Part 1: Course Details

Division/Department requesting change: Arts/Multimedia/Simulation Game Development

Course developer name and contact information: Corral Breding, bredingC@lanecc.edu, 541-517-8627

Division Dean: Richard Lubben

Academic year (e.g., 2018-19) change will take effect:

TYPE OF PROPOSAL

☐ New course (brand new course or courses that have not been offered in three or more years)

☒ Currently a 199 or 299 experimental course? Attach the 199/299 course outline or syllabus

☐ New 199/299 experimental course (May be offered two times over a two-year period. After that, experimental courses to be submitted as a new course.)

TYPE OF COURSE

☐ Lower Division Collegiate

☒ Professional/Technical

☐ Developmental, numbered below 100

COURSE NUMBER AND TITLE

To determine a transfer course number, check the Catalog of Lower Division Collegiate Courses or do a web search for schools with similar courses. For CTE, look at schools with similar courses or contact the Curriculum Office for help.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Short Course Title for Banner (30 character limit)</th>
<th>Full Course Title for print catalog</th>
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</thead>
<tbody>
<tr>
<td>MUL 223</td>
<td>Digital Sculpting and Texture</td>
<td>MUL 223 Digital Sculpting and Texture</td>
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COURSE DESCRIPTION (aim for 300-400 characters/approximately 60-70 words) For help and examples, see Sample Course Descriptions.

[This course will provide an introduction to the industry standard techniques involved in digital sculpting and texturing on 3d models. Students will learn how to use sculpt and paint layers to elevate the realism of computer generated objects ranging from environment props to organic characters.]

Incomplete forms will be returned | Curriculum changes must have dean approval
PREREQUISITES, CO-REQUISITES, GRADE OPTIONS, CREDITS

Prerequisite courses: None

Placement test code and scores (e.g., 4cpa score of 75-120; if you need a code, contact testing)

Co-requisite courses: None

Grade Option: ☑ Graded (with P/NP option) ☐ Pass/No Pass only

Repeatable for credit? _______________

<table>
<thead>
<tr>
<th>Credit Breakdown</th>
<th>Contact Hours Per Week</th>
<th>Contact Hour Formula</th>
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</thead>
<tbody>
<tr>
<td>2 Lecture</td>
<td>2 Lecture</td>
<td>1 lecture = 1 contact hour</td>
</tr>
<tr>
<td>1 Lecture/Lab</td>
<td>2 Lecture/Lab</td>
<td>1 lecture/lab = 2 contact hours</td>
</tr>
<tr>
<td>Lab</td>
<td>Lab</td>
<td>1 lab = 3 contact hours</td>
</tr>
<tr>
<td>3 Total Credits</td>
<td>4 Total Contact Hours per week</td>
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Part 2: Rationale, Equity, Library Resources, Course Overlap

RATIONALE AND CONTEXT  Describe the context and rationale for the new course. How will this course meet the needs of transfer students or employers? What is the demand for this course? How does this proposal further the goals of the program or department? Provide as many details about this new course as possible.

Digital sculpting and texturing has been a part of the CGI industry for a very long time. The industry standard pipeline requires a phase in development where the 3D model is painted and textured, this is traditionally handled in a software program like Mudbox. After the 3D models leave the paint/sculpt program, they will be ready to be used video game engines or in to CGI animation scenes in film production. This class will meet this necessary stage in the pipeline. Beyond that, there is a lot of excitement among the student body for this course! We expect 25 -50 students intending on taking the course per year.

CURRICULUM EQUITY STATEMENT Please do not copy/paste the COPPS equity statement. Reflect how your course supports equity. To promote an environment where all learners are encouraged to develop their full potential, this course will support Lane’s Curriculum Equity policy in the following way(s):

All concepts in this class will be designed to encourage curiosity and openness in the design of animations through multicultural perspectives. The class setting will require students to work together as a team and will encourage students to respect diversity, regardless of race, gender, age, religion, disability, national origin, marital status or class background, while exploring the development stage of their animation projects.

