Course Syllabus
CAP 3034 Introduction to Computer-Aided Animation
Section 8644, Spring 2008

1. **Catalog Description** (3 credits):

2. **Pre-requisites and Co-requisites**
   Pre-requisites: MAC 1147 Precalculus: Algebra and Trigonometry, or equivalent

3. **Course Objectives**:
   - Exposure to the history of animation and computer animation
   - Understanding elemental topics in physics and geometry related to 3D modeling
   - Understanding the 3D computer animation techniques and algorithms
   - Implementing and rendering 3D computer animations using Maya

4. **Instructor**: Rong Zhang
   Office location: CSE E504
   Telephone: 392-9685
   E-mail address: rzhang@cise.ufl.edu
   Office hours: Wednesday 1:00pm – 4:00pm or by appointment in CSE 504

5. **Teaching Assistant**
   Name: Tianyun Ni
   E-mail address: tni@cise.ufl.edu
   Office hours: Friday 2:00pm – 5:00pm or by appointment in CSE 115

6. **Meeting Times and Location**:
   Tuesday period 5-6 and Thursday period 6 in CSE E220

7. **Textbooks and Software Required**
   Required textbook: Learning Maya 8 Foundation
   Publisher: Autodesk Press (Sybex - Wiley), ISBN: 1-897177-33

   Recommended textbook: Learning Maya 7 the Modeling and Animation Handbook
   Publisher: Sybex, ISBN: 1-894893-875

   Software: Maya Unlimited 8.0 is available in UF CISE computer lab E115, and 8.5 is available in UF CIRCA lab. Students do not need to purchase

8. **Course Outline** -
   There might be a shift in topics depending on the backgrounds or interests of the students.
   - History of animation and computer animation
   - Key framing and animation curves
   - Hierarchical animation
• Motion path animation
• Reactive animation
• Skeletons
• Forward and Inverse kinematics
• Skinning and rigging
• Expression-driven animation
• Morph targets
• Rigid-body dynamics
• Particle simulation

9. Attendance and Expectations –
   Class attendance is required. If for some reason you have to miss a class, you
   are responsible for getting class notes from a classmate. Make sure to email your
   completed work to the instructor or TAs before class to avoid a penalty if an
   assignment is due. Cell phones should be turned off or set to vibrate.

10. Homework Policies –
    You may discuss assignments with other students. But you must write the
    program by yourself. If one program is proven to be copied from another
    student, 0 points will be given to both students.

    Late assignments will be accepted with a penalty of deduction of 10% of the
    maximum point value every 12 hours, for up to 3 days, to accommodate the
    misestimation of rendering time. Please plan final renderings for one to two days
    in advance.

11. Grading Scale –
    Final grade is calculated according to the following schedule

    Quizzes                        30%
    Homework and projects          45%
    Final project                  25%

    And the grade scale is:
    A(100-90), B+(89-85), B(84-80), C+(79-75), C(74-70), D+(69-65), D(64-60), F(59-0)

12. Make-up Exam Policy –
    All students should plan to take their exams at the scheduled times. In the case
    of sudden or unexpected events that will cause them to miss an exam, students
    are required to notify the instructor prior to the exam or as early as possible.
    Make-up exams are given only in exceptional circumstances with the Instructor's
    permission.

13. Honesty Policy –
    All students admitted to the University of Florida have signed a statement of
    academic honesty committing themselves to be honest in all academic work and
    understanding that failure to comply with this commitment will result in
    disciplinary action. This statement is a reminder to uphold your obligation as a UF
    student and to be honest in all work submitted and exams taken in this course
    and all others.
14. **Accommodation for Students with Disabilities** –
Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

15. **UF Counseling Services** –
Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
- University Counseling Center, 301 Peabody Hall, 392-1575, Personal and Career Counseling.
- SHCC mental Health, Student Health Care Center, 392-1171, Personal and Counseling.
- Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling.
- Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

16. **Software Use** –
All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.