disasters.
11) **Aggie Honor Code:**  "An Aggie does not lie, cheat, or steal or tolerate those who do."
The University policy will be strictly enforced. See Part I Section 20 in Texas A&M University Student Rules: [http://student-rules.tamu.edu/](http://student-rules.tamu.edu/) Plagiarism (deliberate misrepresentation of someone else’s work as your own) will be treated strictly according to University policy as outlined by the Office of the Aggie Honor System: [http://www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/)

12) **The American with Disabilities Act (ADA)** is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring accommodation, please contact the Department for Student Life, Services for Students with Disabilities, in Cain Hall or call 845-1637. Also contact Prof. Nichols at the beginning of the semester.

**Learning Objectives:**

1) The student will be able to read a text or article about structural technology, identify the key concepts and related equations, and properly apply the concepts and equations to appropriate structural problems (**relevance**). The student will also be able to define the answers to key questions in the reading material. The student will be able to evaluate their own skills, or lack thereof, with respect to reading and comprehension of structural concepts, **clarity** of written communication, reasonable determination of **precision** in numerical data, and **accuracy** of computations.

2) The student will be able to read a problem statement, interpret the structural wording in order to identify the concepts and select equations necessary to solve the problem presented (**significance**). The student will be able to identify common steps in solving structural problems regardless of the differences in the structural configuration and loads, and apply these steps in a clear and structured fashion (**logic**). The student will draw upon existing mathematical and geometrical knowledge to gather information, typically related to locations and dimensions, provided by representational drawings or models of structural configurations, and to present information, typically in the form of plots that graph variable values. The student will be able to draw representational structural models and diagrams, and express information provided by the figures in equation form. The student will compare the computational results in a design problem to the requirements and properly decide if the requirements have been met. The student will take the corrective action to meet the requirements.

3) The student will create a structural model with a computer application based on the concepts of the behavior and loading of the structural member or assemblage. The student will be able to interpret the modeling results and relate the results to the solution obtained by manual calculations.

4) The student will be able to articulate the physical phenomena, behavior and design criteria which influence structural space and form. (**depth**) The student will be able to identify the structural purpose, label, behavior, advantages and disadvantages, and interaction of various types of structural members and assemblies. (**breadth**) The student will create a physical structure or structures using non-traditional building materials, considering material and structural behavior, in order to demonstrate the behavior and limitations of a variety of structural arrangements. The student will produce proper documentation and drawings of the size, spacing, location and connection of parts for the construction of the structure.
5) The student will interact and participate in group settings to facilitate peer-learning and teaching. In addition, the student will be able to evaluate the comprehension of concepts, clarity of communication of these concepts or calculations, and the precision and accuracy of the data used in the computations in the work of their peers.

**Tentative Schedule (subject to change at any time throughout the semester)**

<table>
<thead>
<tr>
<th>Lecture/Lab</th>
<th>Text Topic</th>
<th>Articles/Problems</th>
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</table>
| 1.          | Design Loads and Structural Performance Requirements | **Read**: O¹ Ch. 1; § 5.1; M pg. xv-xvi, pg. 10-14 (Loads)  
**Solve**: Assignment 1 (start) |
| 2.          | Overview of Structural Systems and Behavior | **Read**: M pg. 249-252 (Preliminary Considerations) & Ch. 17; note set 2 |
| 3.          | Structural Planning and Design Issues | **Read**: O Appendix B; M pg. 253-260; note sets 3.1, 3.2 & 3.3  
**Reference**: note set 3.4 |
| 4.          | Forces, Equilibrium of a Point & Analysis of Planar Trusses | **Read**: O § 2.1-2.3, 3.1, pg.89-95; M pg. 4-7 (Forces), pg. 29-46; note sets 4.1 & 4.2  
**Reference**: note set 4.3  
**Due**: Assignment 1 |
| 5.          | Mechanics of Materials | **Read**: O Ch. 6; M Ch. 2; note sets 5.1, 5.2 & 5.3 |
| 6.          | Moments & Rigid Body Equilibrium | **Read**: O § 2.4, 3.2, 3.3; M pg. 7-10 (Moments), pg. 14-18 (Supports); note sets 6.1 & 6.2  
**Due**: Assignment 2 |
| 7.          | Beam Shear and Bending | **Read**: O § 8.1-8.2, M pg. 77-82; note set 7  
**Quiz 1** |
| 8.          | Semi-graphical Method: Shear and Bending Moment Diagrams | **Read**: O § 8.3-8.4; (note set 7)  
**Reference**: note sets 8.1 & 8.2  
**Due**: Assignment 3 |
| 9.          | Beam Section Properties | **Read**: O § 7.1-7.4; M pg. 82-87; note sets 9.1 & 9.2 |
| 10.         | Beam Stresses | **Read**: O § 9.1-9.4; M pg. 87-93; note set 10  
**Due**: Assignment 4 |

