SANTA MONICA COLLEGE
ACADEMIC
SENATE
1900 PICO BOULEVARD
SANTA MONICA, CA 90405
PHONE: (310) 434-4611

Santa Monica College
Curriculum Committee Meeting Agenda

Wednesday, December 1, 2010
3:00 p.m.

Loft Conference Room (DH-300E)
Third Floor, Drescher Hall

Members:
Guido Davis Del Piccolo, Chair
Georgia Lorenz, Vice Chair
Brenda Benson
Ellen Cutler
Diane Gross
Aileen Huang
Maral Hyeler
Randal Lawson
Helen LeDonne
Emily Lodmer
Jesse Martinez
Walter Meyer
Eric Minzenberg
Estela Narrie
Christina Preciado
Patricia Ramos
Judith Remmes
Deborah Schwyter
Jeffery Shimizu
Edie Spain
Gary Taka
Esau Tovar
Carol Womack

Interested Parties:
Maria Bonin
Jonathan Cohanne
Mary Colavito
Kiersten Elliott
Mona Martin
Mitra Moassessi
Katharine Muller
Wendy Parise
Eleanor Singleton
Julie Yarrish
Chris Young

ExOfficio Members:
Eric Oifer
Tiffany Inabu

Agenda:

Approval of Minutes

Chairs Report

Information Items:

1. ET 13: 2D Game Prototyping (course update; title change *from* "Game Prototyping")
2. ET 23: 2D Character Animation (course update; title change *from* "2D Character Animation")
3. ET 64: Digital Effects 1 (course update)
4. ET 72: Career Development (course update; title change *from* "Career Exploration")
5. Graphic Design 65: Web Design I (course update)

Consent Agenda:

1. ET 18: Digital Storyboarding (course update; title change *from* "Storyboards;" unit increase *from* 2 units *to* 3 units)
2. ET 19A: Beginning 2D Animation (course update; title change *from* "2D Animation I;" unit change *from* 2 units *to* 3 units)
3. ET 19B: Advanced 2D Animation (course update; title change *from* "2D Animation II;" unit change *from* 2 units *to* 3 units)
4. ET 24: 3D Fundamentals (course update; prerequisites removed; advisory of ET 11 added)
5. ET 25: 3D Modeling (course update; title change *from* "3D Modeling and Rigging;" unit change *from* 4 units *to* 3 units)
6. ET 26: 3D Rendering (course update; unit change *from* 4 units *to* 3 units)

New Courses—

Credit:

1. ET 25C: 3D Character Rigging
2. Philosophy 20/Environmental Studies 20: Environmental Ethics
3. Recycling and Resource Management 01: Introduction to Recycling and Resource Management
4. Recycling and Resource Management 02: Culture and Zero Waste
5. Recycling and Resource Management 03: Resource Management and Zero Waste for Communities
6. Recycling and Resource Management 04: Resource Management and Zero Waste in Business

Global Citizenship:

1. Philosophy 20/Environmental Studies 20: Environmental Ethics
2. Recycling and Resource Management 01: Introduction to Recycling and Resource Management

A.A. Degree:

1. Associate of Science Degree in Mathematics for Transfer

Certificates:

1. Animation Certificate of Achievement (revised)
2. 2D Animation Department Certificate
3. 3D Animation Department Certificate
4. 3D Modeling Department Certificate
5. 3D Rendering Department Certificate

Old Business

New Business

Adjournment

Please advise Guido Davis Del Piccolo (x3561), Georgia Lorenz (x4277), or Sheryl Bowman (x4454) if you are unable to attend this meeting.

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SANTA MONICA COLLEGE
CURRICULUM COMMITTEE MEETING
MINUTES OF NOVEMBER 17, 2010

The Santa Monica College Curriculum Committee was called to order by Guido Davis Del Piccolo at 3:11 p.m.

Members Present:	Guido Davis Del Piccolo, Chair Georgia Lorenz, Vice Chair Brenda Benson Ellen Cutler Diane Gross Aileen Huang	Maral Hyeler Randal Lawson Helen LeDonne Emily Lodmer Jesse Martinez Estela Narrie	Christina Preciado Patricia Ramos Deborah Schwyter Jeffery Shimizu Edie Spain Gary Taka Carol Womack
Members Absent:	Walter Meyer	Eric Minzenberg	Judith Remmes Esau Tovar
Others Present:	Christine Schultz	Richard Tahvildaran-Jesswein	

Approval of Minutes: The minutes of November 3, 2010 were unanimously approved.

Chairs Report:

- The Academic Senate on November 9, 2010, passed the following: New Courses—Medical Laboratory Technician 01, Medical Laboratory Technician 02, and Turkish 01.
- Guido discussed SMC's Global Studies courses regarding articulation with four-year colleges. UC Santa Barbara rejected the courses and we will pursue this further. We need articulation with three colleges and have acceptance with UCLA and UC Riverside.

Information Items:

1. ESL 10G: Multiple Skills Preparation: Listening, Speaking, and Grammar (course update)
2. ESL 10W: Multiple Skills Preparation: Reading and Writing (course update)
3. ESL 11A: Basic English 1 (course update)
4. ESL 21A: English Fundamentals (course update)

New Courses--Credit:

1. **Political Science 31: Introduction to Public Policy**—presented by Richard Tahvildaran-Jesswein and Christine Schultz. This course is an introduction to public policy. The course covers core topics in American public policy and focuses on institutions, policy actors, and major theoretical models. In addition, the course covers the nature and practice of policy analysis in order to demonstrate how to employ evaluative criteria in substantive policy areas.

(New Courses—cont.)

Randy Lawson moved to approve Political Science 31 with the following changes:

- On the Course Approval and Data Sheet:
  - Appropriate Minimum Qualifications – Change to read: "Political Science."
  - On the Student/Program/Institutional Learning Outcomes: Change ILO #2 to read: "The student will learn how to pursue and develop public policy. The student will be asked to engage . . ."
- On the Course Outline:
  - Please see the appropriate version of this course outline which is attached.

The motion passed unanimously.

2. **Political Science 95: Public Policy—Experiential Learning**—presented by Richard Tahvildaran-Jesswein and Christine Schultz. This course builds upon the content of Political Science 31, Introduction to Public Policy, to provide the student with field experience in the discipline. This course is a practicum in public policy in a local setting. As a hands-on course, students will engage in experiential learning through various agencies which have a role in developing and/or implementing public policy. Each student will develop a reading list, customized to their particular agency's focus and complete a minimum of 30 hours of volunteer work with that agency. In addition, this course addresses the theoretical underpinnings of democratic civic engagement. The course exposes the students to organized meaningful public policy research and implementation in substantive policy arenas. Students will be exposed to both local governmental and nongovernmental agencies and will be supervised in their off-campus experiential learning projects pertaining to the political development of public policy.

   Randy Lawson moved to approve Political Science 95 with the following changes:

   - On the Course Approval and Data Sheet:
     - List all A.A. majors in which this course is/will be an option– Remove "Liberal Arts—Social and Behavioral Sciences."
   - On the Course Outline:
     - Please see the appropriate version of this course outline which is attached.

   The motion passed unanimously.

   Approval of the Prerequisite for Political Science 95: Political Science 31. Estela Narrie moved to approve the prerequisite. The motion passed unanimously.

Old Business: **SB 1440 / C-ID Discussion -** There was discussion on SB 1440 and related resolutions from the statewide Academic Senate Plenary Session.

Adjournment: The meeting was adjourned at 4:05 p.m.

Next Meeting: The next meeting of the Curriculum Committee will be December 1, 2010 at 3:00 p.m. in DH-300E, The Loft.

Respectfully submitted,
Georgia Lorenz
sb

Form 1: Course Outline of Record

Santa Monica College

Course Outline For
Political Science 31

Course Title: Introduction to Public Policy | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **3** In-Class Lab: **(hours)** Arranged: **(hours)**

Date Submitted: September 17, 2010
Date Updated:

IGETC Area: 4H Political Science/Gov't.
CSU GE Area: D8 Political Science/Gov't.
SMC GE Area: IIB Social Science (Group B)
Transfer: UC, CSU

Prerequisite(s): None
Skills Advisory: English 1

I. Catalog Description:

This course is an introduction to public policy. The course covers core topics in American public policy and focuses on institutions, policy actors, and major theoretical models. In addition, the course covers the nature and practice of policy analysis in order to demonstrate how to employ evaluative criteria in substantive policy areas.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. **American Public Policy: Promise and Performance**, 8th edition, 2009. B. Guy Peters, University of Pittsburgh.
2. **Public Policy: Politics, Analysis, and Alternatives**, 3rd edition, 2009. Michale Kraft and Scott Furlong, University of Wisconsin, Green Bay.
3. **Issues for Debate in American Public Policy**, 11th edition, 2010. CQ Press, Washington D.C.

III. Course Objectives:

Upon completion of the course students will be able to:

1. Define and explain the concept of public policy.
2. Identify the structures of policymaking in American government.
3. Explain the politics behind particular policy choices.
4. Demonstrate an understanding of the politics of budgeting and the allocation of public resources pertaining to public policies.
5. Evaluate policy changes.
6. Evaluate cost-benefit analyses pertaining to public policies.
7. Identify and evaluate ethical analyses of substantive contemporary public policies.
8. Write critically about a substantive American public policy (local, state, and/or national).

IV. Methods of Presentation:

Lecture, films, and small group discussions

V. Course Content:

% of course	Topic
10%	What is Public Policy
10%	The Structure of Policymaking in American Government
10%	Explaining Policy Choices
10%	Agenda Setting and Public Policy
10%	Legitimating Policy Choices
10%	Organizations and Implementation
10%	Budgeting: Allocation and Public Policy
10%	Evaluation and Policy Change
10%	Evaluating Substantive Policy Issues: Economic, Tax, Health, Income Maintenance, Education, Energy and the Environment, Defense and Law Enforcement, Social.
10%	Policy Analysis: Cost-Benefit Analysis and Ethical Analysis

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
30%	3 Quizzes
30%	Midterm
10%	Academic Journal with 10 Entries in response to guiding questions from instructor
30%	Final Examination

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Students will be required to keep a written academic journal that chronicles their reflections on class readings and discussions. Each week students will respond in the journal to a question posed by the instructor such as, "Select a public policy issue at the county level and write an argument for or against the policy."
2. Students will work in groups to develop a law or regulation in response to a current public need or problem.

Form 1: Course Outline of Record

Santa Monica College

Course Outline For
Political Science 95

Course Title: Public Policy –Experiential Learning | **Units:** 2

Total Instructional Hours: (usually 18 per unit) **36**

Hours per week (full semester equivalent) in Lecture: **0** In-Class Lab: **(hours)** Arranged: **2**

Date Submitted: September 17, 2010
Date Updated:

IGETC Area: (office use only)

IGETC Area (if applicable): please **underline and bold** the applicable area:

Area 1A: Composition
Area 1B: Critical Thinking
Area 1C: Oral Communication
Area 2: Mathematics
Area 3A: Arts
Area 3B: Humanities
Area 4A: Anthropology/Archeology
Area 4B: Economics
Area 4C: Ethnic Studies (must be US)
Area 4D: Gender Studies
Area 4E: Geography
Area 4F: History
Area 4G: Interdisciplinary
Area 4H: Political Science/Government
Area 4I: Psychology
Area 4J: Sociology & Criminology
Area 5A: Physical Science (lab)
Area 5A: Physical Science (no lab)
Area 5B: Biological Science (lab)
Area 5B: Biological Science (no lab)
Area 6A: Language
Area US1: US History
Area US2: US Constitution & Gov't
Area US3: CA State & Local Gov't

CSU GE Area: (office use only)
2nd CSU GE Area: (office use only)

CSU GE Area(s) (if applicable): please **underline and bold** the applicable area or areas:

Area A1: Speech
Area A2: Composition
Area A3: Critical Thinking
Area B1: Physical Science
Area B2: Biological Science
Area B3: Lab
Area B4: Mathematics
Area C1: Arts
Area C2: Humanities
Area D0: Sociology/Criminology
Area D1: Anthropology/Archeology
Area D2: Economics
Area D3: Ethnic Studies (must be US)
Area D4: Gender Studies
Area D5: Geography
Area D6: History
Area D7: Interdisciplinary
Area D8: Political Science/Government
Area D9: Psychology
Area E: Lifelong Learning/Self-Development
Area US1: US History
Area US2: US Constitution & Gov't
Area US3: California State & Local Gov't

SMC GE Area: (office use only)

SMC AA General Education Area(s) (if applicable): please **underline and bold** the applicable area or areas:

Area I: Natural Science
Area IIA: Social Science (Group A)
Area IIB: Social Science (Group B)
Area III: Humanities
Area IVA: Language and Rationality (Group A)
Area IVA: Language and Rationality (Group B)
Area V: Global Citizenship

Transfer: (office use only)

Transfer (if applicable): please **underline and bold** the anticipated transferability of this course:

Transferable to UC **Transferable to CSU**

Prerequisite(s): Political Science 95
Skills Advisory: English 1

I. Catalog Description:

This course builds upon the content of Political Science 31, Introduction to Public Policy, to provide the student with field experience in the discipline. This course addresses the theoretical underpinnings of democratic civic engagement and is a practicum in public policy in a local setting. As a hands-on course, the student will engage in experiential learning through various governmental and nongovernmental agencies which have a role in developing and/or implementing public policy. The student will develop a reading list, customized to his/her particular agency's focus and complete a minimum of 30 hours of volunteer work with that agency. The course exposes the student to

organized, meaningful public policy research and implementation in substantive policy arenas and will be supervised in his/her off-campus experiential learning project pertaining to the development of public policy.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Ehrlich, Thomas (2007). **Education for Democracy: Preparing Undergraduates for Responsible Political Engagement**. Jossey-Bass, San Francisco.
2. Colby, Anne, et. al. (2003). **Educating Citizens: Preparing America's Undergraduates for Lives of Moral and Civic Responsibility**. Jossey-Bass, San Francisco.
3. Wilson, Carter (2006). **Public Policy: Continuity and Change**. McGraw Hill, New York, NY.
4. Smith, Michel, et. al. (2010). **Citizenship across the Curriculum**. Indiana University Press.
5. **Issues for Debate in American Public Policy**, 11th edition (2010). CQ Researcher.

III. Course Objectives:

Upon completion of the course students will be able to:

1. Identify and explain core theories of democratic civic engagement.
2. Demonstrate an understanding and awareness of contemporary substantive public issues and policies.
3. Evaluate theories pertaining to civic engagement and public participation.
4. Identify public problems and policy alternatives.
5. Assess specific substantive public policy alternatives.
6. Demonstrate professional and political skills in the public arena.

IIIb. Arranged Hours Objectives:

If this course has any "arranged hours" listed above, provide the specific objectives related to those arranged hours.

Upon completion of the arranged hours students will be able to:

1. Write critically pertaining to a substantive public policy in a specific area of interest.
2. Identify improvements pertaining to a substantive public policy in a specific area of interest.

IV. Methods of Presentation:

An orientation will provide an introduction and discussion of basic concepts what will be addressed in the course. Instructors will approve the placement site. Discussions (could be electronic) involving the instructor as well as classmates will occur, providing feedback and guidance to further academic exploration.

