# Course Change Proposal
## Form A

<table>
<thead>
<tr>
<th>Academic Group (College): Arts and Letters</th>
<th>Academic Organization (Department): Art</th>
<th>Date: 9/10/09</th>
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</thead>
<tbody>
<tr>
<td>Type of Course Proposal: New <em>X</em> Change ___ Deletion ___</td>
<td>Department Chair: Dr. Dan Frye</td>
<td>Submitted by: Rachel Clarke</td>
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<tr>
<td>Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes ___ No ___</td>
<td>For Catalog Copy: Yes <em>X</em> No ___</td>
<td>Semester Effective: Fall <em>X</em> Spring ___ 2010</td>
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<tr>
<td>CCE (Extension): Yes ___ No ___</td>
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This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number): N/A

If changing an existing course, should new version be considered a repeat of the original version? If so, the same Course ID will be maintained. If not, a new Course ID will be assigned. Note: In PeopleSoft terminology, the Course ID is the unique system identifier, not the Catalog Nbr. N/A

### Change from:

<table>
<thead>
<tr>
<th>Subject Area (prefix) &amp; Catalog Nbr (course no.):</th>
<th>Title:</th>
<th>Units:</th>
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### Change to:

<table>
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<tr>
<th>Subject Area (prefix) &amp; Catalog Nbr (course no.):</th>
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<tr>
<td>Art 143</td>
<td>3D Computer Animation</td>
<td>3</td>
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### JUSTIFICATION:

This course is the second of three courses to be offered in 3D computer graphics in the Art Department’s program in Electronic Art. Art 142 (3D Computer Modeling) is the prerequisite course and has now been taught for three semesters. There is clearly the demand and the necessary skill level in students who have taken the prerequisite course to justify the development of an animation course, which creates the next logical learning step for students with 3D computer modeling experience.

### NEW COURSE DESCRIPTION:

(Not to exceed 80 words, and language should conform to catalog copy. See [http://www.csus.edu/umanual/acad.htm](http://www.csus.edu/umanual/acad.htm) - Guidelines for Catalog Course Description)

Creative skills and techniques for animating 3D computer-modeled objects/environments. Topics include animation techniques; keyframing and interpolation; deformation and morphing; path control; skeletal animation; model rigging and skinning; forward- and inverse-kinematics, constraints and IK solvers; particle systems; fluid, cloth, hair, and fur simulation; shape keys; and soft body animation. Emphasis on both skill development and creative application of modeling and animation techniques. Includes demos, in-class and homework exercises, and self-directed projects. Prerequisite: CSc 126 or Art 142.

### Note:

Prerequisite: Art 142 / Csc 126
Enforced at Registration: Yes _X_ No ___
Corequisite: Enforced at Registration: Yes ___ No ___ _X_
Graded: Letter _X_ Credit/No Credit ___ | Instructor Approval Required? Yes ___ No ___ _X_
Course Classification (e.g., lecture, lab, seminar, discussion):

Lab

Title for CMS (not more than 30 characters)

3D Computer Animation

Cross Listed?

Yes  X  No    

If yes, do they meet together and fulfill the same requirement, and what is the other course.

Yes, CSc 127, 3D Computer Animation

How Many Times Can This Course be Taken for Credit? ______

Can the course be taken for Credit more than once during the same term? Yes    No  X

FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

Description of the Expected Learning Outcomes: Describe outcomes using the following format: “Students will be able to: 1), 2), etc.” See the example at http://www.csus.edu/acaef/example.htm

Students will be able to:

- Create 3D animations which demonstrate the application of a range of 3D computer animation techniques
- Use 3D animation techniques to creatively explore movement, gravity, volume, space and time
- Use problem-solving skills to work through technical problems in the animation process
- Use 3D modeling tools to create hierarchical 3D models
- Apply materials and textures to 3D models
- Create 3D scenes and environments including camera and light positioning
- Discuss the creative uses of 3D computer animation and virtual reality within contemporary culture and new media art
- Participate in critiques with peers
- Participate in creating an effective classroom environment, including helping others

**Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean's office, not Academic Affairs.

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

- Group critiques (participation in critiques and discussions, contributions to the class) 15%
- Homework and in-class exercises 20%
- Short animation projects 25%
- Final animation project 40%

For whom is this course being developed?

- Majors in the Dept  X  
- Majors of other Depts  X  
- Minors in the Dept  X  
- General Education  
- Other  

Is this course required in a degree program (major, minor, graduate degree, certificate)? Yes  No  X

If yes, identify program(s):

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes  No  X

If yes, attach a description of resources needed and verify that resources are available.

The MRP1007 lab and the software are already in place for Art 142

Indicate which department or programs will be affected by the proposed course (if any). None

The Department Chair's signature below indicates that affected programs have been sent a copy of this proposal form.

Approvals: If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.
<table>
<thead>
<tr>
<th>Department Chair:</th>
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<tbody>
<tr>
<td>College Dean or Associate Dean:</td>
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</tr>
<tr>
<td>CPSP (for school personnel courses ONLY)</td>
<td></td>
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<tr>
<td>Associate Vice President and Dean for Academic Programs</td>
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Distribution: Academic Affairs (original), Department Chair and College Dean. Dean's office to send original after approval to Academic Affairs, at mail zip 6016. An electronic copy must also be sent.

9/10/2008