¹O represents the Onouye text, while M represents the Moore text.
<table>
<thead>
<tr>
<th>Lecture</th>
<th>Text Topic</th>
<th>Articles/ Problems</th>
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<tbody>
<tr>
<td>11.</td>
<td>Other Beams and Pinned Frames</td>
<td>Read: O § 4.2, pg 73; M Ch. 13, pg. 93-94 (Continuous Beams); note set 11</td>
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<td>Quiz 2</td>
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<tr>
<td>12.</td>
<td>Rigid Frames - Compression &amp; Buckling</td>
<td>Read: O § 10.1, 10.2 &amp; 10.5; M pg. 67-70 (Columns), Ch. 9, pg. 97-98 (Slabs); note</td>
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<td></td>
<td></td>
<td>sets 12.1 &amp; 12.2</td>
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<td></td>
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<td>Reference: note set 12.3</td>
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<td>Due: Assignment 5</td>
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<td>13.</td>
<td>Design Loads, Codes and Methodology</td>
<td>Read: O § 5.1; M pg. 10-14 (Loads); note set 13.1</td>
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<tr>
<td>14.</td>
<td>System Assemblies and Load Tracing</td>
<td>Read: O § 5.2, 5.3, 4.4; note set 14</td>
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<td>Due: Assignment 6</td>
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<td>15.</td>
<td>Wood Construction</td>
<td>Read: O § 9.5-9.6; M pg. 233-237 (Timber); note sets 15.1 &amp; 15.2</td>
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<td>Materials &amp; Beam Design</td>
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<td>Column Design</td>
<td>Read: O § 10.4; note set 15.1</td>
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<td>17.</td>
<td>Joints and Connection Stresses</td>
<td>Read: note set 15.1</td>
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<td>18.</td>
<td>Steel Construction</td>
<td>Read: M pg. 237-241 (Steel); note set 18</td>
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<td>19.</td>
<td>Trusses, Decks &amp; Plate Girders</td>
<td>Read: O pg. 98-110; M Ch. 5 &amp; 6; note sets 18 &amp; 19</td>
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<td>Quiz 4</td>
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<td>20.</td>
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<tr>
<td>21.</td>
<td>Bolted Connections &amp; Welds</td>
<td>Read: note set 18</td>
</tr>
<tr>
<td>22.</td>
<td>Concrete Construction</td>
<td>Read: M pg. 241-243 (Concrete), Ch. 15; note set 22.1</td>
</tr>
<tr>
<td></td>
<td>Materials &amp; Beam Design</td>
<td>Reference: note set 22.2</td>
</tr>
<tr>
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<td>Due: Assignment 10</td>
</tr>
<tr>
<td>23.</td>
<td>T-beams &amp; Slabs</td>
<td>Read: note set 22.1</td>
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<tr>
<td></td>
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<td>Quiz 5</td>
</tr>
<tr>
<td>24.</td>
<td>Shear, Torsion, Reinforcement &amp; Deflection</td>
<td>Read: note sets 22.1 &amp; 24</td>
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<tr>
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<td>Due: Assignment 11</td>
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'O' represents the Onouye text, while 'M' represents the Moore text.
<table>
<thead>
<tr>
<th>Lecture</th>
<th>Text Topic</th>
<th>Articles/ Problems</th>
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<tr>
<td>25.</td>
<td>Floor Systems &amp; Continuous Beams</td>
<td>Read: M pg. 99-101, Ch. 16; note sets 22.1 &amp; 25.1</td>
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<tr>
<td></td>
<td></td>
<td>Reference: note set 25.2</td>
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<tr>
<td>26.</td>
<td>Columns &amp; Frames</td>
<td>Read: note set 22.1</td>
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<td>Due: Assignment 12</td>
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<tr>
<td>27.</td>
<td>Foundation Design &amp; Footings</td>
<td>Read: note sets 27.1 &amp; 27.2</td>
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<td>Quiz 6</td>
</tr>
<tr>
<td>28.</td>
<td>Masonry Construction Beams &amp; Columns</td>
<td>Read: M pg. 243-247 (Masonry+), pg. 70-76, pg. 163-171 (Arches); note set 28.1</td>
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<tr>
<td></td>
<td></td>
<td>Reference: note sets 28.2 &amp; 28.3</td>
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<tr>
<td></td>
<td></td>
<td>Due: Assignment 13 &amp; Learning Portfolio</td>
</tr>
<tr>
<td></td>
<td>Final Exam Period</td>
<td>Exam</td>
</tr>
</tbody>
</table>

*Note: Materials in the Class Note Set not specifically mentioned above are provided as references or aids.