IVb. Arranged Hours Instructional Activities:

If this course has any "arranged hours" listed above, provide the specific instructional activities related to those arranged hours.

1. Students will complete 30 hours of experiential learning in an arranged local governmental or nongovernmental agency in one of four substantive policy areas.

V. Course Content:

% of course	Topic
15%	Introduction to course requirements, basic concepts in public policy and engaged scholarship, basic concepts in experiential learning, and how they are applied in the particular situation involved.
10%	Development of an appropriate reading list.
75%	Applying theoretical and empirical knowledge to lived experiences through experiential learning.

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
10%	Development of appropriate reading list
60%	Academically-sound Experiential Learning Reflection Journals (approximately 6)
30%	Term Paper

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Students will be required to maintain an academic journal that demonstrates their awareness and understanding of the connections between the theoretical and the practical in the area of a substantive public policy.
2. Students will be required to complete a term paper where they identify a public policy alternative, present a cost-benefit analysis, and critique.
3. Students will complete community-based experiential-learning work focused on civic matters such as environmental and socioeconomic issues, education and the arts, and public health. Students will be asked to demonstrate an awareness of an active engagement in the work of a community agency through writing in their reflective journal.

Form 1: Course Outline of Record

Santa Monica College

Course Outline For
Entertainment Technology 18

Course Title: Digital Storyboarding | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **3** In-Class Lab: **1** Arranged: **1**

Date Submitted: May 1997 (March 2005)
Date Updated: October 15, 2010

IGETC Area: (office use only)
CSU GE Area: (office use only)
2nd CSU GE Area: (office use only)
SMC GE Area: (office use only)
Transfer: (office use only)

Transfer (if applicable): please **underline and bold** the anticipated transferability of this course:

Transferable to UC Transferable to CSU

Prerequisite(s): ET 2
Skills Advisory: ET 11, 91, 92,

I. Catalog Description:

This introductory course explores the fundamentals of the storyboarding process used in the entertainment industry. Through the use of computer software and the digital drawing tablet, students will learn the basic principles of visual storytelling including techniques such as staging, composition and camera movement. The class will analyze and discuss the various applications of digital storyboarding for games, web, 2D and 3D animation, and visual effects.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Exploring Storyboarding (Design Exploration Series) by Wendy Tumminello; Delmar Cengage Learning; 1 Edition; July 16, 2004
2. The Graphic Designer's Digital Toolkit: A Project-Based Introduction to Adobe Photoshop CS5, Illustrator CS5 & InDesign CS5 (Adobe Creative Suite) by Allan Wood; Delmar Cengage Learning; 5 Edition; August 2, 2010

III. Course Objectives:

Upon completion of the course students will be able to:

1. Tell a visual story in effective manner using sequential art.
2. Create digital storyboards that utilize background layout planning and key pose animation.
3. Understand the correct terminology for describing camera framing and movement.
4. Design an animatic using the principles of storyboarding and animation timing.

IIIb. Arranged Hours Objectives:

If this course has any "arranged hours" listed above, provide the specific objectives related to those arranged hours.

Upon completion of the arranged hours students will be able to:

1. Become proficient with the use of digital input devices such as a Wacom tablet or Cintiq monitor.

2. Become proficient with the use of digital storyboard software such as Storyboard Pro.

IV. Methods of Presentation:

Lecture, demonstration, discussion, hands-on projects, screenings

IVb. Arranged Hours Instructional Activities:

If this course has any "arranged hours" listed above, provide the specific instructional activities related to those arranged hours.

1. Tutorials that relate to the use of digital input devices.
2. Tutorials that relate to the use of digital storyboard software.

V. Course Content:

% of course	Topic
5%	Visual Storytelling Overview
10%	Shot Fundamentals (camera terminology, aspect ratios, etc.)
20%	Composition Basics
20%	Continuity Basics
10%	Storyboarding for Film, Television and Visual Effects
10%	Storyboarding for Videogames
25%	Animatic Development

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
15%	Participation
40%	8 Project Presentations
25%	Quizzes
20%	Final Project

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Create a 10-12 panel storyboard using the story concept of "getting to class on time". Set up an Establishment-Conflict scenario, and devise a creative resolution.
2. Use the Beatles' "Rocky Raccoon" to create a storyboard that is inspired by the lyrics but is not a direct illustration of what is actually being said in the song.

2. Become proficient with the use of digital storyboard software such as Storyboard Pro.

IV. Methods of Presentation:

Lecture, demonstration, discussion, hands-on projects, screenings

IVb. Arranged Hours Instructional Activities:

If this course has any "arranged hours" listed above, provide the specific instructional activities related to those arranged hours.

1. Tutorials that relate to the use of digital input devices.
2. Tutorials that relate to the use of digital storyboard software.

V. Course Content:

% of course	Topic
5%	Visual Storytelling Overview
10%	Shot Fundamentals (camera terminology, aspect ratios, etc.)
20%	Composition Basics
20%	Continuity Basics
10%	Storyboarding for Film, Television and Visual Effects
10%	Storyboarding for Videogames
25%	Animatic Development

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
15%	Participation
40%	8 Project Presentations
25%	Quizzes
20%	Final Project

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Create a 10-12 panel storyboard using the story concept of "getting to class on time". Set up an Establishment-Conflict scenario, and devise a creative resolution.
2. Use the Beatles' "Rocky Raccoon" to create a storyboard that is inspired by the lyrics but is not a direct illustration of what is actually being said in the song.

Form 2: Course Approval and Data Sheet for: Entertainment Technology 18

Is this a New Course, Updated/Revised Course, or Reinstated Course?	Updated/Revised
If this is a NEW course, anticipated semester and year of first offering:	**(enter status here)**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:
(enter rationale here: table will automatically expand to accommodate your complete response)

List all A.A. majors in which this course is/will be **required**:

- Animation; Digital Media

List all A.A. majors in which this course is/will be an **option**:

-

List all Certificates of Achievement in which this course is/will be **required**:

- Animation; Digital Media, Level 1

List all Certificates of Achievement in which this course is/will be an **option**:

-

List all Department Certificates in which this course is/will be **required**:

-

List all Department Certificates in which this course is/will be an **option**:

-

Should this course be **transferable to the CSU?** **YES**

Should this course be **transferable to the UC?** **NO**

If you are requesting UC transferability, please list either a comparable lower division course offered at one of the UC campuses or a comparable California Community College course which is transferable to UC:

- UC Campus:
- UC Course Number:
- UC Course Title:

or

- California Community College:
- Course Number:
- Course Title:

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **None**

Course Load Factor suggested by department: **1.0**
Rationale for the above load factor suggestion: technology based course that requires significant preparation and frequent revision

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Multimedia

Form 3: Student / Program / Institutional Learning Outcomes

October 15, 2010

Entertainment Technology 18

Course Level Student Learning Outcomes: (Must list at least 2)

1. Students will exhibit strong academic behaviors including regular attendance, timeliness, participation in class activities, and adherence to the College Honor Code.

   As assessed by: in-class exercises, assignments

2. Apply the digital storyboarding process effectively to the development of an entertainment industry project.

   As assessed by: assignments and final project

Demonstrate how this course supports/maps to at least one program learning outcome. Please include all that apply:

1. Create compelling and original content for a quality entertainment project using industry-specific technology tools.

   This course emphasizes the design of original content using digital storyboarding tools.

2. Effectively analyze and apply design and production methods used by the entertainment industry.

   This course utilizes digital storyboarding methods employed by the entertainment industry.

Demonstrate how this course supports/maps to at least one of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

This course supports student self-discipline by assessing the timely completion of coursework and participation in group activities.

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.

This course assesses the student's ability to effectively communicate original concepts, work with industry-standard tools and resolve technical and storytelling problems.

S/ILO Committee Use Only reviewed by: CKS 11-17-10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Entertainment Technology 18

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	X	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	X	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	X	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	X	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	X	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	X	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	X	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	X	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	X	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	X	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	X	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	X	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	X	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	X	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required? **YES**

ET 2, Storytelling
ET 11, Computer Skills for Digital Media
ET 91, Perspective
ET 92, Figures in Motion

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course? **NO**

If yes, state the English and/or math level necessary for success:

English level recommended: _____ Math level recommended: _____

FORM 5: APPROVALS PAGE

Entertainment Technology 18

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Enter Department or Area	7	0	0	11/8/10
Additional Department or Area (if applicable)				
Please list any other Departments, Areas, or Chairpersons consulted regarding this course:				

Department Chair Approval:	Chris Fria	Date:	11/8/10
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes		No	
Library has adequate materials to support course?	Yes		No	
Librarian Approval:	(Enter Name Here)	Date:		

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 18

Corequisite: ET 2, Storytelling
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
ET 11; Computer Skills for Digital Media
ET 91; Perspective Drawing
ET 92; Figure in Motion

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	X	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	X	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

In addition to the affirmation of content review listed in section I, an additional level of scrutiny is also required. The level of scrutiny depends on which type of prerequisite is involved. There are six types and each is listed below. Please identify which one is being used to justify the proposed prerequisite. The additional level of scrutiny corresponding to each type of prerequisite is identified below.

___ Type 1: Standard Prerequisite

x Type 2: Sequential within and across disciplines

___ Type 3: Course in communication or computational skills as prerequisite for course other than another skills course

___ Type 4: Program prerequisites

___ Type 5: Health and Safety

___ Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET18

A)	Analyze and discuss the history of storytelling.
B)	Compare and contrast the function of the story in different cultures.
C)	Recognize and apply the breakdown of story formula.
D)	Identify and define the elements of an effective story.

EXIT SKILLS FOR ET 2

1.	Analyze and discuss the history of storytelling.
2.	Compare and contrast the function of the story in different cultures.
3.	Recognize and apply the breakdown of story formula.
4.	Identify and define the elements of an effective story.

		ENTRANCE SKILLS FOR ET 18									
		A	B	C	D	E	F	G	H	I	J
EXIT SKILLS FOR ET 2	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 18

Advisory: ET 11; Computer Skills for Digital Media
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
ET 91; Perspective Drawing
ET 92; Figure in Motion
ET 2; Storytelling

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	x	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	x	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

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___ Type 1: Standard Prerequisite

x Type 2: Sequential within and across disciplines

___ Type 3: Course in communication or computational skills as prerequisite for course other than another skills course

___ Type 4: Program prerequisites

___ Type 5: Health and Safety

___ Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET18

A)	Efficiently work with the computer, create files and folders, use keyboard shortcuts, work in a cross-platform environment, and work on a network.
B)	Organize and name files correctly.
C)	Make proper backups of information on the computer.
D)	Utilize the fundamental concepts of digital images and audio.

EXIT SKILLS FOR ET 11

1.	Efficiently work with the computer, create files and folders, use keyboard shortcuts, work in a cross-platform environment, and work on a network.
2.	Organize and name files correctly.
3.	Make proper backups of information on the computer.
4.	Utilize the fundamental concepts of digital images and audio.

		ENTRANCE SKILLS FOR ET 18									
		A	B	C	D	E	F	G	H	I	J
EXIT SKILLS FOR ET 11	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 18

Advisory: ET 91; Perspective Drawing
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
ET 11; Computer Skills for Digital Media
ET 92; Figure in Motion
ET 2; Storytelling

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
10. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	X	
11. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	X	
12. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
13. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
14. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
15. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
16. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
17. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
18. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

In addition to the affirmation of content review listed in section I, an additional level of scrutiny is also required. The level of scrutiny depends on which type of prerequisite is involved. There are six types and each is listed below. Please identify which one is being used to justify the proposed prerequisite. The additional level of scrutiny corresponding to each type of prerequisite is identified below.

___ Type 1: Standard Prerequisite

x Type 2: Sequential within and across disciplines

___ Type 3: Course in communication or computational skills as prerequisite for course other than another skills course

___ Type 4: Program prerequisites

___ Type 5: Health and Safety

___ Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET18

A)	Employ standard drafting methods to draw one, two, and three-point perspective.
B)	Render objects in three dimensions from any viewing angle.
C)	Create accurate shading and cast shadows using mechanical and free-hand methods.
D)	Analyze and depict human and animal forms as a collection of connected basic geometric shapes.

EXIT SKILLS FOR ET 91

1.	Employ standard drafting methods to draw one, two, and three-point perspective.
2.	Render objects in three dimensions from any viewing angle.
3.	Create accurate shading and cast shadows using mechanical and free-hand methods.
4.	Analyze and depict human and animal forms as a collection of connected basic geometric shapes.

		ENTRANCE SKILLS FOR ET 18									
		A	B	C	D	E	F	G	H	I	J
EXIT SKILLS FOR ET 91	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 18

Advisory: ET 92; Figure in Motion
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
ET 91; Perspective Drawing
ET 11; Computer Skills for Digital Media
ET 2; Storytelling

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
19. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	x	
20. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	x	
21. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
22. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
23. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
24. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
25. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
26. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
27. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

In addition to the affirmation of content review listed in section I, an additional level of scrutiny is also required. The level of scrutiny depends on which type of prerequisite is involved. There are six types and each is listed below. Please identify which one is being used to justify the proposed prerequisite. The additional level of scrutiny corresponding to each type of prerequisite is identified below.

___ Type 1: Standard Prerequisite

x Type 2: Sequential within and across disciplines

___ Type 3: Course in communication or computational skills as prerequisite for course other than another skills course

___ Type 4: Program prerequisites

___ Type 5: Health and Safety

___ Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET18

A)	Create realistic drawings of the human figure in motion.
B)	Demonstrate an understanding of animal or human joints and pivot points.
C)	Apply an understanding of muscular dynamics to figure drawing.
D)	Break down any movement in terms of arcs and weight.

EXIT SKILLS FOR ET 92

1.	Create realistic drawings of the human figure in motion.
2.	Demonstrate an understanding of animal or human joints and pivot points.
3.	Apply an understanding of muscular dynamics to figure drawing.
4.	Break down any movement in terms of arcs and weight.

		ENTRANCE SKILLS FOR ET 18									
		A	B	C	D	E	F	G	H	I	J
EXIT SKILLS FOR ET 92	1	x									
	2		x								
	3			x							
	4				x						
	5										
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	9										
	10										

Form 1: Course Outline of Record

Santa Monica College

Course Outline For

Entertainment Technology 19A

Course Title: Beginning 2D Animation | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **3** | In-Class Lab: **1** | Arranged: **1**

Date Submitted: July 1997 (February 2005)
Date Updated: October 15, 2010

IGETC Area: (office use only)
CSU GE Area: (office use only)
2nd CSU GE Area: (office use only)
SMC GE Area: (office use only)
Transfer: CSU

Transfer (if applicable): please **underline and bold** the anticipated transferability of this course:

Transferable to UC **Transferable to CSU**

Prerequisite(s): None
Skills Advisory: ET 11, 91, 92

I. Catalog Description:

This introductory course teaches the basic principles of digital animation. Through lectures and projects, students will learn animation fundamentals such as timing, staging, squash and stretch, anticipation, follow through, overlapping action, arcs, and exaggeration. The material covered in this course serves as a foundation for advanced courses in games, web, 2D and 3D animation, and visual effects.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Cartoon Animation (The Collector's Series); Preston Blair; Walter Foster, 1994
2. Animation from Pencils to Pixels: Classical Techniques for the Digital Animator; Tony White; Focal Press, 2006

III. Course Objectives:

Upon completion of the course students will be able to:

1. Apply the basic principles of animation to individual projects.
2. Understand the natural rules of gravity and physics as they apply to animation.
3. Analyze and exaggerate realistic movement.
4. Demonstrate a working knowledge of the digital animation production process.