LIBRARY CONSULTATION Please contact your liaison librarian to schedule a 30+ minute individualized instructional consultation and collaboration session. In addition to your specific course-related questions, your librarian will be prepared to share:

- Library resources and services that support your teaching and student learning needs
• OER (Open Educational Resources) options that align with your program and course curriculum
• Strategies for integrating the development of information literacy skills into course content and/or assignments

Please allow one week for the librarian to prepare for your consultation. If you are not sure who your liaison librarian is, you can either look it up on the Library's website or call the Library Reference Desk at 463-5355. (Librarian signature required above.)

COURSE OVERLAP Indicate any topic/content overlap with other courses. How will this course’s topics and content be differentiated? If there is overlap, faculty of overlapping courses must agree on the extent of overlap and include a rationale explaining its necessity. The dean of the division in which overlap occurs must sign approval (see checklist).

<table>
<thead>
<tr>
<th>Division/department</th>
<th>Course Number / Title</th>
<th>Rationale</th>
<th>Dean of overlap course (name)</th>
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CAREER/TECHNICAL COURSE TRACKING (required only for career/technical courses)

Career/Technical courses are tracked within programs for purposes of Carl Perkins funding and budgetary planning. Indicate all degree or certificate programs for which this course will be required.

<table>
<thead>
<tr>
<th>Programs in which course will be required</th>
<th>Division</th>
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<tbody>
<tr>
<td>Will be a course in the Game Art Option Curriculum that is currently under development</td>
<td>Arts / Media Arts</td>
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</table>

Part 3: Outcomes, Assessments, Topics

LIST COURSE OUTCOMES, CORE LEARNING OUTCOMES (CLOS), AND ASSESSMENTS The information in this section should be used to create your course outline and syllabus.

<table>
<thead>
<tr>
<th>Core Learning Outcomes and Dimensions covered or assessed in the course. You do not need a CLO for each course outcome.</th>
<th>COURSE-LEVEL LEARNING OUTCOMES (course outcomes)</th>
<th>ASSESSMENTS Include specific assignments you will use to measure/observe student attainment of outcomes. Some assignments may be used for multiple outcomes. For assessment ideas see Authentic Tasks</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>What will the student know or be able to do at the end of the course? Write outcomes that are measurable, observable, or demonstrable. See this list of measurable verbs or this web page and verb wheel (based on Bloom's taxonomy) for guidance.</td>
<td>Research paper and oral presentation</td>
</tr>
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</table>

CLO 1: Think critically
1.2 Determine information need, find and cite relevant

EXAMPLE Describe and explain general plant structure and function in relation to plant growth and development
<table>
<thead>
<tr>
<th>CLO info here</th>
<th>Outcome text here / add rows as needed</th>
<th>Assessment type/name here</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLO 5.1 Connect practice to deepen skills and understand from one situation to new situations</td>
<td>Utilize advanced digital sculpting tools and sculpt layers within the software package</td>
<td>separate projects that will utilize sculpting tools within the digital program, each project will be peer reviewed and critiqued on industry sculpting practices</td>
</tr>
<tr>
<td>CLO 5.2 Apply methodology from one situation to new situations</td>
<td>Produce high end texture maps from digital sculpt projects for use in game engines and other external animation programs</td>
<td>Each project will have a element of extracting texture maps as part of the graded project. In addition students will be tested on how to procedurally extract and edit texture maps</td>
</tr>
<tr>
<td>CLO 5.4 Integrate experiences from diverse contexts</td>
<td>Use critical thinking to analyze anatomically correct structures and to apply that knowledge to fictional character sculpts. Apply and build upon learned skills from previous projects to produce an elevated end product</td>
<td>weekly class exercises, 2 personal projects that are peer reviewed and Final examination</td>
</tr>
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</table>

Are Lane’s Core Learning Outcomes emphasized in this course, and measured or demonstrated through course assessments? Please indicate which Core Learning Outcomes and Dimensions are linked to your course outcomes. Need help? Contact Tammy Salman, Faculty Coordinator, Assessment and Curriculum Development or Sarah Lushia, Core Learning Outcomes Coordinator.