\(^{1}\text{O}\) represents the Onouye text, while \(\text{M}\) represents the Moore text.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of
   Performance Studies

2. Course prefix, number and complete title of course:
   THAR 145: Basic Theatre Design

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

   Cross-listed courses require the signature of both department heads.

4. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 6. Attach a course syllabus.

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

6. a. As currently in course inventory:
   Prefix: THAR
   Course #: 1 4 5
   Title (excluding punctuation): BASIC THEATRE DESIGN
   Lect.: 0 3 0
   Lab: 0 0
   SCH: 3 5
   CIP and Fund Code: 0 0 5 0
   Admin. Unit: 2 0 0 0 3
   FICE Code: 2 1 9 6
   Level: 3 6 3 2

   b. Change to:
   Prefix: THAR
   Course #: 2 4 5
   Title (excluding punctuation): BASIC THEATRE DESIGN
   Lect.: 0 3 0
   Lab: 0 0
   SCH: 3 5
   CIP and Fund Code: 0 0 5 0
   Admin. Unit: 2 0 0 0 3
   FICE Code: 2 1 9 6
   Acad. Year: 0 9
   Level: 1
   Date: 3 6 3 2

   Approval recommended by:
   Head of Department: 9/30/08
   Chair, College Review Committee: 11/23/08
   Dean of College: 11/9/08
   Date

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

   Associate Director, Curricular Services: Date
   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201.
Curricular Services – 11/07
Basic Theatre Design

THAR 145-500

MWF 10:20-11:10 AM
Blocker 136
Instructor: Rebecca Wolf
Office: 140 Blocker
Office Hrs: TTh 12:00-2:00 p.m. or by appointment
Phone: 979-845-5586
E-mail: r-wolf@tamu.edu

Course Description

“Drama is life, to be sure, but life seen through the eyes of a dramatist, seen sharply and together, and given an arbitrary form and order. We see our own lives reflected as in a magic mirror, enlarged and simplified, in a pattern we had not perceived before. Everything on stage becomes a part of that other order – the words, the situations, the actors, the setting, the lights, the costumes. Each element has its own particular relation to the drama and plays its own part in the drama. And each element – the word, the actor, the costume – has the exact significance of a note in a symphony.”

Robert Edmond Jones

Everyday we are affected by our visual environment, by the clothing we wear, the objects around us, the atmosphere of the light. How can we employ design in theatre as a means of visual communication? During this course, you will explore the creative process and tools of the theatre designer with a focus on the connection between the script, the imagination, the intellect and the visual world of the play. Course material will be organized around several design projects introducing each area of visual design - costume, scenic and lighting design – exploring both theoretical approaches and visual presentation techniques with the semester culminating in a larger collaborative project. You will engage in readings, discussion, writing, presentation, drawing and painting in order to discover more about theatre design and your own creative mind.

Course Objectives

By the end of the course, you should be able to:

• Analyze a script and evaluate the design needs of the piece
• Develop a design concept for a play supported by script analysis and visual research
• Translate a design concept into unrealized visual designs for costume, scenery & lighting
• Communicate your ideas through drawing, color rendering, drafting, models, writing and oral presentation
• Collaborate with others to develop an overall design approach for a scripted play
• Effectively discuss and evaluate your own and others’ work
Course Materials

**Texts**

ISBN: 9780073514192

ISBN: 0878301844


*Riders to the Sea*, John Millington Synge (available on-line)

**Supplies**

Required:  
- Sketchbook (9”x12”)
- Pad of Watercolor Paper (Cold Press, 9”x12”)
- Several Drawing Pencils (B Series)
- Drafting Pencil (H or 2H)
- Art Eraser
- Watercolor Brush (Round 6 or 8)
- Binder/Sheet Protectors

You should have your sketchbook and drawing pencils by the third week of class. We will not be using the watercolor supplies until Oct. 17th.