IIIb. Arranged Hours Objectives:

If this course has any "arranged hours" listed above, provide the specific objectives related to those arranged hours.

Upon completion of the arranged hours students will be able to:

1. Become proficient with the use of digital input devices such as a Wacom tablet or Cintiq monitor.
2. Become proficient with the use of digital animation software such as DigiCel Flipbook.

IV. Methods of Presentation:

Lecture, demonstration, discussion, hands-on projects, screenings

IVb. Arranged Hours Instructional Activities:

If this course has any "arranged hours" listed above, provide the specific instructional activities related to those arranged hours.

1. Tutorials that relate to the use of digital input devices.
2. Tutorials that relate to the use of digital animation software.

V. Course Content:

% of course	Topic
10%	Overview of animation development
10%	Basics of posing and timing
10%	Analyzing movement and natural forces
10%	Applying squash and stretch
10%	Using anticipation
10%	Creating follow-through and overlapping action
40%	Viewing and analyzing specific animation samples

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
10%	Quizzes
70%	7 Assignments
20%	Final Project

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Create a two second digital animation of a bouncing ball utilizing the principles of stretch and squash, arcs, and slow-in/slow-out.
2. Use a sample of beat-driven music to animate a motion cycle that hits the beat on the extreme poses. The cycle should utilize one of the 12 principles of animation.

Form 2: Course Approval and Data Sheet for: Entertainment Technology 19A

Is this a New Course, Updated/Revised Course, or Reinstated Course?	Updated/Revised
If this is a NEW course, anticipated semester and year of first offering:	**(enter status here)**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:
(enter rationale here: table will automatically expand to accommodate your complete response)

List all A.A. majors in which this course is/will be **required**:

•

List all A.A. majors in which this course is/will be an **option**:

- Animation

List all Certificates of Achievement in which this course is/will be **required**:

•

List all Certificates of Achievement in which this course is/will be an **option**:

- Animation

List all Department Certificates in which this course is/will be **required**:

- 2D Animation

List all Department Certificates in which this course is/will be an **option**:

•

Should this course be **transferable to the CSU?** **YES**

Should this course be **transferable to the UC?** **NO**

If you are requesting UC transferability, please list either a comparable lower division course offered at one of the UC campuses or a comparable California Community College course which is transferable to UC:

- UC Campus:
- UC Course Number:
- UC Course Title:

or

- California Community College:
- Course Number:
- Course Title:

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **None**

Course Load Factor suggested by department: **1**
Rationale for the above load factor suggestion: technology based course that requires significant preparation and frequent revision

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Multimedia

Form 3: Student / Program / Institutional Learning Outcomes

October 15, 2010
ET 19A

Course Level Student Learning Outcomes: (Must list <u>at least 2</u>)

1. Students will exhibit strong academic behaviors including regular attendance, timeliness, participation in class activities, and adherence to the College Honor Code.

   As assessed by: quizzes, assignments

2. Students will demonstrate mastery of the fundamental principles of animation by creating effective character or object animations.

   As assessed by: assignments, final project

Demonstrate how this course supports/maps to <u>at least one</u> program learning outcome. Please include all that apply:

1. Create compelling and original content for a quality entertainment project using industry-specific technology tools.

   This course emphasizes the creation of original content using animation industry tools.

2. Effectively analyze and apply design and production methods used by the entertainment industry.

   This course utilizes production methods employed by the animation industry.

Demonstrate how this course supports/maps to <u>at least one</u> of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

This course supports student self-discipline by assessing the timely completion of coursework and participation in class activities.

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.

This course assesses the student's ability to effectively communicate animation concepts, work with industry-standard tools and resolve technical problems.

S/ILO Committee Use Only reviewed by: CKS 11-17-10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Entertainment Technology 19A

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	X	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	X	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	X	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	X	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	X	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	X	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	X	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	x	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	x	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	x	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	x	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	x	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	x	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	x	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required? **YES**

If yes, state the recommended prerequisites: **ET 11, Computer Skills for Digital Media**
ET 91, Perspective Drawing
ET 92, Figure in Motion

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course? **NO**

If yes, state the English and/or math level necessary for success:

English level recommended: _____ Math level recommended: _____

FORM 5: APPROVALS PAGE

Entertainment Technology 19A

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Enter Department or Area	7	0	0	11/8/10
Additional Department or Area (if applicable)				
Please list any other Departments, Areas, or Chairpersons consulted regarding this course:				

Department Chair Approval:	Chris Fria	Date:	11/8/10
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes		No	
Library has adequate materials to support course?	Yes		No	
Librarian Approval:	(Enter Name Here)	Date:		

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 19A

Advisory: ET 11; Computer Skills for Digital Media
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
ET 91; Perspective Drawing
ET 92; Figure in Motion

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	x	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	x	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

In addition to the affirmation of content review listed in section I, an additional level of scrutiny is also required. The level of scrutiny depends on which type of prerequisite is involved. There are six types and each is listed below. Please identify which one is being used to justify the proposed prerequisite. The additional level of scrutiny corresponding to each type of prerequisite is identified below.

- ___ Type 1: Standard Prerequisite
- x Type 2: Sequential within and across disciplines
- ___ Type 3: Course in communication or computational skills as prerequisite for course other than another skills course
- ___ Type 4: Program prerequisites
- ___ Type 5: Health and Safety
- ___ Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET19A

A)	Efficiently work with the computer, create files and folders, use keyboard shortcuts, work in a cross-platform environment, and work on a network.
B)	Organize and name files correctly.
C)	Make proper backups of information on the computer.
D)	Utilize the fundamental concepts of digital images and audio.

EXIT SKILLS FOR ET 11

1.	Efficiently work with the computer, create files and folders, use keyboard shortcuts, work in a cross-platform environment, and work on a network.
2.	Organize and name files correctly.
3.	Make proper backups of information on the computer.
4.	Utilize the fundamental concepts of digital images and audio.

		ENTRANCE SKILLS FOR ET19A									
		A	B	C	D	E	F	G	H	I	J
EXIT SKILLS FOR ET 11	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 19A

Advisory: ET 91; Perspective Drawing
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
ET 11; Computer Skills for Digital Media
ET 92; Figure in Motion

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	x	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	x	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

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- ___ Type 4: Program prerequisites
- ___ Type 5: Health and Safety
- ___ Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET19A

A)	Employ standard drafting methods to draw one, two, and three-point perspective.
B)	Render objects in three dimensions from any viewing angle.
C)	Create accurate shading and cast shadows using mechanical and free-hand methods.
D)	Analyze and depict human and animal forms as a collection of connected basic geometric shapes.

EXIT SKILLS FOR ET 91

1.	Employ standard drafting methods to draw one, two, and three-point perspective.
2.	Render objects in three dimensions from any viewing angle.
3.	Create accurate shading and cast shadows using mechanical and free-hand methods.
4.	Analyze and depict human and animal forms as a collection of connected basic geometric shapes.

		ENTRANCE SKILLS FOR ET 19A									
		A	B	C	D	E	F	G	H	I	J
EXIT SKILLS FOR ET 91	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 19A

Advisory: ET 92; Figure in Motion
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
ET 91; Perspective Drawing
ET 11; Computer Skills for Digital Media

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	x	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	x	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

In addition to the affirmation of content review listed in section I, an additional level of scrutiny is also required. The level of scrutiny depends on which type of prerequisite is involved. There are six types and each is listed below. Please identify which one is being used to justify the proposed prerequisite. The additional level of scrutiny corresponding to each type of prerequisite is identified below.

	Type 1: Standard Prerequisite
x	Type 2: Sequential within and across disciplines
	Type 3: Course in communication or computational skills as prerequisite for course other than another skills course
	Type 4: Program prerequisites
	Type 5: Health and Safety
	Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET19A

A)	Create realistic drawings of the human figure in motion.
B)	Demonstrate an understanding of animal or human joints and pivot points.
C)	Apply an understanding of muscular dynamics to figure drawing.
D)	Break down any movement in terms of arcs and weight.

EXIT SKILLS FOR ET 92

1.	Create realistic drawings of the human figure in motion.
2.	Demonstrate an understanding of animal or human joints and pivot points.
3.	Apply an understanding of muscular dynamics to figure drawing.

		ENTRANCE SKILLS FOR ET 19A									
EXIT SKILLS FOR ET 92		A	B	C	D	E	F	G	H	I	J
	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

form modified 05/12/2010

Form 1: Course Outline of Record

Santa Monica College

Course Outline For

Entertainment Technology 19B

Course Title: Advanced 2D Animation | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **3** In-Class Lab: **1** Arranged: **1**

Date Submitted: March 1999 (February 2005)
Date Updated: October 15, 2010

IGETC Area: (office use only)
CSU GE Area: (office use only)
2nd CSU GE Area: (office use only)
SMC GE Area: (office use only)
Transfer: CSU

Transfer (if applicable): please **underline and bold** the anticipated transferability of this course:

Transferable to UC **Transferable to CSU**

Prerequisite(s): ET 19A
Skills Advisory:

I. Catalog Description:

This advanced course focuses on the tools and methods used to create digital character animation. Through lectures and projects, students will further their understanding and application of the 12 principles of animation such as timing, weight, anticipation, squash and stretch, overlapping action, exaggeration and staging. Students will be introduced to the basics of lip-synch and performance animation.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Animation from Pencils to Pixels: Classical Techniques for the Digital Animator; Tony White; Focal Press, 2006
2. The Animator's Survival Kit; Richard Williams; Faber & Faber, 2001

III. Course Objectives:

Upon completion of the course students will be able to:

1. Analyze character movement and performance.
2. Apply the digital principles of timing, posing and staging to character animation.
3. Demonstrate an understanding of the basic principles of character acting and lip-synch.
4. Animate characters that exhibit emotions.

IIIb. Arranged Hours Objectives:

If this course has any "arranged hours" listed above, provide the specific objectives related to those arranged hours.

Upon completion of the arranged hours students will be able to:

1. Become proficient with the use of digital input devices such as a Wacom tablet or Cintiq monitor.
2. Become proficient with the use of digital animation software such as DigiCel Flipbook

IV. Methods of Presentation:

Lecture, demonstration, discussion, hands-on projects, screenings

IVb. Arranged Hours Instructional Activities:

If this course has any "arranged hours" listed above, provide the specific instructional activities related to those arranged hours.

1. Tutorials that relate to the use of digital input devices.
2. Tutorials that relate to the use of digital animation software.

V. Course Content:

% of course	Topic
10%	Review basic principles of animation
10%	Analyzing character movement
10%	Squash and stretch
10%	Exaggeration
10%	Line of action and arcs
15%	Principles of acting
15%	Staging and silhouettes
10%	Posing and emotion
10%	Facial animation and lip-synch

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
10%	Quizzes
70%	7 Assignments
20%	Final Project

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Create a short animation that communicates a character's thought process when reading and reacting to a letter.
2. Animate a character struggling to lift and hold a very heavy rock to demonstrate the concept of weight.

Form 2: Course Approval and Data Sheet for: Entertainment Technology 19B

Is this a New Course, Updated/Revised Course, or Reinstated Course?	Updated/Revised
If this is a NEW course, anticipated semester and year of first offering:	**(enter status here)**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:
(enter rationale here: table will automatically expand to accommodate your complete response)

List all A.A. majors in which this course is/will be **required**:

-

List all A.A. majors in which this course is/will be an **option**:

- Animation

List all Certificates of Achievement in which this course is/will be **required**:

-

List all Certificates of Achievement in which this course is/will be an **option**:

- Animation

List all Department Certificates in which this course is/will be **required**:

- 2D Animation

List all Department Certificates in which this course is/will be an **option**:

-

Should this course be **transferable to the CSU?** **YES**

Should this course be **transferable to the UC?** **NO**

If you are requesting UC transferability, please list either a comparable lower division course offered at one of the UC campuses or a comparable California Community College course which is transferable to UC:

- UC Campus:
- UC Course Number:
- UC Course Title:

or

- California Community College:
- Course Number:
- Course Title:

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **None**

Course Load Factor suggested by department: **1**
Rationale for the above load factor suggestion: technology based course that requires significant preparation and frequent revision

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Multimedia

Form 3: Student / Program / Institutional Learning Outcomes

October 15, 2010
Entertainment Technology 19B

Course Level Student Learning Outcomes: (Must list at least 2)

1. Students will exhibit strong academic behaviors including regular attendance, timeliness, participation in class activities, and adherence to the College Honor Code.

   As assessed by: quizzes and assignments

2. Students will demonstrate mastery of the principles of animation and character acting by creating effective character animations for portfolio development.

   As assessed by: assignments, final project

Demonstrate how this course supports/maps to at least one program learning outcome. Please include all that apply:

1. Create compelling and original content for a quality entertainment project using industry-specific technology tools.

   This course emphasizes the creation of original content using animation industry tools.

2. Effectively analyze and apply design and production methods used by the entertainment industry.

   This course utilizes production methods employed by the animation industry.

Demonstrate how this course supports/maps to at least one of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

This course supports student self-discipline by assessing the timely completion of coursework and participation in class activities

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.

This course assesses the student's ability to effectively communicate animation concepts, work with industry-standard tools and resolve technical problems.

S/ILO Committee Use Only reviewed by: CKS 11-17-10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Entertainment Technology 19B

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	X	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	X	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	X	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	X	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	X	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	X	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	X	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	x	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	x	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	x	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	x	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	x	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	x	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	x	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required? **YES**

If yes, state the recommended prerequisites: **ET 19A, Beginning 2D Animation**

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course? **NO**

If yes, state the English and/or math level necessary for success:

English level recommended: _____ Math level recommended: _____

FORM 5: APPROVALS PAGE

(Enter Discipline and Course # here)

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Enter Department or Area	7	0	0	11/8/10
Additional Department or Area (if applicable)				
Please list any other Departments, Areas, or Chairpersons consulted regarding this course:				

Department Chair Approval:	Chris Fria	Date:	11/8/10
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes		No	
Library has adequate materials to support course?	Yes		No	

Librarian Approval:	(Enter Name Here)	Date:	

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 19B

Prerequisite: ET 19A, Beginning 2D Animation
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
(If applicable, enter Discipline and Course # here) ; (Enter Course Title here)
(If applicable, enter Discipline and Course # here) ; (Enter Course Title here)

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	x	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	x	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

In addition to the affirmation of content review listed in section I, an additional level of scrutiny is also required. The level of scrutiny depends on which type of prerequisite is involved. There are six types and each is listed below. Please identify which one is being used to justify the proposed prerequisite. The additional level of scrutiny corresponding to each type of prerequisite is identified below.

	Type 1: Standard Prerequisite
x	Type 2: Sequential within and across disciplines
	Type 3: Course in communication or computational skills as prerequisite for course other than another skills course
	Type 4: Program prerequisites
	Type 5: Health and Safety
	Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET19B

A)	Apply the basic principles of animation to individual projects.
B)	Understand the natural rules of gravity and physics as they apply to animation.
C)	Analyze and exaggerate realistic movement.
D)	Demonstrate a working knowledge of the digital animation production process.