**COMPETENCIES AND TOPICS COVERED (course outline)**

Example: [Course Outline Sample](from COPPS)

**General Course Outcome**

**Upon Completion of the Course students will be able to:**

A. Produce advanced 3D sculpts using digital sculpting tools and sculpt layers within the software package

**Outcomes verified by the following assessment**: separate projects that will utilize sculpting tools within the digital program, each project will be peer reviewed and critiqued on industry sculpting practices

**Upon Completion of the Course students will be able to:**

B. Produce high end texture maps from digital sculpt projects for use in game engines and other external animation programs

**Outcomes verified by the following assessment**: Each project will have a element of extracting texture maps as part of the graded project. In addition students will be tested on how to procedurally extract and edit texture maps

**Upon Completion of the Course students will be able to:**
Week 1:
Day 1: UI overview of Mudbox
Day 2: Class Project 1: Part I: Game Asset - Introduction to sculpt layers and blocking out forms

Week 2:
Day 1: Class Project 1: Part II: Game Asset - Introduction to alpha layer sculpt tools and masking tools
Day 2: Student project presentation / peer review

Week 3:
Day 1: Class Project 2: Part I: Environment Asset - Beginning sculpt tools
Day 2: Class Project 2: Part II: Environment Asset - Projection texture

Week 4:
Day 1: Class Project 2: Part III: Environment Asset - Baking normal maps, editing normal maps
Day 2: Class Project 2: Part IV: Environment Asset - Lighting (Work Shop)

Week 5:
Day 1: Project Presentation / peer review
Day 2: Class Project 3: Part I: Stone Golem Character: Intro to Painting with layers

Week 6:
Day 1: Class Project 3: Part II: Stone Golem Character: Intro to Painting Defuse

Week 7:
Day 1: Class Project 3: Part IV: Stone Golem Character: Painting with projections

Week 8:
Day 1: Class Project 3: Part VI: Stone Golem Character: Intermediate muscle sculpting
Week 9
Day 1: Class Project 3: Part VIII: Stone Golem Character: Advanced form refinement
Day 2: Class Project 3: Part IX: Stone Golem Character: Advanced detailed texture application

Week 10
Day 1: Class Project 3: Part X: Stone Golem Character: Painting with Specular
Day 2: Work Shop

Week 11
Day 1: Work Shop
Day 2: Presentation / peer review

**Part 4: Financial and Student Impact**

**Financial Impact Analysis**

Describe the financial impact of the proposed course, including: Instructional costs; workload (both FT and PT faculty and classified staff); physical space requirements (e.g., labs); additional equipment needs; additional fees; any cost reductions.

Digital Sculpting and Texture will need a PT instructor once a year to teach the course, this will have to be factored from the PT faculty budget. The current computer labs specs are sufficient to run the necessary software. Students will need to have access to the Wacom Drawing tablets from equipment checkout, for the class. The current 65$ standard fee will cover these costs.

**Student Impact Analysis**

Describe the proposed course’s potential impact on students, including: Effect of changes on program requirements, articulations, cost, credit load, avoiding excess credits in transfer, financial aid credit limits, completion, and enrollments; determination of how new/revised courses transfer to four-year schools (please consult with your advisor).

Digital Sculpting and Texture is a career / technical class so transfer credit is not an option. Digital Sculpting and texture will be a required course in the new Game Art option of the Simulation Game Development degree. The addition of digital sculpting and texture fits into the 96 credits of the Game Art option and will have no effect on student’s credit limit. Digital Sculpting and Texture is offered once a year ensuring the class will fill and be available for students that are in sync with the degree path.

**Part 5: Degree Requirements Applications (if applicable)**

If applying for any of the following, check the appropriate boxes and include your completed degree requirements forms with this course proposal. Go to the Curriculum Office website to download the appropriate forms.

- [ ] AAOT (Career Technical courses not eligible)
- [ ] Arts & Letters
- [ ] Cultural Literacy

Revised 9/2017
- Information Literacy
- Mathematics
- Science / Computer Science
- Social Sciences
- Speech / Oral Communication
- Health / Wellness / Fitness (all degrees)
- Human Relations designation (for AAS degrees and certificates)
- Sustainability course status (optional)

<table>
<thead>
<tr>
<th>College Approval (before signing, please see Curriculum Committee recommendations for this course in the committee's meeting minutes)</th>
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<tr>
<td>Executive Dean for Academic Affairs</td>
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<td>Vice President for Academic &amp; Student Affairs</td>
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Revised 9/2017