Optional:  
- Architect Scale Rule
- Triangle (10” or 12”)
- Watercolor or Gouache paint
- Colored pencils or other color media

A classroom supply will be available for your use in the design lab; however, for convenience you may wish to purchase some of the above items.

Coursework Overview

**Class Participation:** Just as the success of a theatre production relies on the work of many people and their ability to collaborate, your experience in this course depends on the dialogue and environment created by its members. Your work and viewpoints provide important material for the course. At the same time, you gain from considering and evaluating the contributions of others. Therefore, your participation grade will reflect the quality and consistency of your preparation for class, active involvement in all class discussions/activities, respect for peers/instructor and contribution to the class environment. Any unexcused absences beyond the first two will result in a zero for the day.

**Reading Summaries:** Assigned readings serve as background and discussion material, so we will get the most out of our class sessions if everyone has read the assignments and given thought to their content prior to class. To aid you in this endeavor, you will need to complete a total of 10 brief reading summaries, five for the Jones reading assignments and five for the Gillette. Summaries are due the same day as the respective reading (one summary per day, regardless of the number of pages or chapters). Each summary, about half a page in length, should begin by identifying the key concepts/terms of the reading and then provide a short personal response. A minimum of five must be submitted by midterm (Oct. 13th). Also, you have the option of turning in up to two extra summaries, which will allow you to drop your lowest scores.
**Production Responses:** Students need to attend both department productions listed below. Tickets will be available for approx. $5 at the MSC Box Office. For *How I Learned to Drive* please write a one page response to the design elements. For *Lend Me a Tenor* submit a two page analytical critique of the production design.

*How I Learned to Drive* by Paula Vogel  
October 2-5 in Fallout Theatre (Blocker 144)

*Lend Me a Tenor* by Ken Ludwig  
November 13-16, 20-23 in Rudder Forum Theatre

**Scenic Project:** This first project acquaints students with the design process from the perspective of the scenic designer and introduces compositional principles and scenic graphic techniques. Includes an analysis paper supported by visual research as well as a drafted ground plan and colored perspective sketch for *M. Butterfly*.

**Costume Project:** During this project, students will continue to explore the design process, focusing on costume design, figure drawing and watercolor media. Includes an analysis paper supported by visual research and four colored costume renderings for *Tartuffe*.

**Lighting Project:** As an introduction to the objectives and process of the lighting designer, students will complete preliminary aspects of a lighting design for *Riders to the Sea*.

**Final Project:** For the culminating project, each student will pair up with a classmate to design for a play of their choice, subject to instructor approval. One person will design scenery and the other costumes. Includes a concept paper, visual research, preliminary sketches, color renderings or scenic model, presentation and self-evaluation.

**Evaluation**

**Grading**

Coursework will be weighted in your final grade as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>15%</td>
</tr>
<tr>
<td>Reading Summaries</td>
<td>10%</td>
</tr>
<tr>
<td>Scenic Project</td>
<td>15%</td>
</tr>
<tr>
<td>Costume Project</td>
<td>15%</td>
</tr>
<tr>
<td>Lighting Project</td>
<td>10%</td>
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<tr>
<td>Production Responses</td>
<td>10%</td>
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<tr>
<td>Final Project</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>

Your final grade is a reflection of your commitment, performance and growth throughout the semester. Specific grading criteria will be provided for each assignment.

Excellent \( A = 90-100\% \)

Good \( B = 80-89\% \)

Satisfactory \( C = 70-79\% \),

Passing \( D = 60-69\% \)

Failing \( F = \text{below 60}\% \)
Course Policies

Attendance
Your presence and punctuality at every class is expected and required, just as it would be in a professional work environment. Generally, course material builds on the previous lessons, so missing a class affects the continuity of your learning as well as your ability to successfully complete the design projects. Responsibility for keeping up with missed material and assignments lies with you. If you do miss a class, be sure to get any notes, announcements, handouts and assignments from a classmate before the next class meeting.

Unexcused Absences/Tardies:
Two (2) unexcused absences will be allowed without penalty. For each absence beyond the first two, you will lose three points, 1/3 letter grade, off your final grade average. Three instances of tardiness, with a tardy defined as arriving after roll is taken, will constitute one absence.

Excused Absences:
For excused absences, submit proper documentation in writing within one week of the absence. Consult the university list of excused absences.