EXIT SKILLS FOR ET 19A

1.	Apply the basic principles of animation to individual projects.
2.	Understand the natural rules of gravity and physics as they apply to animation.
3.	Analyze and exaggerate realistic movement.
4.	Demonstrate a working knowledge of the digital animation production process.

		ENTRANCE SKILLS FOR ET 19B									
		A	B	C	D	E	F	G	H	I	J
EXIT SKILLS FOR ET 19A	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

Form 1: Course Outline of Record

Santa Monica College

Course Outline For
ET 24, 3D Fundamentals

Course Title: 3D Fundamentals | **Units:** 4

Total Instructional Hours: (usually 18 per unit) **72**

Hours per week (full semester equivalent) in Lecture: **3** In-Class Lab: **1** Arranged: **1**

Date Submitted: May 1997 (November 2006)
Date Updated: October 15, 2010

IGETC Area: (office use only)
CSU GE Area: (office use only)
2nd CSU GE Area: (office use only)
SMC GE Area: (office use only)
Transfer: CSU

Transfer (if applicable): please **underline and bold** the anticipated transferability of this course:

Transferable to UC **Transferable to CSU**

Prerequisite(s): None
Skills Advisory: ET 11

I. Catalog Description:

This introductory course provides a basic overview of the tools used in the creation of 3D digital animation. Topics covered include modeling, character rigging, animation, shading, lighting and rendering. This course emphasizes the fundamental concepts of 3D digital animation as well as an understanding of the software. In addition to completing weekly exercises, students will apply the skills they learn to create an individual project.

This course uses Autodesk Maya.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Introducing Maya 2011; Dariush Derakhshani; Sybex; May 3, 2010
2. The Art of 3D Computer Animation and Effects; Isaac Kerlow; Wiley; April 13, 2009

III. Course Objectives:

Upon completion of the course students will be able to:

1. Demonstrate an understanding of 3D concepts and terminology.
2. Model and rig a simple character.
3. Model, texture and light a simple 3D environment.
4. Animate a character within a 3D environment.
5. Apply traditional animation techniques to 3D animation.

IIIb. Arranged Hours Objectives:

If this course has any "arranged hours" listed above, provide the specific objectives related to those arranged hours.

Upon completion of the arranged hours students will be able to:

1. Use the Maya interface in a proficient manner.

IV. Methods of Presentation:

Lecture, discussion, demonstration

IVb. Arranged Hours Instructional Activities:

If this course has any "arranged hours" listed above, provide the specific instructional activities related to those arranged hours.

1. Complete video tutorials related to using the Maya software interface.

V. Course Content:

% of course	Topic
5%	Overview of 3D digital animation
10%	Maya interface basics
5%	Maya animation basics
5%	NURBS modeling
5%	Polygonal modeling
5%	Hierarchies and path animation
10%	Skeletons and kinematics
25%	Character animation exercises
5%	Constraint animation
5%	Cameras
5%	Lighting
5%	Shading
10%	Rendering

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
10%	Participation
10%	Quizzes
50%	10 Assignments
30%	Final Project

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Assignment 1 - The Bouncing Ball

Objective:

Use a primitive NURBS sphere to create a 60 frame animation of a ball bouncing three times from left to right along the positive X axis of worldspace.

Procedure:

- Create a new scene in Maya.
- Set animation preferences for real-time playback at 30fps.
- Create a NURBS sphere and adjust its pivot point along the world's Y axis to the base of the object.

- Keyframe the X and Y translation attributes of the sphere to create key poses of the ball bouncing.
- Use the Graph Editor to modify the timing of the animation.
- Keyframe the scale attributes of the sphere to add the secondary effect of squashing on impact.
- Playblast the animation.

2. Assignment 4 - Hierarchies and Path Animation

Objective:
Use the polygonal model of the airplane from Assignment 3 to create a simple path animation.

Procedure:

- Create the proper animation hierarchy for the airplane model.
- Use the Sculpt Geometry tool to shape the background terrain using a NURBS plane with 24 divisions.
- Create a NURBS curve as the motion path for the airplane.
- Edit the timing of the path animation to add acceleration and deceleration.
- Add secondary motion of the airplane banking into the turns.
- Attach a camera to a second motion path that follows the airplane.

Form 2: Course Approval and Data Sheet for: Entertainment Technology 24

Is this a New Course, Updated/Revised Course, or Reinstated Course?	**Updated/Revised**
If this is a NEW course, anticipated semester and year of first offering:	**(enter status here)**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:
(enter rationale here: table will automatically expand to accommodate your complete response)

List all A.A. majors in which this course is/will be **required**:

- Animation

List all A.A. majors in which this course is/will be an **option**:

-

List all Certificates of Achievement in which this course is/will be **required**:

- Animation

List all Certificates of Achievement in which this course is/will be an **option**:

-

List all Department Certificates in which this course is/will be **required**:

-

List all Department Certificates in which this course is/will be an **option**:

-

Should this course be **transferable to the CSU?** **YES**

Should this course be **transferable to the UC?** **(please indicate YES or NO)**

If you are requesting UC transferability, please list either a comparable lower division course offered at one of the UC campuses or a comparable California Community College course which is transferable to UC:

- UC Campus:
- UC Course Number:
- UC Course Title:

or

- California Community College:
- Course Number:
- Course Title:

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **NONE**

Course Load Factor suggested by department: **1.0**
Rationale for the above load factor suggestion: technology based course that requires significant preparation and frequent revision

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Multimedia

Form 3: Student / Program / Institutional Learning Outcomes

10/15/10
Entertainment Technology 24

Course Level Student Learning Outcomes: (Must list at least 2)

1. Students will exhibit strong academic behaviors including regular attendance, timeliness, participation in class activities, and adherence to the College Honor Code.

   As assessed by: quizzes, assignments

2. Students will demonstrate mastery of the course content by creating effective and original 3D animations.

   As assessed by: assignments, final project

Demonstrate how this course supports/maps to at least one program learning outcome. Please include all that apply:

1. Create compelling and original content for a quality entertainment project using industry-specific technology tools.

   This course emphasizes the creation of original 3D content using industry tools.

2. Effectively analyze and apply design and production methods used by the entertainment industry.

   This course introduces students to 3D production methods employed by the entertainment industry.

Demonstrate how this course supports/maps to at least one of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

This course supports student self-discipline by assessing the timely completion of coursework and participation in group activities.

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.

This course assesses the student's ability to effectively develop original concepts, work with industry-standard tools and resolve technical problems.

S/ILO Committee Use Only reviewed by: CKS 11-17-10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Entertainment Technology 24

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	x	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	x	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	x	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	x	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	x	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	x	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	x	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	x	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	x	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	x	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	x	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	x	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	x	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	x	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required? **YES**

If yes, state the recommended prerequisites:

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course? **NO**

If yes, state the English and/or math level necessary for success:

English level recommended: _____ Math level recommended: _____

FORM 5: APPROVALS PAGE

Entertainment Technology 24

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Enter Department or Area	7	0	0	11/8/10
Additional Department or Area (if applicable)				
Please list any other Departments, Areas, or Chairpersons consulted regarding this course:				

Department Chair Approval:	Chris Fria	Date:	11/8/10
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:					
List of suggested materials has been given to librarian?		Yes		No	
Library has adequate materials to support course?		Yes		No	
Librarian Approval:	(Enter Name Here)		Date:		

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 24

Advisory: ET 11 ; Computer Skills for Digital Media
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
(If applicable, enter Discipline and Course # here) ; (Enter Course Title here)
(If applicable, enter Discipline and Course # here) ; (Enter Course Title here)

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	X	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	X	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

In addition to the affirmation of content review listed in section I, an additional level of scrutiny is also required. The level of scrutiny depends on which type of prerequisite is involved. There are six types and each is listed below. Please identify which one is being used to justify the proposed prerequisite. The additional level of scrutiny corresponding to each type of prerequisite is identified below.

___ Type 1: Standard Prerequisite

x Type 2: Sequential within and across disciplines

___ Type 3: Course in communication or computational skills as prerequisite for course other than another skills course

___ Type 4: Program prerequisites

___ Type 5: Health and Safety

___ Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET 24

A)	Efficiently work with the computer, create files and folders, use keyboard shortcuts, work in a cross-platform environment, and work on a network.
B)	Organize and name files correctly.
C)	Make proper backups of information on the computer.
D)	Utilize the fundamental concepts of digital images and audio.

EXIT SKILLS FOR ET 11

1.	Efficiently work with the computer, create files and folders, use keyboard shortcuts, work in a cross-platform environment, and work on a network.
2.	Organize and name files correctly.
3.	Make proper backups of information on the computer.
4.	Utilize the fundamental concepts of digital images and audio.

		ENTRANCE SKILLS FOR ET 24									
		A	B	C	D	E	F	G	H	I	J
EXIT SKILLS FOR ET 11	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

Form 1: Course Outline of Record

Santa Monica College

Course Outline For

Entertainment Technology 25

Course Title: 3D Modeling | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **2** | In-Class Lab: **1** | Arranged: **1**

Date Submitted: May 1997 (November 2006)
Date Updated: October 15, 2010

IGETC Area: (office use only)
CSU GE Area: (office use only)
2nd CSU GE Area: (office use only)
SMC GE Area: (office use only)
Transfer: CSU

Transfer (if applicable): please **underline and bold** the anticipated transferability of this course:

Transferable to UC **Transferable to CSU**

Prerequisite(s): ET 24
Skills Advisory: None

I. Catalog Description:

This course provides an overview of the production process used to construct digital characters and environments. Using industry-standard tools and methods, students will learn to create production-ready 3D models. Organic and inorganic modeling with polygons, NURBS and subdivision surfaces will be covered. Students will also learn the basic principles of digital sculpting software as well as methods for optimizing models for 3D game engines.

This course uses Autodesk Maya and Pixologic ZBrush.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. 3-D Human Modeling and Animation, Third Edition; Peter Ratner; Wiley, 2009
2. ZBrush Digital Sculpting Human Anatomy; Scott Spencer; Sybex, 2010

III. Course Objectives:

Upon completion of the course students will be able to:

1. Identify the advantages and disadvantages of each surface type used in 3D modeling.
2. Use photo reference to create realistic organic and inorganic models.
3. Prepare polygonal surfaces for texturing using effective UV mapping techniques.
4. Control the complexity of detailed character and environment models by employing efficient workflows.

IIIb. Arranged Hours Objectives:

If this course has any "arranged hours" listed above, provide the specific objectives related to those arranged hours.

Upon completion of the arranged hours students will be able to:

1. Use the basic functions of digital sculpting software.
2. Create production-ready 3D game assets.

IV. Methods of Presentation:

Lecture, discussion, demonstration, hands-on projects

IVb. Arranged Hours Instructional Activities:

If this course has any "arranged hours" listed above, provide the specific instructional activities related to those arranged hours.

1. Video tutorials and exercises

V. Course Content:

% of course	Topic
5%	Overview of 3D surface types
5%	Using reference images
20%	Polygonal modeling tools
10%	NURBS modeling tools
5%	Subdivision modeling tools
10%	UV mapping techniques
30%	Organic modeling techniques
15%	Inorganic modeling techniques

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
10%	Participation
50%	10 Assignments
10%	Midterm Project
30%	Final Project

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Assignment 2: Modeling a simple polygonal character

   Objective:
   Create a light-weight character model using only polygonal surfaces

   Procedure:
   Import images to use as modeling reference
   Model the legs using a polygonal cube
   Use a polygonal cube to create a shoe
   Create the torso from a polygonal cylinder
   Create the rough head a polygonal cube
   Refine the head and complete the character hierarchy

2. Assignment 3: Modeling a detailed polygonal head

   Objective:
   Create a detailed character head model using polygonal modeling techniques

Procedure:

- Create image planes to use as reference
- Model the rough head using a polygonal cube
- Refine the mouth
- Refine the eye
- Create the nose
- Create the ear
- Refine the head surface

Form 2: Course Approval and Data Sheet for: Entertainment Technology 25

Is this a New Course, Updated/Revised Course, or Reinstated Course?	**Updated/Revised**
If this is a NEW course, anticipated semester and year of first offering:	**(enter status here)**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:
(enter rationale here: table will automatically expand to accommodate your complete response)

List all A.A. majors in which this course is/will be **required**:

-

List all A.A. majors in which this course is/will be an **option**:

- Animation

List all Certificates of Achievement in which this course is/will be **required**:

-

List all Certificates of Achievement in which this course is/will be an **option**:

- Animation

List all Department Certificates in which this course is/will be **required**:

- 3D Modeling, 3D Rendering

List all Department Certificates in which this course is/will be an **option**:

-

Should this course be **transferable to the CSU?** **YES**

Should this course be **transferable to the UC?** **NO**

If you are requesting UC transferability, please list either a comparable lower division course offered at one of the UC campuses or a comparable California Community College course which is transferable to UC:

- UC Campus:
- UC Course Number:
- UC Course Title:

or

- California Community College:
- Course Number:
- Course Title:

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **None**

Course Load Factor suggested by department: **1.0**
Rationale for the above load factor suggestion: technology based course that requires significant preparation and frequent revision

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Multimedia

Form 3: Student / Program / Institutional Learning Outcomes

10/15/2010
Entertainment Technology 25

Course Level Student Learning Outcomes: (Must list <u>at least 2</u>)

1. Students will exhibit strong academic behaviors including regular attendance, timeliness, participation in class activities, and adherence to the College Honor Code.

   As assessed by: in-class exercises, assignments

2. Students will demonstrate mastery of the course content by creating production-ready 3D character and environment models.

   As assessed by: assignments, midterm and final projects

Demonstrate how this course supports/maps to <u>at least one</u> program learning outcome. Please include all that apply:

1. Create compelling and original content for a quality entertainment project using industry-specific technology tools.

   This course emphasizes the design of original content using industry tools.

2. Effectively analyze and apply design and production methods used by the entertainment industry.

   This course utilizes production methods employed by the entertainment industry.

Demonstrate how this course supports/maps to <u>at least one</u> of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

This course supports student self-discipline by assessing the timely completion of coursework and participation in class activities.

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.

This course assesses the student's ability to effectively communicate original concepts, work with industry-standard tools and resolve technical problems.

S/ILO Committee Use Only reviewed by: CKS 11-17-10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Entertainment Technology 25

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	x	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	x	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	x	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	x	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	x	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	x	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	x	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	x	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	x	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	x	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	x	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	x	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	x	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	x	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required? **YES**

If yes, state the recommended prerequisites: **ET 24**

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course? **NO**

If yes, state the English and/or math level necessary for success:

English level recommended: _____ Math level recommended: _____

FORM 5: APPROVALS PAGE

Entertainment Technology 25

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Enter Department or Area	7	0	0	11/8/10
Additional Department or Area (if applicable)				
Please list any other Departments, Areas, or Chairpersons consulted regarding this course:				

Department Chair Approval:	Chris Fria	Date:	11/8/10
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes		No	
Library has adequate materials to support course?	Yes		No	
Librarian Approval:	(Enter Name Here)	Date:		

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 25

Prerequisite: ET 24 ; 3D Fundamentals
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
(If applicable, enter Discipline and Course # here) ; (Enter Course Title here)
(If applicable, enter Discipline and Course # here) ; (Enter Course Title here)

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	X	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	X	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

In addition to the affirmation of content review listed in section I, an additional level of scrutiny is also required. The level of scrutiny depends on which type of prerequisite is involved. There are six types and each is listed below. Please identify which one is being used to justify the proposed prerequisite. The additional level of scrutiny corresponding to each type of prerequisite is identified below.

___ Type 1: Standard Prerequisite

x Type 2: Sequential within and across disciplines

___ Type 3: Course in communication or computational skills as prerequisite for course other than another skills course

___ Type 4: Program prerequisites

___ Type 5: Health and Safety

___ Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET 25

A)	Use the Maya interface in a proficient manner.
B)	Demonstrate an understanding of 3D concepts and terminology.
C)	Model and rig a simple character.
D)	Model, texture and light a simple 3D environment.

EXIT SKILLS FOR ET 24

1.	Use the Maya interface in a proficient manner.
2.	Demonstrate an understanding of 3D concepts and terminology.
3.	Model and rig a simple character.
4.	Model, texture and light a simple 3D environment.

		ENTRANCE SKILLS FOR ET 25									
		A	B	C	D	E	F	G	H	I	J
EXIT SKILLS FOR ET 24	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

Form 1: Course Outline of Record

Santa Monica College

Course Outline For
Entertainment Technology 26

Course Title: 3D Rendering | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **2** | In-Class Lab: **1** | Arranged: **1**

Date Submitted: January 2002 (November 2006)
Date Updated: October 15, 2010

IGETC Area: (office use only)
CSU GE Area: (office use only)
2nd CSU GE Area: (office use only)
SMC GE Area: (office use only)
Transfer: CSU

Transfer (if applicable): please **underline and bold** the anticipated transferability of this course:

Transferable to UC **Transferable to CSU**

Prerequisite(s): ET 25
Skills Advisory: None

I. Catalog Description:

This course provides an overview of the production process used to render digital characters and environments. Using industry-standard tools and methods, students will learn to create photo-realistic and stylized renderings. Advanced shading, lighting, rendering and compositing techniques will be covered.

This course uses Autodesk Maya.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Advanced Maya Texturing and Lighting; Lee Lanier; Sybex, 2008

III. Course Objectives:

Upon completion of the course students will be able to:

1. Build materials and textures through digital and traditional techniques.
2. Simulate traditional lighting techniques for realistic rendering.
3. Render and composite several layers into completed shots.
4. Integrate camera effects into a rendered animation.

IIIb. Arranged Hours Objectives:

If this course has any "arranged hours" listed above, provide the specific objectives related to those arranged hours.

Upon completion of the arranged hours students will be able to:

1. Use mental ray materials and rendering methods.

IV. Methods of Presentation:

Lecture, discussion, demonstration, hands-on projects

IVb. Arranged Hours Instructional Activities:
If this course has any "arranged hours" listed above, provide the specific instructional activities related to those arranged hours.

1. Video tutorials and exercises

V. Course Content:

% of course	Topic
10%	Rendering workflow overview: • Camera settings • Render settings
25%	Shading: • Using the Hypershade editor • Creating shading networks • Material attributes • Creating texture maps
25%	Lighting: • Light types and attributes • Shadow types and attributes • Direct and indirect lighting techniques • Lighting effects
20%	Rendering effects: • Depth of Field • Motion Blur
20%	Compositing: • Rendering layers and passes • Batch rendering and compositing workflows

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
10%	Participation
50%	10 Assignments
10%	Midterm and final exams
30%	Final project

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Assignment 2: Using Materials

   Objective:
   Create materials for a simple still life composition.

   Procedure:
   Compile reference images of the objects that you see in the still life file. Pay close attention to the way the objects in the reference images react to light. In Maya, create materials for the objects in the still life file. Use the type of material that you think is appropriate for each object. Do not adjust the lighting or assign any textures. Focus on adjusting the attributes of the materials to replicate what you see in your reference images.

   Bring your scene file and all of your reference images to the next class meeting.

2. Assignment 8: Scene Lighting

Objective:

Apply the basic principles of scene lighting to an environment in Maya.

Procedure:

Copy the file "sceneLighting_enviroment.mb" from your instructor's Teacher folder.

You will need to create two lighting scenarios with this file: a warm and inviting daytime scene and an eerie and mysterious nightime scene.

Begin by compiling reference images of the type of lighting you want to create. In Maya, create materials for the objects in the file. Use the type of material that you think is appropriate for each object. You may also alter the camera angle slightly but do not change its overall position. You may assign textures if time allows but textures that are necessary to control the lighting should be given a priority.

When complete, save both versions of the scene. Bring your scene files and your reference images to the next class meeting.

Form 3: Student / Program / Institutional Learning Outcomes

10/15/10
Entertainment Technology 26

Course Level Student Learning Outcomes: (Must list <u>at least 2</u>)

1. Students will exhibit strong academic behaviors including regular attendance, timeliness, participation in class activities, and adherence to the College Honor Code.

   As assessed by: assignments, exams

2. Students will demonstrate mastery of the course content by creating production-quality renderings of 3D animations.

   As assessed by: assignments, final project

Demonstrate how this course supports/maps to <u>at least one</u> program learning outcome. Please include all that apply:

1. Create compelling and original content for a quality entertainment project using industry-specific technology tools.

   This course emphasizes the design of original content using industry tools.

2. Effectively analyze and apply design and production methods used by the entertainment industry.

   This course utilizes production methods employed by the entertainment industry.

Demonstrate how this course supports/maps to <u>at least one</u> of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

This course supports student self-discipline by assessing the timely completion of coursework and participation in class activities.

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.

This course assesses the student's ability to effectively communicate original concepts, work with industry-standard tools and resolve technical problems.

ILO #4 take responsibility for their own impact on the earth by living a sustainable and ethical life style.

(Provide explanation here, if applicable)

S/ILO Committee Use Only reviewed by: CKS 11-17-10

Form 1: Course Outline of Record

Santa Monica College

Course Outline For
Entertainment Technology 25C

Course Title: 3D Character Rigging | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **2** In-Class Lab: **1** Arranged: **1**

Date Submitted: November 10, 2010 (dated: October 10, 2010)
Date Updated:

IGETC Area: (office use only)
CSU GE Area: (office use only)
2nd CSU GE Area: (office use only)
SMC GE Area: (office use only)
Transfer: CSU

Transfer (if applicable): please **underline and bold** the anticipated transferability of this course:

Transferable to UC **Transferable to CSU**

Prerequisite(s): ET 25
Skills Advisory:

I. Catalog Description:

This course covers the technical aspects of creating effective animation controls for 3D characters. Using industry-standard tools and methods, students will develop intuitive and efficient character rigs. The use of deformers, constraints, expressions, scripts, utility nodes and kinematic controls will be covered. Students will also be introduced to advanced topics such as cloth, hair, fur and muscle systems.

This course uses Autodesk Maya.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Body Language: Advanced 3D Character Rigging; Eric Allen; Sybex, 2008
2. Stop Staring: Facial Modeling and Animation Done Right; Jason Osipa; Sybex, 2010
3. (add references as needed by pressing TAB; note: could include the contents of a "customized reader")

III. Course Objectives:

Upon completion of the course students will be able to:

1. Demonstrate an understanding of human anatomy in relation to skeletons and kinematics.
2. Apply constraints, expressions and utility nodes to control various aspects of a control rig.
3. Use efficient and effective skin weighting techniques to correct deformations.
4. Use professional workflows to create production-quality body and facial control rigs for a variety of characters.

IIIb. Arranged Hours Objectives:

If this course has any "arranged hours" listed above, provide the specific objectives related to those arranged hours.

Upon completion of the arranged hours students will be able to:

1. Apply the basic principles of MEL and Python scripting.

IV. Methods of Presentation:

Lecture, discussion, demonstration, hands-on projects

IVb. Arranged Hours Instructional Activities:

If this course has any "arranged hours" listed above, provide the specific instructional activities related to those arranged hours.

1. Video tutorials and exercises

V. Course Content:

% of course	Topic
20%	Skeletons and kinematics
10%	Constraints
10%	Expressions and utility nodes
10%	Deformers
10%	Character hierarchies and selection sets
10%	Skinning
20%	Facial rigging
10%	Dynamic simulations and muscle systems

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
10%	Participation
10%	Quizzes
50%	10 Assignments
30%	Final Project

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Assignment 1: Create a simple biped rig

   Objective:
   Create a skeleton and IK system for a simple biped character.

   Procedure:
   Build the joint chains for the character's skeleton
   Edit and mirror the joint chains to complete the skeleton
   Add IK handles to the leg and arm joint chains

2. Assignment 5: Create a facial control rig

   Objective:
   Construct a facial animation system using a series of deformers.

   Procedure:
   Isolate and modify the head geometry
   Add cluster deformers to the eyelids and eyebrows

Build a control rig for the mouth
Create the facial blend shape targets
Create the facial blend shape deformers
Complete the facial controls
Bind the head to the rig

Form 2: Course Approval and Data Sheet for: Entertainment Technology 25C

Is this a New Course, Updated/Revised Course, or Reinstated Course?	**New**
If this is a NEW course, anticipated semester and year of first offering:	**Fall 2011**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:

This course material currently makes up half of the content for ET 25, but the subject matter is too complex to be presented in that format. Having a separate course which focuses on 3D character rigging is the only way to effectively address advanced concepts that are a required part of industry workflows.

List all A.A. majors in which this course is/will be **required**:

-

List all A.A. majors in which this course is/will be an **option**:

- Animation

List all Certificates of Achievement in which this course is/will be **required**:

-

List all Certificates of Achievement in which this course is/will be an **option**:

- Animation

List all Department Certificates in which this course is/will be **required**:

- 3D Modeling

List all Department Certificates in which this course is/will be an **option**:

-

Should this course be **transferable to the CSU?**	**YES**
Should this course be **transferable to the UC?**	**NO**

If you are requesting UC transferability, please list either a comparable lower division course offered at one of the UC campuses or a comparable California Community College course which is transferable to UC:

- UC Campus:
- UC Course Number:
- UC Course Title:

or

- California Community College:
- Course Number:
- Course Title:

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **NONE**

Course Load Factor suggested by department: **1.0**
Rationale for the above load factor suggestion: extremely technical computer-based course that requires significant preparation and frequent revision

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Multimedia

Form 3: Student / Program / Institutional Learning Outcomes

10/15/10
Entertainment Technology 25C

Course Level Student Learning Outcomes: (Must list <u>at least 2</u>)

1.	Students will exhibit strong academic behaviors including regular attendance, timeliness, participation in class activities, and adherence to the College Honor Code.
	As assessed by: quizzes, assignments

2.	Students will demonstrate mastery of the course content by creating production-ready control rigs for 3D characters.
	As assessed by: assignments, final project

Demonstrate how this course supports/maps to <u>at least one</u> program learning outcome. Please include all that apply:

1.	Create compelling and original content for a quality entertainment project using industry-specific technology tools.
	This course emphasizes the design of original content using industry tools.

2.	Effectively analyze and apply design and production methods used by the entertainment industry.
	This course utilizes production methods employed by the entertainment industry.

Demonstrate how this course supports/maps to <u>at least one</u> of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1	acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.
	This course supports student self-discipline by assessing the timely completion of coursework and participation in class activities.

ILO #2	obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.
	This course assesses the student's ability to effectively communicate original concepts, work with industry-standard tools and resolve technical problems.

S/ILO Committee Use Only	reviewed by:	CKS	11-17-10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Entertainment Technology 25C

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	x	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	x	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	x	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	x	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	x	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	x	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	x	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	x	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	x	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	x	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	x	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	x	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	x	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	x	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required?	**YES**
If yes, state the recommended prerequisites:	**ET 25**

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course?		**NO**	
If yes, state the English and/or math level necessary for success:			
English level recommended:		Math level recommended:	

FORM 5: APPROVALS PAGE

Entertainment Technology 25C

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Enter Department or Area	7	0	0	11/8/10
Additional Department or Area (if applicable)				
Please list any other Departments, Areas, or Chairpersons consulted regarding this course:				

Department Chair Approval:	Chris Fria	Date:	11/8/10
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes		No	
Library has adequate materials to support course?	Yes		No	
Librarian Approval:	(Enter Name Here)	Date:		

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

Form 6: Prerequisite, Corequisite, & Advisory Checklist and Worksheet (as per Matriculation Regulations)

Entertainment Technology 25C

Prerequisite: ET 25 ; 3D Modeling
Other prerequisites, corequisites, and advisories also required for this course: (Please note that a separate sheet is required for each prerequisite, corequisite, or advisory)
(If applicable, enter Discipline and Course # here) ; (Enter Course Title here)
(If applicable, enter Discipline and Course # here) ; (Enter Course Title here)

SECTION 1 - CONTENT REVIEW: Check items 1-9 below. If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	X	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	X	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY

In addition to the affirmation of content review listed in section I, an additional level of scrutiny is also required. The level of scrutiny depends on which type of prerequisite is involved. There are six types and each is listed below. Please identify which one is being used to justify the proposed prerequisite. The additional level of scrutiny corresponding to each type of prerequisite is identified below.

___ Type 1: Standard Prerequisite

x Type 2: Sequential within and across disciplines

___ Type 3: Course in communication or computational skills as prerequisite for course other than another skills course

___ Type 4: Program prerequisites

___ Type 5: Health and Safety

___ Type 6: Recency and other measures of readiness (miscellaneous)

Prerequisite Worksheet

ENTRANCE SKILLS FOR ET 25C

A)	Identify the advantages and disadvantages of each surface type used in 3D modeling.
B)	Use photo reference to create realistic organic and inorganic models.
C)	Prepare polygonal surfaces for texturing using effective UV mapping techniques.
D)	Control the complexity of detailed character and environment models by employing efficient workflows.

EXIT SKILLS FOR ET 25

1.	Identify the advantages and disadvantages of each surface type used in 3D modeling.
2.	Use photo reference to create realistic organic and inorganic models.
3.	Prepare polygonal surfaces for texturing using effective UV mapping techniques.
4.	Control the complexity of detailed character and environment models by employing efficient workflows.