When feasible, a student who knows s/he will be absent should seek instructor approval. Please submit a notification in writing (acknowledged e-mail is acceptable). Notification should be made prior to the day of the absence whenever possible. Absences will only be excused after-the-fact in unavoidable situations such as last minute illness or emergencies. In those cases, please notify the instructor in writing by the end of the second working day following the absence. (For example, if you are absent on a Wednesday, you would need to notify me by 5 P.M. on Friday.)

Documentation for all excused absences must be submitted to the instructor in a timely fashion, by the end of the class day after the absence, through a doctor’s note, university absence report or other official letter.

Consult the University Student Rules Section 7 for further information on University policy for absences (http://student-rules.tamu.edu/rule7.htm).

Late Work
Since you will be presenting and discussing assignments in class, it is essential that you complete all work on time. Please note due dates and presentation dates on the calendar. Except for University excused reasons, late assignments will be penalized one letter grade per day. All assignments are due at the beginning of class and are considered late after a 10 minute grace period. If you need an extension, you must discuss the situation with the instructor prior to the due date unless the situation is covered by the university excused reasons in Student Rule 7.

If you are absent from class on a due date, even for excused reasons, you still are responsible for turning in the assignment on time. If you know that you will be missing class when a graded assignment is due, please inform me prior to the due date and make plans to turn in your work early. Should a last minute illness or emergency arise, notify me ASAP to make alternate arrangements.
E-learning and E-mail
The syllabus, assignment sheets, grades and certain other course materials will be posted on Blackboard VISTA. Also, I periodically send out class announcements through e-mail, so please check your university e-mail account between class sessions. The best way to contact me is through e-mail at r-wolf@tamu.edu.

Office Hours
I strongly encourage you to maintain an ongoing dialogue with both classmates and the instructor concerning your design work. Thinking out loud with another person will help you develop your ideas, gain a fresh perspective and improve faster. I recommend meeting with me outside of class for individual feedback at least once for each of the larger design projects prior to the due date. Also, if you are not doing as well as you like in the course, please talk with me ASAP. If you cannot attend office hours, I’ll be happy to schedule an appointment.

Design Lab (Blocker 136)
The design lab is open for student use whenever classes or meeting are not being held. You are welcome to use any of the lab’s art and drafting supplies on the conditions that they remain in the room and you clean up your workspace and supplies before leaving. You will find the magazines on the bookcase particularly useful for research purposes and may cut out images from them. The computers are available as well for class related use. A keypad (soon to be card reader) provides you with 24/7 access to the room; please help maintain security by keeping the door closed.

Academic Integrity
AGGIE HONOR CODE

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

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

American with Disabilities Act (ADA) Policy
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 Cain Hall, room # B118, or call 845-1637.
### COURSE CALENDAR

Graded work due dates and presentation days are noted in bold. The instructor reserves the right to alter the following, if necessary.