		ENTRANCE SKILLS FOR ET 25C									
EXIT SKILLS FOR ET 25		A	B	C	D	E	F	G	H	I	J
	1	x									
	2		x								
	3			x							
	4				x						
	5										
	6										
	7										
	8										
	9										
	10										

Form 1: Course Outline of Record

Santa Monica College

Course Outline For
Philosophy 20 / Environmental Studies 20

Course Title:	Environmental Ethics			**Units:**	3
Total Instructional Hours: (usually 18 per unit)	**54**				
Hours per week (full semester equivalent) in Lecture:	**3**	In-Class Lab:		Arranged:	

Date Submitted:	November 9, 2010

IGETC Area:	3B (pending)
CSU GE Area:	C2
2nd CSU GE Area:	D7
SMC GE Area:	III
SMC GE Area:	V

Transfer:	UC (pending), CSU

Prerequisite(s):	none
Skills Advisory:	Eligibility for English 1

I. Catalog Description:

This course introduces the field of environmental ethics with an emphasis on global environmental problems and global citizenship. The conceptual foundations of environmental attitudes and values are examined through an historical survey of philosophies of nature and human/nature relations. Ethical theories are presented and used to analyze contemporary environmental problems, e.g. mistreatment of animals, pollution, climate change, species extinction, natural resource depletion, environmental racism etc. The ethical assumptions underlying various national and international responses to environmental problems will be analyzed and evaluated.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1.	*Environmental Ethics: The Big Questions*, David R. Keller, Wiley-Blackwell, 2010.
2.	*Environmental Ethics: Readings in Theory and Application*, Louis Pojman, fifth edition, Thomson-Wadsworth, 2008.
3.	*Environmental Ethics: An Introduction to Environmental Philosophy*, Joseph R. Des Jardins, fourth edition, Wadsworth, 2005.
4.	*Environmental Ethics: Divergence & Convergence*, Susan Armstrong & Richard Botzler, third edition, McGraw-Hill, 2004.
5.	*Ecological Ethics: An Introduction*, Patrick Curry, Polity, 2006.
6.	*Global Environmental Ethics*, Louis Pojman, McGraw-Hill, 1999.
7.	*Unsustainable: A Primer for Global Environmental and Social Justice*, Patrick Hossay, Zed Books, 2006.
8.	*Just Ecological Integrity: The Ethics of Maintaining Planetary Life*, Peter Miller and Laura Westra, Roman & Littlefield, 2002.
9.	*Earth and Other Ethics: The Case for Moral Pluralism*, Christopher D. Stone, Harper & Row, 1987.
10.	*The Incomplete Eco-Philosopher: Essays from the Edges of Environmental Ethics,* Anthony Weston, State University of New York, 2009.

III. Course Objectives: Upon completion of the course students will be able to:	
1.	Identify and explain basic philosophical concepts essential to ecological literacy, e.g. "ethics", "environmentalism", "nature", "ecology", "wilderness", "sustainability", "global commons", "moral community", "global citizenship", "environmental justice".
2.	Understand the rise of modern environmentalism in terms of the history of Western philosophy.
3.	Compare, contrast and evaluate a range of philosophies of nature and human/nature relations.
4.	Critically analyze the intrinsic/instrumental value distinction as it applies to "nature".
5.	Examine the meaning of individual and collective responsibility for our impact on the earth, in the present and the future.
6.	Identify and analyze a range of ethical theories, e.g. utilitarian, virtue ethics, deontology, pragmatism.
7.	Apply various ethical theories to a range of environmental problems, e.g. climate change, pollution, species loss.
8.	Analyze and critically evaluate the philosophical assumptions underlying various national and international responses to environmental problems.
9.	Construct ethical justifications for particular solutions to environmental problems.

IV. Methods of Presentation:
A combination of lecture, discussion, film, guest speakers, collaborative learning, and/or service-learning/experimental learning is employed.

V. Course Content:	
% of course	**Topic**
5%	Introduction to environmental ethics: basic concepts; sustainability; ecological integrity; global citizenship.
5%	Global environmental problems & dilemmas, e.g. the tragedy of the commons.
5%	The philosophical roots of environmentalism: philosophies of "nature" and human/nature relationships; intrinsic/extrinsic value; anthropocentricism/biocentricism/ecocentricism.
10%	Traditional ethical theories: deontology, utilitarianism, virtue ethics, pragmatism, etc.
15%	The scope of moral considerability and rights: people, land, ecosystems, plants, animals, and future generations.
40%	Case-studies: mistreatment of animals, pollution, climate change, species extinction, natural resource depletion, environmental racism, etc.
10%	Ethical dimensions of national and international policy efforts to resolve selected environmental problems, e.g. Kyoto Protocol, United Nations sustainable development initiatives, and The Earth Charter.
10%	Ecological Democracy, Environmental Justice, Ecological Feminism & Global Citizenship

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)	
% of grade	**Evaluation Method**
20%	Group Projects/Presentations/Experiential Learning Activities
20%	Midterm Exam
30%	Writing Assignments/Essays
30%	Final Exam/Final Project

VII. Sample Assignments: (please describe at least 2 sample assignments)	
1.	Should ecosystems have rights? Write an argument for or against the extension of rights to ecosystems based on two or more ethical theories presented in the course.
2.	Write an explanatory essay that answers this question: "How can an ethic of global citizenship, such as that presented in *The Earth Charter*, resolve the central issue raised by Garrett Hardin's tragedy of the commons?".

Form 2: Course Approval and Data Sheet for: Philosophy 20 / Environmental Studies 20

Is this a New Course, Updated/Revised Course, or Reinstated Course?	**New**
If this is a NEW course, anticipated semester and year of first offering:	**Fall 2011**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:
This course will add an option for students seeking to fulfill the requirements for the Environmental Studies AA degrees, Liberal Arts AA degrees, and Certificates of Achievement in Environmental Studies, Environmental Science, and Liberal Arts.

List all A.A. majors in which this course is/will be an **option**:

- Environmental Studies
- Environmental Science
- Liberal Arts – Arts and Humanities
- Liberal Arts – Social and Behavior Science

List all Certificates of Achievement in which this course is/will be an **option**:

- Environmental Studies
- Environmental Science
- Liberal Arts – Arts and Humanities
- Liberal Arts – Social and Behavior Science

Should this course be **transferable to the CSU?**	**YES**
Should this course be **transferable to the UC?**	**YES**

If you are requesting UC transferability, please list either a comparable lower division course offered at one of the UC campuses or a comparable California Community College course which is transferable to UC:

- UC Campus:
- UC Course Number:
- UC Course Title:

or

- California Community College: Butte College
- Course Number: PHIL 5
- Course Title: Environmental Ethics

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **0**

Course Load Factor suggested by department: **1**
Rationale for the above load factor suggestion: Standard Lecture Course

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Philosophy

Form 3: Student / Program / Institutional Learning Outcomes

November 9, 2010
Philosophy 20 / Environmental Studies 20

Course Level Student Learning Outcomes: (Must list <u>at least 2</u>)

1.	Exhibit strong academic behaviors including regular attendance, timeliness, participation in class activities, and adherence to the College Honor Code.
	As assessed by: record of class participation, attention to deadlines, and adherence to the College Honor Code.

2.	Demonstrate through oral and written work knowledge of the conceptual foundations of environmental attitudes and values through an examination of Western philosophies of nature and human/nature relations.
	As assessed by: Exams, essays and/or class presentations.

3.	Be proficient in the research, analytical, and communication skills necessary to present, orally and in writing, compelling and original arguments that advance reasonable conclusions as to the most ethical global solutions to selected environmental problems
	As assessed by: Written and oral argumentation.

Demonstrate how this course supports/maps to <u>at least one</u> program learning outcome. Please include all that apply:

1.	(Enter a Program Learning Outcome here)
	(Provide explanation here)

2.	(Enter a Program Learning Outcome here)
	(Provide explanation here)

Demonstrate how this course supports/maps to <u>at least one</u> of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #4	take responsibility for their own impact on the earth by living a sustainable and ethical life style.
	One of the objectives of the course is to, "Examine the meaning of individual and collective responsibility for our impact on the earth, in the present and the future." The process of analyzing selected environmental problems will provide students with the opportunity to reflect on the impact of their life styles, and to reflect on and deliberate about the ethics they believe should guide a sustainable way of life.

S/ILO Committee Use Only	reviewed by:	CKS	11/9/2010

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Philosophy 20 / Environmental Studies 20

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	X	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	X	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	X	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	X	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	X	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	X	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	X	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	X	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	X	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	X	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	X	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	X	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	X	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	X	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required?	**NO**
If yes, state the recommended prerequisites:	

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course?	**NO**		
If yes, state the English and/or math level necessary for success:			
English level recommended:		Math level recommended:	

FORM 5: APPROVALS PAGE

Philosophy 20 / Environmental Studies 20

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Philosophy and Social Science	16	0	1	11/14/2010
Interdisciplinary Studies (Environmental Studies)	18	0	46	11/17/2010
Please list any other Departments, Areas, or Chairpersons consulted regarding this course:				

Department Chair Approval:	Christine Schultz	Date:	11/16/2010
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes		No	X
Library has adequate materials to support course?	Yes	X	No	

Librarian Approval:	Carol Womack	Date:	11/11/2010

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

FORM 8: APPLICATION FOR APPROVAL—COURSE TO FULFILL GLOBAL CITIZENSHIP A.A. DEGREE REQUIREMENT

Philosophy 20 / Environmental Studies 20

Step 1: Under which category does the course belong? (select only one)

		Course content focuses primarily on **at least one** of the following four areas: (Check all that apply)
☐	Ecological Literacy	☒ Conceptual foundations of our environmental attitudes, values and challenges from a variety of cultural perspectives
		☐ Scientific understanding of Earth's natural systems and cycles, emphasizing humanity's role as the planet's ecologically dominant species and how that affects the continuing viability of habitats for life on Earth.
		☐ Analysis of human activity and its impact on Earth's natural environments, both local and global, and the shorter-and longer-term implications for the planet's livability and sustainability.
		☐ Analysis of environmental problems and solutions as they apply to the understanding and practical application of technologies aimed at curbing the adverse impact of human activity on the natural environment and/or improving the sustainable use of natural resources.

Step 2: Student Learning Outcome

It is expected that at least one student learning outcome (SLO) of this course reflects the particular focus of the category to which you are applying. Please identify that SLO here:

SLO: Demonstrate through oral and written work knowledge of the conceptual foundations of environmental attitudes and values through an examination of Western philosophies of nature and human/nature relations.

Step 3: Course Outline of Record

It is expected that the particular focus of the category to which you are applying be integrated **throughout** the course content, objectives, etc. As such, the course outline of record must have been updated within the past two academic years to be considered by the committee.

Step 4: Narrative

Please write a rationale as to why this course should fulfill of the SMC Global Citizenship A.A. degree requirement for the particular category under which you have applied. Explain how this course fulfills the areas checked above.

Narrative:

Environmental Ethics constitutes an important foundation for ecological literacy insofar as it provides the ethical knowledge and skill necessary to prepare citizens to assess and solve environmental problems, locally and globally. The course introduces students to the traditional ethical theories (utilitarian, deontological, virtue ethics) as well as contemporary environmental theories (social ecology, ecofeminism, ecocentricism, biocentrism, deep ecology, ecological democracy) as frameworks to use in thinking through solutions to environmental problems such as air and water pollution, natural resource exploitation, habitat loss, and global climate change. Among the conceptual foundations of our environmental attitudes, values and challenges, considered in the course, are: "human", "nature", "wilderness", "sustainable development", "global commons", "moral community", "global citizenship", "environmental justice", and "stewardship". In addition, the course offers opportunities for reflection on a range of contemporary ethical values (autonomy, liberty, equality, justice) in relation to a range of solutions to environmental problems, e.g. does a commitment to equality entail moral consideration for animals?

Step 5: Departmental or Area Vote on Fulfillment of Global Citizenship

	Yes	No	Abstain	Not voting
Department or Area Vote	11	0		1

Form 1: Course Outline of Record

Santa Monica College

Course Outline For

Recycling and Resource Management 1

Course Title: Introduction to Recycling and Resource Management | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **3** | In-Class Lab: | Arranged:

Date Submitted: November 10, 2010
Date Updated:

IGETC Area: n/a
CSU GE Area: n/a
SMC GE Area: n/a
Transfer: CSU

Prerequisite(s): None
Skills Advisory: None

I. Catalog Description:

This course introduces general terminology and principles regarding waste, recycling, resource management and Zero Waste. The history of waste and resource management in California, including residential, commercial and institutional reuse, recycling, and composting programs, is addressed. An overview of national, state, and local legislation and regulations related to waste and resource management and recycling is provided. The course covers waste diversion practices such as reduce, reuse, recycle, and also introduces principles in recovery, remanufacturing and repurchasing.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Robin Murray, Zero Waste, February, 2002, Published by Greenpeace Publications, 2002, 211 pp. ISBN 1 903907 01 2
2. Jared Diamond, Collapse: How Societies Choose to Fail or Succeed, Published by Viking Penguin, 2005, 575 pp. ISBN-10: 0143036556, ISBN-13: 978-0143036555
3. Richard Gertman and Susan Kinsella, *Single Stream Recycling Best Practices Manual and Guide*, 2007, *http://www.conservatree.com/learn/SolidWaste/bestpractices.shtml*

III. Course Objectives:

Upon completion of the course students will be able to:

1. Describe and explain recycling and resource management principles, such as Zero Waste.
2. Explain how recycling and resource management can be a key part of community and business sustainability plans and help contribute to reducing greenhouse gases which affect global climate change
3. Identify occupations in the industry and skill sets needed to gain employment
4. Analyze the role of markets and local policies in driving successful waste diversion and resource recovery techniques such as recycling, reusing, and composting.
5. Examine historical trends in waste and resource management and identify areas for improvement

IV. Methods of Presentation:

Lectures, PowerPoint Presentations, Films, Guest Lecturers and field observations of local recycling, recovery and resource management industries

V. Course Content:

% of course	Topic
30%	Introduction to Recycling, Resource Management, and Rethinking Waste Rethinking Wastes How Recycling Works: as nature, as human construct, as legislation Collecting and Processing Resources (Not Wastes) Resources as Feedstocks for Manufacturing How Landfills Really Work Integrated waste management or resource management system? Eliminating Wastes Public Involvement in Recycling & Buying Recycled Public Understanding of Goals
35%	Principles of Zero Waste Definition of Zero Waste Climate Change Resource management paradigms Community Case Studies Business Case Studies History (and Culture) of Waste and Recycling Recycling Legislation Zero Waste Upstream: Producer responsibility and eliminating toxicity Service Opportunities Analyses Sources, Types and Values of Materials: 12 market categories Special Discards (Ewaste, HHW, Regulated materials) Zero Waste Infrastructure
15%	Composting The Science of Composting Major Composting Methods Organics Material Collection Compost Uses and Markets
15%	Construction & Demolition (C&D) Recycling Barriers to C&D Recycling Policies, Ordinances, Programs Disaster Debris C&D Markets Strategies for Highest and Best Use Markets Creating Demand
15%	Professional Development and Field Work Jobs and Careers Tours: Reuse retail store, Material Recovery Facility, Composting, Landfill

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
15%	Quizzes
30%	Written Analysis (approximately 3)
30%	Oral presentations – group and/or individual
25%	Examinations (2)

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Prepare a paper that identifies and analyzes market incentives and tools for businesses to achieve Zero Waste.
2. Prepare a presentation on how individuals, businesses, institutions, and communities are successfully diverting waste from landfill and achieving goals for Zero Waste.

Form 2: Course Approval and Data Sheet for: Recycling and Resource Management 1

Is this a New Course, Updated/Revised Course, or Reinstated Course? **New**

If this is a NEW course, anticipated semester and year of first offering: **Fall 2011**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:

A Department of Labor grant of $5 million has been awarded to SMC to help train people in the Recycling and Resource Management field. The funds will be used as a collaborative project in partnership with two Orange County community colleges — Irvine Valley College and Golden West College — to develop training curriculum and provide job placement services.