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<thead>
<tr>
<th>DAY</th>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENT DUE</th>
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</thead>
<tbody>
<tr>
<td>M</td>
<td>Aug. 25</td>
<td>Intro/Syllabus</td>
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<tr>
<td>W</td>
<td>Aug. 27</td>
<td>Designer’s Role</td>
<td>Jones, Introduction</td>
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<td></td>
<td></td>
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<td>Jones, Chapters 1&amp;2</td>
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<tr>
<td>F</td>
<td>Aug. 29</td>
<td>Design as Process</td>
<td>Gillette, Ch. 1, pp. 1-20</td>
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<td>Gillette, Ch. 2, pp. 21-35</td>
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<td>M</td>
<td>Sept. 1</td>
<td>Scene Design Intro</td>
<td>Jones, Chapter 3&amp;4</td>
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<tr>
<td>W</td>
<td>Sept. 3</td>
<td>Script Analysis: <em>M. Butterfly</em></td>
<td>Hwang, <em>M. Butterfly</em> and 3-D Response</td>
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<td>F</td>
<td>Sept. 5</td>
<td>Scenic Considerations</td>
<td>Gillette, Ch. 9, pp. 161-185</td>
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<td>M</td>
<td>Sept. 8</td>
<td>Visual Research</td>
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<td>W</td>
<td>Sept. 10</td>
<td>Elements/Principles of Design</td>
<td>Gillette, Ch. 5, pp. 75-87</td>
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<td>Elements/Principles of Design</td>
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<td>Sept. 15</td>
<td>Thumbnail Sketches</td>
<td>Scenic Project: Analysis/Research Due</td>
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<td>Sept. 17</td>
<td>Theatre Spaces</td>
<td>Gillette, Ch. 4, pp. 51-74</td>
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<td>Sept. 19</td>
<td>Drafting the Ground Plan</td>
<td>Gillette, Ch. 7, pp. 113-135</td>
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<td>Rough Sketches Due</td>
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<td>Perspective Rendering</td>
<td>Gillette, Ch. 8, pp. 136-145</td>
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<td>W</td>
<td>Sept. 24</td>
<td>Drawing Techniques</td>
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<td>F</td>
<td>Sept. 26</td>
<td>Scenic Project Presentations</td>
<td>Scenic Project: Drafting and Perspective Due</td>
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<td>M</td>
<td>Sept. 29</td>
<td>Taymor’s <em>The Magic Flute</em> Video</td>
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<td>W</td>
<td>Oct. 1</td>
<td>Magic Flute Discussion/ Costume Intro</td>
<td>Jones, Chapter 5</td>
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<td>Oct. 6</td>
<td>Character Analysis</td>
<td>Gillette, Ch. 18, pp. 438-460</td>
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<td><em>Learned to Drive</em> Response Due</td>
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<td>W</td>
<td>Oct. 8</td>
<td>Research: Historical</td>
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<td>F</td>
<td>Oct. 10</td>
<td>Research: Conceptual</td>
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<td>Day</td>
<td>Date</td>
<td>Activity</td>
<td>Notes</td>
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<td>Oct. 13</td>
<td>Figure Drawing</td>
<td>Costume Project: Analysis/Research Due</td>
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<td>W</td>
<td>Oct. 15</td>
<td>Color Theory</td>
<td>Gillette, Ch. 6, pp. 88-112</td>
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<td>F</td>
<td>Oct. 17</td>
<td>Watercolor Media</td>
<td>Bring watercolor supplies Rough Sketches Due</td>
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<td>Oct. 20</td>
<td>Watercolor Techniques</td>
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<td>W</td>
<td>Oct. 22</td>
<td>Rendering Workday</td>
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<td>F</td>
<td>Oct. 24</td>
<td>Costume Project Presentations</td>
<td>Costume Project: Renderings Due</td>
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<tr>
<td>M</td>
<td>Oct. 27</td>
<td>Lighting Design Objectives</td>
<td>Jones, Chapter 6</td>
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<tr>
<td>W</td>
<td>Oct. 29</td>
<td>Lighting Considerations</td>
<td>Synge, <em>Riders to the Sea</em> Gillette, Ch. 14, pp. 338-344</td>
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<td>F</td>
<td>Oct. 31</td>
<td>Research and Visualization</td>
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<td>M</td>
<td>Nov. 3</td>
<td>Lighting Plot</td>
<td>Gillette, Ch. 14, pp. 344-367</td>
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<tr>
<td>W</td>
<td>Nov. 5</td>
<td>Plot/Paperwork</td>
<td></td>
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<tr>
<td>F</td>
<td>Nov. 7</td>
<td>Workday</td>
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<tr>
<td>M</td>
<td>Nov. 10</td>
<td>Lighting Project Presentations</td>
<td>Lighting Project Due</td>
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<tr>
<td>W</td>
<td>Nov. 12</td>
<td>Final Project Discussion/Workday</td>
<td>Have read play of choice</td>
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<tr>
<td>F</td>
<td>Nov. 14</td>
<td>Production Style</td>
<td>Jones, Chapter 7&amp;8</td>
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<tr>
<td>M</td>
<td>Nov. 17</td>
<td>Workday</td>
<td>Final Project: Rough Concept Due</td>
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<tr>
<td>W</td>
<td>Nov. 19</td>
<td>Scenic Models</td>
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<tr>
<td>F</td>
<td>Nov. 21</td>
<td>Costume Renderings</td>
<td>Research/Rough Sketches Due</td>
</tr>
<tr>
<td>M</td>
<td>Nov. 24</td>
<td>Discuss Tenor</td>
<td><em>Tenor Response Due</em></td>
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<tr>
<td>W-F</td>
<td>Nov. 26-28th</td>
<td>THANKSGIVING BREAK NO CLASS</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Dec. 1</td>
<td>Workday</td>
<td></td>
</tr>
<tr>
<td>Tues</td>
<td>Dec. 9</td>
<td>FINAL PROJECT PRESENTATIONS 8-10 AM</td>
<td>Final Project Due</td>
</tr>
</tbody>
</table>
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments.