Introduction to Recycling and Resource Management is one of four core courses being developed under this Department of Labor grant.

List all A.A. majors in which this course is/will be **required**:

- **Recycling and Resource Management (forthcoming)**

List all A.A. majors in which this course is/will be an option:

- n/a

List all Certificates of Achievement in which this course is/will be **required**:

- **Recycling and Resource Management Level 1 (12-units; forthcoming)**
- **Recycling and Resource Management Level 2 (18-units; forthcoming)**

List all Certificates of Achievement in which this course is/will be an **option**:

- n/a

List all Department Certificates in which this course is/will be **required**:

- n/a

List all Department Certificates in which this course is/will be an **option**:

- n/a

Should this course be **transferable to the CSU?** **Yes**

Should this course be **transferable to the UC?** **No**

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **0**

Course Load Factor suggested by department: **1.0**
Rationale for the above load factor suggestion: Standard Lecture Course

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Ecology or
- Environmental Technologies or
- The equivalent

Form 3: Student / Program / Institutional Learning Outcomes

November 10, 2010
Recycling and Resource Management 1

Course Level Student Learning Outcomes: (Must list <u>at least 2</u>)
Upon completion of this course, the student will be able to:

1. Explain the recycling system and the tools employed to eliminate waste and use resources efficiently.

   As assessed by: Quizzes, Exams, Papers

2. Identify local markets for recovered products and materials to be used as resources for local manufacturing

   As assessed by: oral presentations and papers

3. Identify specific regulations that influence recycling and resource management in California.

   As assessed by: oral presentations and papers

Demonstrate how this course supports/maps to <u>at least one</u> program learning outcome. Please include all that apply:

1. Earth Science students will acquire and develop knowledge and skills that will equip them to be informed, engaged, and productive global citizens, capable of leading humanity toward a more sustainable and adaptable future.

   This course will provide a solid understanding of recycling and resource management. Students will identify how Zero Waste principles can be a key part of community and business sustainability plans and help contribute to reducing greenhouse gases which affect global climate change.

2. Students will use key concepts and methodologies presented in Earth Science classes to recognize, describe, evaluate and analyze various aspects of human behavior

   A key component of this class will be introducing students to recycling and resource recovery by identifying historical and current disposal practices, including the concept of recycling as a human construct in a wasteful society. Additionally, best practices for preventing waste through design and resource management systems will be presented.

Demonstrate how this course supports/maps to <u>at least one</u> of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

Students will be required to participate in group discussions based on readings and lectures. Working alone, or in a group, in preparation for an oral presentation provides the opportunities for students to become more self-confident, more organized and develop self-discipline.

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.
Students will be assigned reading from texts that expand and enhance lecture topics:

a. *Collapse,* to clarify how civilizations prospered or collapsed depending on how they managed their resources.
b. *Zero Waste,* to clarify the importance of new policies, programs and facilities needed to move towards Zero Waste.
c. EPA's *Decision Makers Guide to Waste Management* to provide overview of municipal policy and program options.
d. *Single Stream Recycling Best Practices Manual and Guide* to provide understanding of how local

governments are key to better designed and integrated systems.
Critical thinking skills will be developed as students make connections between theoretical frameworks and practical implications of resource management and recovery.

ILO#3 respect the inter-relatedness of the global human environment, engage with diverse peoples, and acknowledge the significance of their daily actions relative to broader issues and events.

A key component of this class will be introducing students to the basic principles of recycling and resource management, which includes rethinking waste by identifying historical, current and emerging disposal practices. Additionally, best practices for preventing waste through design and resource management systems will be presented. Waste management is a global issue which includes issues concerning Environmental Justice.

ILO #4 take responsibility for their own impact on the earth by living a sustainable and ethical life style.

This course will provide an understanding of recycling, resource recovery and waste disposal. Students will utilize principles of resource management to examine the role of the individual as part of a global society; recognizing the connection between individual behaviors and global environmental problems.

S/ILO Committee Use Only reviewed by: CKS 11/11/10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Recycling and Resource Management 1

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	X	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	X	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	X	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	X	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	X	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	X	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	X	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	X	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	X	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	X	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	X	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	X	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	X	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	X	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required? **No**

If yes, state the recommended prerequisites:

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course? **No**

If yes, state the English and/or math level necessary for success:

English level recommended: _____ Math level recommended: _____

FORM 5: APPROVALS PAGE

Recycling and Resource Management 1

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Earth Science	11	0	0	Nov 5, 2010
Additional Department or Area (if applicable)				
Please list any other Departments, Areas, or Chairpersons consulted regarding this course: • Interdisciplinary Studies Program—Environmental Studies				

Department Chair Approval:	Vicki Drake	Date:	Nov 5, 2010
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes	x	No	
Library has adequate materials to support course?	Yes	x	No	
Librarian Approval:	Carol Womack	Date:	11/17/2010		

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

FORM 8:

APPLICATION FOR APPROVAL—COURSE TO FULFILL GLOBAL CITIZENSHIP A.A. DEGREE REQUIREMENT

Recycling and Resource Management 1

Step 1: Under which category does the course belong? (select only one)

		Course content focuses primarily on **at least one** of the following four areas: (Check all that apply)	
		☐	Conceptual foundations of our environmental attitudes, values and challenges from a variety of cultural perspectives
		☐	Scientific understanding of Earth's natural systems and cycles, emphasizing humanity's role as the planet's ecologically dominant species and how that affects the continuing viability of habitats for life on Earth.
X	Ecological Literacy	X	Analysis of human activity and its impact on Earth's natural environments, both local and global, and the shorter-and longer-term implications for the planet's livability and sustainability.
		X	Analysis of environmental problems and solutions as they apply to the understanding and practical application of technologies aimed at curbing the adverse impact of human activity on the natural environment and/or improving the sustainable use of natural resources.

Step 2: Student Learning Outcome
It is expected that at least one student learning outcome (SLO) of this course reflects the particular focus of the category to which you are applying. Please identify that SLO here:

SLO:

1.	Explain the recycling system and the tools employed to eliminate waste and use resources efficiently.
	As assessed by: Quizzes, Exams, Papers
2.	Identify specific regulations that influence recycling and resource management in California.
	As assessed by: Quizzes, Exams, Papers

Step 4: Narrative
Please write a rationale as to why this course should fulfill of the SMC Global Citizenship A.A. degree requirement for the particular category under which you have applied. Explain how this course fulfills the areas checked above.

Narrative:

Recycling and Resource Management 1 is an integral part of ecological literacy insofar as it provides an economic, political, and social perspective on waste production and diversion on a local and global scale. It will prepare our students for global citizenship by providing them the terminology, conceptual frameworks, and skills necessary to solve problems associated with our current unsustainable material flows. Students will examine a variety of problem-solving discourses including the role of technology, government, culture, and economics.

- Analysis of human activity and its impact on Earth's natural environments, both local and global, and the shorter- and longer-term implications for the planet's livability and sustainability.

  This course examines the process of waste diversion and resource management including basic scientific principles associated with recycling, composing, materials flows, organics, and life cycle analysis. It examines human's role in waste prevention, diversion, and management. It also introduces the concept of ecological footprints and carbon footprints and explains the connection between waste management and climate change.

Additionally, this course helps students make connections between local actions and global environmental impact. It examines human's role in creating waste and mismanaging resources and identifies the various waste diversion programs that are helping residents, businesses, and governments move towards Zero Waste. It analyzes the processes of waste management from an anthropocentric perspective and explores how Zero Waste is an integral part of sustainable communities and planet vitality.

- Analysis of environmental problems and solutions as they apply to the understanding and practical application of technologies aimed at curbing the adverse impact of human activity on the natural environment and/or improving the sustainable use of natural resources.

  This course provides an introductory study on the negative environmental impacts of waste production and resource management. It provides an overview of solutions including technology such as food digesters that transform waste into energy, compostable flatware, and cradle-to-cradle design. Also covered are important legislative mechanisms for encouraging sustainable alternatives to historical practices that are unsustainable and detrimental to the health of humans and the planet.

Step 5: Departmental or Area Vote on Fulfillment of Global Citizenship

	Yes	No	Abstain	Not voting
Earth Science Vote	11	0	0	0

Form 1: Course Outline of Record

Santa Monica College

Course Outline For
Recycling and Resource Management 2

Course Title: Culture and Zero Waste | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **3** | In-Class Lab: | Arranged:

Date Submitted: November 6, 2010
Date Updated:

IGETC Area: n/a
CSU GE Area: n/a
SMC GE Area: n/a
Transfer: CSU

Prerequisite(s): None
Skills Advisory: None

I. Catalog Description:

This course will provide an overview of our "throw-away" culture and the motivations behind consumerism and related waste disposal practices. Key issues of the course include carbon footprint, plastics in our environment, consumer laws and cultural mindsets. The course will identify key government agencies and policies and how to collaborate and obtain funding for outreach. Environmental educational skills, programs, and methods will be reviewed. Case studies of successful youth campaigns will be explored and the basics of establishing strong youth educational programs examined.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing (Education for Sustainability Series); Author: Doug McKenzie-Mohr, William Smith Publisher: New Society Publishers (June 29, 1999); ISBN-10: 0865714061; ISBN-13: 978-0865714069

2. Chapter 2 & 6 from Green Marketing: Opportunity for Innovation; Author: Jacquelyn A. Ottman Publisher: BookSurge Publishing (May 14, 2004); ISBN-10: 1594570787; ISBN-13: 978-1594570780

III. Course Objectives:

Upon completion of the course students will be able to:

1. Identify the essentials of effective public outreach strategies, including social media tools, used to sell the concepts of "Reduce, Reuse and Recycle" behaviors to the public.
2. Explore a variety of techniques for reaching and engaging target audiences, shaping behavior, and measuring the effectiveness of various marketing tools.
3. Identify the job skills necessary for successful careers in Recycling and Resource Management, including sales, marketing, materials recovery, disposal, public servant, coordination, and educational programs.
4. Explain the history of consumerism and the current cultural shift toward Zero Waste principles.
5. Recognize the major stakeholders influencing legislation concerning recycling and resource management.

IV. Methods of Presentation:

Lectures, videos, PowerPoints and field trips to local industries

V. Course Content:

% of course	Topic
35%	Community-Based Social Marketing and Social Media Public Communications & Relations Recycling Education Community Based Social Marketing Outreach Models: Case Studies Electronic Marketing Tools & Social Media Marketing
25%	Consumerism Disposable Society Footprints: Eco, Carbon, Plastic
15%	Public Policies and Outreach Programs Government Agencies Zero Waste, Air Quality and Water Quality (NPDES – urban runoff,/storm drains, CARB) Train the Trainer Creating effective RFPs for Public Outreach
10%	Youth Education Curriculum Existing Programs Community Service and Service-based learning Youth Developed Campaigns: Case Studies Zero Waste Schools: Case Studies
10%	Recycling and Resource Management Professional Job Skills Career Planning Education Planning Public Speaking Job skills: Diverse Communities, Professional writing, Public Speaking, technology skills Soft skills: Time Management, communication skills, interpersonal skills

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
15%	Quizzes
30%	Written analysis (2)
30%	Oral presentations: individual and/or group
25%	Examinations (2)

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Prepare a paper that analyzes the components of a recent or current, real-world public outreach campaign and obtain samples of the campaign materials. This could include a brochure, a flyer, a recycling guide, a photo of a bus shelter ad, a transcript of a TV or radio PSA, a website, etc. Be sure your samples include at least one tangible/non-digital item.
2. Develop and deliver a presentation based on an analysis of "real-life" social marketing examples in relation to the principles addressed in the course.

Form 2: Course Approval and Data Sheet for: Recycling and Resource Management 2

Is this a New Course, Updated/Revised Course, or Reinstated Course?	**New**
If this is a NEW course, anticipated semester and year of first offering:	**Fall 2011**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:

A Department of Labor grant of $5 million has been awarded to SMC to help train people in the Recycling and Resource Management field. The funds will be used as a collaborative project in partnership with two Orange County community colleges — Irvine Valley College and Golden West College — to develop training curriculum and provide job placement services.

Culture and Zero Waste is one of four core courses being developed under this Department of Labor grant.

List all A.A. majors in which this course is/will be **required**:

- **Recycling and Resource Management (forthcoming)**

List all A.A. majors in which this course is/will be an option:

- n/a

List all Certificates of Achievement in which this course is/will be **required**:

- **Recycling and Resource Management Level 1 (12-units; forthcoming)**
- **Recycling and Resource Management Level 2 (18-units; forthcoming)**

List all Certificates of Achievement in which this course is/will be an **option**:

- n/a

List all Department Certificates in which this course is/will be **required**:

- n/a

List all Department Certificates in which this course is/will be an **option**:

- n/a

Should this course be **transferable to the CSU?**	**YES**
Should this course be **transferable to the UC?**	**NO**

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **0**

Course Load Factor suggested by department: **1.0**
Rationale for the above load factor suggestion: Standard Lecture Course

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Ecology or
- Environmental Technologies or
- The equivalent

Form 3: Student / Program / Institutional Learning Outcomes

November 10, 2010
Recycling and Resource Management 2

Course Level Student Learning Outcomes: (Must list at least 2)
Upon completion of this course, the student will be able to:

1. Develop an effective outreach campaign strategy utilizing Social Media and Community-Based Marketing tools.

   As assessed by: Papers, and individual/group presentations

2. Identify key components of an effective Request for Proposal (RFP) for public outreach and Community-Based Social Marketing services.

   As assessed by: Examinations, papers and individual/group presentations

3. Identify key components of successful Zero Waste curriculum and educational tools.

   As assessed by: Examinations, papers and individual/group presentations

4. Recognize how consumerism and a disposable society are components of a cultural shift towards Zero Waste

   As assessed by: Examinations and papers

Demonstrate how this course supports/maps to at least one program learning outcome. Please include all that apply:

1. Earth Science students will acquire and develop knowledge and skills that will equip them to be informed, engaged, and productive global citizens, capable of leading humanity toward a more sustainable and adaptable future.

   This course will provide an overview of our "throw-away" culture and the motivations behind consumerism. Key issues of the course include carbon footprint, plastics in our environment, consumer laws and cultural mindsets.

2. Students will use key concepts and methodologies presented in Earth Science classes to recognize, describe, evaluate and analyze various aspects of human behavior.

   This course will identify key government agencies and policies and how to collaborate and obtain funding for outreach. Environmental educational skills, programs, and methods will be reviewed. Successful youth campaigns case-studies will be explored and basics of establishing strong youth programs taught.

Demonstrate how this course supports/maps to at least one of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

Students will be required to participate in group discussions based on readings and lectures. Working alone, or in a group, in preparation for an oral presentation provides the opportunities for students to become more self-confident, more organized and develop self-discipline.

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.

Students will be required to prepare a paper that analyzes the components of a recent or current, real-world public outreach campaign and obtain samples of the campaign materials. (This could include a brochure, a flyer,

a recycling guide, a photo of a bus shelter ad, a transcript of a TV or radio PSA, a website, etc). Students will be required to research the context for the campaign, finding out as much as possible re: the sponsoring agency, what their overall mission is, specifically what the target behavior for this particular campaign is, who they are targeting, how long the campaign has been going on, whether they have quantifiable goals for the campaign, how they plan to measure the results of the campaign, etc.