1. This request is submitted by the Department of

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

   VIST 271 Computing for Visualization

3. Change requested

   a. Prerequisite(s): From: CPSC 206 or approval of the Chair of
   the Visual Studies Option
   To: MATH 152; VIZA 270

   b. Withdrawal (reason):

   c. Cross-list with:

   Cross-listed courses require the signature of both department heads.

   d. Change in course title and description. Enter complete current course title and current course description in item 4; enter proposed course title and proposed course description in item 5.

   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 6. Attach a course syllabus.

4. Complete current course title and current course description:

   Introduction to the theory and practice of visual computing based problem solving; system tools; scripting; high level programming constructs; interactive programming and interface design; development concepts and principles useful in digital art and visualization production.

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

   Continuation of Computing for Visualization I; concepts of object oriented programming; emphasis on principles and techniques useful for three dimensional visualization and real time graphic display.

6. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIST</td>
<td>271</td>
<td>COMPUTING ENVIRONMENTS</td>
</tr>
</tbody>
</table>

   Lect. | Lab | SCH | CIP and Fund Code | Admin. Unit | FICE Code | Level |
   |------|-----|-----|------------------|-------------|-----------|-------|
   0 3 0 0 0 0 3 0 9 9 9 9 9 0 9 0 2 0 2 9 0 0 3 6 3 2 2

   b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIST</td>
<td>271</td>
<td>COMPUTING FOR VISUALIZATION II</td>
</tr>
</tbody>
</table>

   Lect. | Lab | SCH | CIP and Fund Code | Admin. Unit | Acad. Year | FICE Code | Level |
   |------|-----|-----|------------------|-------------|------------|-----------|-------|
   0 3 0 0 0 3 3 0 9 9 9 9 9 0 9 0 2 9 3 8 0 9 1 0 0 3 6 3 2

   Approval recommended by:

   Head of Department
   Date: 11/21/08

   Chair, College Review Committee
   Date: 11/21/08

   Head of Department (if cross-listed course)
   Date: 11/21/08

   Dean of College
   Date: 11/24/08

   Submitted to Coordinating Board by:

   Associate Director, Curricular Services
   Date: 11/25/08

   Questions regarding this form should be directed to Sandra Williams at 845-8201.
   Curricular Services – 11/07
MEMORANDUM:

The Undergraduate Curriculum Committee of the Department of Computer Science and Engineering evaluated the courses VIST 270, VIST 271, and VIST 486 that have been proposed or changed by the Department of Visualization in a meeting on Friday, January 23, 2009.

The proposed course VIST 270, Computing for Visualization I, gives an introduction to C++ that is geared towards applications in computer graphics. The changed course VIST 271, Computing for Visualization II, gives an introduction to object oriented programming in C++ with 3D computer graphics applications.

We appreciate that the two courses are structured such that each one of them does not have too much overlap with any course in computer science. However, we recognize that the topics covered in the union of VIST 270 and VIST 271 is mostly a subset of the topics covered in the union of CPSC 121, Introduction to Program Design and Concepts, and CPSC 441, Computer Graphics. Apparently, the courses are aimed at students with a lower level of technical skills. Therefore, the Department of Computer Science and Engineering does not object to the creation of these courses.

In the area of computer games, one can distinguish three types of courses including (a) the design of computer games, (b) the technical development of computer games, and (c) the artistic development of computer games. The three types of courses have nearly disjoint content. The proposed course VIST 486 belongs to the category (a), focusing on the initial idea of the computer game, the design of the rules of the game, and the visual interface. Little programming is required for such a course.

By contrast, our Computer Game Development course (CPSC 489, currently taught for the second time and intended to become part of the CS/CE catalogue by Spring 2010) belongs to the category (b). Our course focuses on the development of the computer game engine. It requires a high level of programming skills and practices collaboration in medium- to large-sized teams.

The Undergraduate Curriculum Committee concluded that there is little overlap between the proposed course VIST 486 Introduction to Game Design and the course CPSC 489 Computer Game Development. In fact, the courses nicely complement each other and students can probably take both courses. The Department of Computer Science and Engineering might even request at a later point to cross list VIST 486. We anticipate the support of the Department of Visualization when we make our Computer Game Development course permanent.

Best regards,

Andreas Klappenecker
UGCC Chair, Department of CSE

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http://www.cse.tamu.edu
Course Title: VIST 271. Computing for Visualization II

Description: VIST 271. Computing for Visualization II. (3-0). Credit 3.
Continuation of Computing for Visualization I; concepts of object oriented
programming; emphasis on principles and techniques useful for three
dimensional visualization and real-time graphic display.

Prerequisites: Math 152 (Engineering Mathematics II); VIST 270 (Computing for Visualization I).

Introduction: Building on the principles introduced in VIST 270, this course extends the
concepts and techniques presented in 2D into three dimensions. Problem
solving concepts will be enhanced to allow better control and organization of
student developed work. Important topical areas for creating realistic images
will be explored which include lighting, shading and complex geometry.

Objectives: The learning objectives for the course are as follows:
- To introduce terminology and concepts for 3D visualization.
- To understand principles of object programming.
- To introduce procedures for resource control.
- To introduce principles of lighting and visual properties of materials.
- To explore useful 3D modeling and display techniques.

Course topics and calendar: Topics for the course are listed below. Other material may
be presented depending on class interaction and problem contexts. Project assignments
related to topic areas will be completed during the lab portion of the course.

Week 1: Course introduction; review of graphic library concepts and use;
useful utilities for organizing and controlling student work.
Week 2: Inheriting behaviors; extending operations with user defined
operators.
Week 3: Modeling worlds in 3D; transformations; connecting objects for high
level motion control.
Week 4: Time and motion control; basic principles.
Week 5: The virtual camera; properties and control; comparison to the "real"
camera and the human vision system.
Week 6: Extending 2D concepts into the 3rd dimension; billboard techniques;
level of detail.
Week 7: Storing geometric data; access and modification.
Week 8: Determining visibility of objects in a scene; basic techniques.
Week 9: Lighting and shading; illumination models; blending operations and
shadows.
Week 10: Lighting and shading continued; specifying material properties.
Week 11: Image and bump mapping; controlling visual characteristics;
antialiasing textures.
Week 12: Creating user interfaces; controlling objects and behaviors
interactively.
Week 13: Curves; definition, properties and uses in animation.
Week 14: 3D surfaces; formulation and use in creating complex geometry.
Grading and Evaluation: Five projects will be given during the course of the semester based on the lecture material.

Assignments will be graded based upon:
- **Completion**: completing the assignment, handed in on time
- **Programmatic requirements**: fulfilling the specific points/issues to be addressed in the assignment
- **Project quality**: problem solving with clarity, robustness and versatility
- **Coding practices**: good coding practices include documentation, visual clarity and organization

Unscheduled quizzes may be given at any time, so the student should be prepared. Exams and the final will cover concepts, processes and techniques discussed in the lectures and the required readings. While a significant amount of detail will be covered, the intent of the exams is not to challenge your short term memory, but your understanding of the course content, concepts and techniques.

Your grade will be based upon the following items:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Five Assignments</td>
<td>50%</td>
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<tr>
<td>2 Exams</td>
<td>25%</td>
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<tr>
<td>Comprehensive final examination</td>
<td>20%</td>
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<tr>
<td>Class participation/ quizzes</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
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Final grades will be calculated based on the following scale:

- 100% - 90%: A
- 89% - 80%: B
- 79% - 70%: C
- 69% - 60%: D
- 59% - 0%: F

Late student work will be accepted only for reasons specified in the Texas A&M University Student Rules, Section 7.1.

Attendance: The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at [http://student-rules.tamu.edu/](http://student-rules.tamu.edu/).

Required Texts: 
- **C++ Primer Plus (5th Edition)**  
  Stephen Prata  
  Sams  

- **OpenGL: A Primer (3rd Edition)**  
  Edward Angel  
  Addison Wesley  
Optional Supplemental Information:


Costs:

No costs are expected beyond the text book.

Contact Information:

**Terry R. Larsen**

Office: Langford ARCA 328
Office Hours: MTWRF 9:00-10:30
Telephone: 979.845.7068
Email: trl@archone.tamu.edu
American Disabilities Act:
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118 or call 845-1637.

Copyright:
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, lab problems, in-class materials, review sheets and additional problem sets and the contents of the class Web site. Because these materials are copyrighted, you do not have the right to copy the handouts, unless you are expressly granted permission. You have permission to make printouts of the on-line class notes and the class web site strictly for your use in this class.

Plagiarism:
In this course, we want to encourage collaboration and the free interchange of ideas among students and in particular the discussion of reading and writing assignments and review questions, approaches to solving them, etc. However, we do not allow plagiarism, which, as commonly defined, consists of passing off as one's own the ideas, words, writings, etc. that belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one form of scholastic dishonesty. If you have questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section on Scholastic 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.