ILO#3 respect the inter-relatedness of the global human environment, engage with diverse peoples, and acknowledge the significance of their daily actions relative to broader issues and events.

Students will participate in group discussions. Each group will share their "real-life" social marketing samples brought into class and analyze them using the principles learned in class. The team will choose one campaign and present their analysis to the rest of the class. Additionally, topics in consumerism will be presented, describing how the United States and other countries have moved into 'disposable' societies and what steps are necessary to rethink waste generation and diversion. Concepts of Environmental Justice will be discussed.

ILO #4 take responsibility for their own impact on the earth by living a sustainable and ethical life style.

Through the identifying of key components of successful waste diversion and resource recovery campaigns, curriculum and educational tools, students will be learning to not only take responsibility for their own impact, but will also develop the tools necessary to help others live sustainable and ethical life styles through waste reduction.

S/ILO Committee Use Only reviewed by: CKS 11/11/10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Recycling and Resource Management 2

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	X	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	X	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	X	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	X	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	X	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	X	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	X	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	X	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	X	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	X	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	X	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	X	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	X	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	X	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required? **No**

    If yes, state the recommended prerequisites:

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course? **No**

    If yes, state the English and/or math level necessary for success:

    English level recommended: _____ Math level recommended: _____

FORM 5: APPROVALS PAGE

Recycling and Resource Management 2

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Earth Science	11	0	0	11/5/2010
Additional Department or Area (if applicable)				
Please list any other Departments, Areas, or Chairpersons consulted regarding this course: • Interdisciplinary Studies Program—Environmental Studies				

Department Chair Approval:	Vicki Drake	Date:	11/5/2010
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes	x	No	
Library has adequate materials to support course?	Yes	x	No	
Librarian Approval:	Carol Womack	Date:	11/17/2010		

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

Form 1: Course Outline of Record

Santa Monica College

Course Outline For

Recycling and Resource Management 3

Course Title: Resource Management and Zero Waste for Communities | **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **3** | In-Class Lab: | Arranged:

Date Submitted: November 10, 2010
Date Updated:

IGETC Area: n/a
CSU GE Area: n/a
SMC GE Area: n/a
Transfer: CSU

Prerequisite(s): None
Skills Advisory: None

I. Catalog Description:

This course will identify how resource management and Zero Waste policies and programs are developed within a community, what type of planning and facilities are needed, and how to finance the systems. Students will also review sample sustainability and zero waste plans and will discuss different approaches communities have taken to developing Zero Waste goals. Students will also learn about tools for local government, best practices for RFPs (Request for Proposals) and contracts, understanding enforcement options, design of resource recovery parks, performance reporting and financial records, Extended Producer Responsibility and Local Producer Responsibility policies and programs, bans, rules and incentives, and local markets and uses for discarded resources.

II. Examples of Appropriate Text or Other Required Reading: (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Solid Waste Management in the World's Cities: Water and Sanitation in the World's Cities, Published by Earthscan Ltd, 2010, 228 pp. ISBN: 9781849711708 HS Number: HS/105/10E/ \
2. Zero Waste International Alliance, *Global Principles for Zero Waste Communities,* http://www.zwia.org/standards.html
3. Gary Liss & Associates, *Zero Waste Strategic Plan*, City of Oakland, 2006, http://www.zerowasteoakland.com/AssetFactory.aspx?did=2123
4. Gary Liss & Associates, *Zero Waste Strategic Plan,* City of Austin, 2009, http://www.ci.austin.tx.us/sws/downloads/zerowaste_plan.pdf

III. Course Objectives:

Upon completion of the course students will be able to:

1. Review sample Zero Waste community plans and discuss different approaches communities have taken to developing Zero Waste goals.
2. Identify what type of planning and facilities are needed for Zero Waste Communities and how to finance the systems.
3. Identify best practices for RFPs (Request for Proposals) and contracts for developing local markets and uses.
4. Identify Extended Producer Responsibility and Local Producer Responsibility policies and programs including bans, rules and incentives.

IV. Methods of Presentation:

Lectures, PowerPoint presentations, guest lecturers, videos, online discussions, and field trips to local Zero Waste communities and industries

V. Course Content:

% of course	Topic
25%	Zero Waste Community Plans, Programs, and Policies
20%	Implementing Local Programs (Commercial, Residential, Governmental, etc.)
10%	Enforcement (jurisdictions, prosecution, environmental health and safety issues)
15%	Designing Systems and Facilities to Support Maximum Resource Recovery
10%	Financing Programs and Systems (alternatives and grants)
20%	Extended Producer Responsibility and Waste Prevention

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
15%	Quizzes
30%	Written analysis (2)
30%	Oral presentations: individual and/or group
25%	Examinations (2)

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Develop and deliver a presentation to the class based on your experiences with recycling and resource management at home, business and/or community. Additionally, choose a community and develop a Zero Waste Plan based on the principles learned in class.
2. Write a paper that analyzes how climate change is a driver for communities to adopt Zero Waste goals and plans.

Form 2: Course Approval and Data Sheet for: Recycling and Resource Management 3

Is this a New Course, Updated/Revised Course, or Reinstated Course?	**New**
If this is a NEW course, anticipated semester and year of first offering:	**Fall 2011**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:

A Department of Labor grant of $5 million has been awarded to SMC to help train people in the Recycling and Resource Management field. The funds will be used as a collaborative project in partnership with two Orange County community colleges — Irvine Valley College and Golden West College — to develop training curriculum and provide job placement services.

Resource Management and Zero Waste in Communities is one of four core courses being developed under this Department of Labor grant.

List all A.A. majors in which this course is/will be **required**:

- **Recycling and Resource Management (forthcoming)**

List all A.A. majors in which this course is/will be an option:

- n/a

List all Certificates of Achievement in which this course is/will be **required**:

- **Recycling and Resource Management Level 1 (12-units; forthcoming)**
- **Recycling and Resource Management Level 2 (18-units; forthcoming)**

List all Certificates of Achievement in which this course is/will be an **option**:

- n/a

List all Department Certificates in which this course is/will be **required**:

- n/a

List all Department Certificates in which this course is/will be an **option**:

- n/a

Should this course be **transferable to the CSU?**	**YES**
Should this course be **transferable to the UC?**	**NO**

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **0**

Course Load Factor suggested by department: **1.0**
Rationale for the above load factor suggestion: Standard Lecture Course

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: *Minimum Qualifications for Faculty and Administrators in California Community Colleges* adopted by The Board of Governors)

- Ecology or
- Environmental Technologies or
- The equivalent

Form 3: Student / Program / Institutional Learning Outcomes

November 10, 2010
Recycling and Resource Management 3

Course Level Student Learning Outcomes: (Must list <u>at least 2</u>)
Upon completion of this course, the student will be able to:

1. Explain how and why communities are adopting waste diversion goals and develop community plans to eliminate waste and use resources efficiently.

   As assessed by: Group presentations, written papers

2. Compare policies, programs and facilities needed for communities to improve waste diversion and resource recovery.

   As assessed by: quizzes, exams and written papers

3. Analyze the role of markets and local policies in driving successful waste diversion and resource recovery techniques such as recycling, reusing, and composting.

   As assessed by: Group presentations, written papers

4. Identify Local Producer Responsibility policies and programs and advocate for Extended Producer Responsibility policies and programs.
   As assessed by: Presentations (group and individual) and written papers

Demonstrate how this course supports/maps to <u>at least one</u> program learning outcome. Please include all that apply:

1. Earth Science students will acquire and develop knowledge and skills that will equip them to be informed, engaged, and productive global citizens, capable of leading humanity toward a more sustainable and adaptable future.

   This course examines resource management and recovery in communities and provides students with the tools to design and develop community plans to eliminate waste and use resources efficiently.

2. Students will use key concepts and methodologies presented in Earth Science classes to recognize, describe, evaluate and analyze various aspects of human behavior.
   Students will discuss how residents, business owners, and government officials are adopting Zero Waste goals and are implementing Zero Waste plans.

   Additionally, students will identify Local Producer Responsibility policies and programs, and advocate for Extended Producer Responsibility policies.

Demonstrate how this course supports/maps to <u>at least one</u> of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

Students will be required to participate in group discussions based on readings and lectures. Working alone, or in a group, in preparation for an oral presentation provides the opportunities for students to become more self-confident, more organized and develop self-discipline.

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.
This course will define the problems of waste management and examine the wide variety of problem-solving approaches. Through critical thinking, students will identify key components of policies and programs aimed at reducing waste and implementing recycling and resource management in communities across the United States.

ILO#3 respect the inter-relatedness of the global human environment, engage with diverse peoples, and acknowledge the significance of their daily actions relative to broader issues and events.
In class, students will break into groups. Each group will share their experience with recycling and resource recovery at home and discuss how waste diversion practices differ in various cultures. This course will allow students to identify and recognize the common approaches, goals and outcomes that communities throughout the world are pursuing through resource management and recovery.

ILO #4 take responsibility for their own impact on the earth by living a sustainable and ethical life style.
Waste diversion programs are an essential part of creating sustainable communities and achieving Zero Waste. In this class, students will examine the role of the individual as part of a community. By evaluating effective waste reduction policies, programs, and strategies, students will learn how to reduce their own impact on the Earth and lead a sustainable and ethical lifestyle.

S/ILO Committee Use Only reviewed by: CKS 11/11/10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Recycling and Resource Management 3

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	X	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	X	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	X	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	X	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	X	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	X	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	X	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	X	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	X	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	X	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	X	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	X	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	X	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	X	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required? **No**

    If yes, state the recommended prerequisites:

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course? **No**

    If yes, state the English and/or math level necessary for success:

    English level recommended: _____ Math level recommended: _____

FORM 5: APPROVALS PAGE

Recycling and Resource Management 3

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Earth Science	11	0	0	Nov 5, 2010
Additional Department or Area (if applicable)				

Please list any other Departments, Areas, or Chairpersons consulted regarding this course:

- Interdisciplinary Studies Program—Environmental Studies

Department Chair Approval:	Vicki Drake	Date:	Nov 5, 2010
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes	x	No	
Library has adequate materials to support course?	Yes	x	No	

Librarian Approval:	Carol Womack	Date:	11/17/2010

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

Form 1: Course Outline of Record

Santa Monica College

Course Outline For

Recycling and Resource Management 4

Course Title: Resource Management and Zero Waste in Business **Units:** 3

Total Instructional Hours: (usually 18 per unit) **54**

Hours per week (full semester equivalent) in Lecture: **3** In-Class Lab: Arranged:

Date Submitted: 11/10/10
Date Updated:

IGETC Area: n/a
CSU GE Area: n/a
SMC GE Area: n/a
Transfer: CSU

Prerequisite(s): None
Skills Advisory: None

I. Catalog Description:

This course will provide hands-on applications and tools for businesses to design, implement and oversee waste reduction and resource management programs. It will review a variety of best practices for successful waste diversion and recovery in businesses, detailing how businesses can implement those practices to achieve Zero Waste. Examination of case studies will be used to demonstrate how different companies have implemented successful waste diversion and sustainability programs, including triple bottom line business practices. This course will also provide students with an understanding of how to plan and implement commercial food and organics programs.

II. **Examples of Appropriate Text or Other Required Reading:** (include all publication dates; for transferable courses at least one text should have been published within the last five years)

1. Kenneth Geiser, Materials Matter: Toward a Sustainable Materials Policy, MIT Press, 2001, 473 pp. ISBN 0-262-07216-5 (hc.:alk.paper) - ISBN 0-262-57148-X (pbk.:alk.paper)
2. William McDonough and Michael Braungart, Cradle to Cradle: Remaking the Way We Make Things, 2002, North Point Press, 208pp. ISBN-10: 0865475873, ISBN-13: 978-0865475878
3. Paul Hawken, Amory Lovins, and L. Hunter Lovins, Natural Capitalism: Creating the Next Industrial Revolution, Back Bay Books, 2008, 416 pp. ISBN-10: 0316353000, ISBN-13: 978-0316353007

III. **Course Objectives:**

Upon completion of the course students will be able to:

1. Plan, implement and oversee waste reduction programs aimed at achieving Zero Waste in businesses
2. Identify best practices for waste diversion and resource recovery in businesses
3. Understand important local, state, and federal regulations relating to sustainability and waste diversion, including international ISO 14001 environmental standards
4. Explain the process and provide hands-on experience with conducting on-site assessments and waste audits

IV. Methods of Presentation:

Lectures, PowerPoint Presentations, videos, guest lecturers and field observations of industries

V. **Course Content:**

% of course	Topic
30%	Designing waste diversion and resource recovery programs for businesses, including performing waste audits and setting zero waste goals
15%	Producer Responsibility (marketing, redesigning packaging, product stewardship, life cycle analysis)
20%	Internal Business Drivers for Success (leadership, training, green procurement)
10%	Market and Economics (composting business, reuse business, recycling economics, triple bottom line)
25%	Implementing a commercial food and organics recycling program

VI. Methods of Evaluation: (Specific percentages will vary with instructor; approximate values are shown.)

% of grade	Evaluation Method
15%	Quizzes
30%	Written analysis (2)
30%	Oral presentations: individual and/or group
25%	Examinations (2)

VII. Sample Assignments: (please describe at least 2 sample assignments)

1. Prepare a paper that reviews a real business and then develops a Zero Waste plan identifying leadership's role, training strategies, goals, measurements, vendor relations, benchmarking, waste audits and corporate policies.

2. Conduct a mock business assessment and waste audit which includes an evaluation of on-site logistics and issues. The assessment will identify opportunities to design waste out and provide for vendors to take back products. Your assessment should provide an estimate of the recoverable reusables, organics and recyclables, as well as a cost and service proposal using appropriate assumptions about service pricing.

Form 2: Course Approval and Data Sheet for: Recycling and Resource Management 4

Is this a New Course, Updated/Revised Course, or Reinstated Course? **New**

If this is a NEW course, anticipated semester and year of first offering: **Fall 2011**

If this is a new course, please provide a rationale for the addition of this course to the curriculum:

A Department of Labor grant of $5 million has been awarded to SMC to help train people in the Recycling and Resource Management field. The funds will be used as a collaborative project in partnership with two Orange County community colleges — Irvine Valley College and Golden West College — to develop training curriculum and provide job placement services.

Resource Management and Zero Waste in Business is one of four core courses being developed under this Department of Labor grant.

List all A.A. majors in which this course is/will be **required**:

- **Recycling and Resource Management (forthcoming)**

List all A.A. majors in which this course is/will be an option:

- n/a

List all Certificates of Achievement in which this course is/will be **required**:

- **Recycling and Resource Management Level 1 (12-units; forthcoming)**
- **Recycling and Resource Management Level 2 (18-units; forthcoming)**

List all Certificates of Achievement in which this course is/will be an **option**:

- n/a

List all Department Certificates in which this course is/will be **required**:

- n/a

List all Department Certificates in which this course is/will be an **option**:

- n/a

Should this course be **transferable to the CSU?** **YES**

Should this course be **transferable to the UC?** **NO**

Repeatability (requires that the student's experience will be qualitatively different with each repetition).

- How many times should this course be repeatable? **0**

Course Load Factor suggested by department: **1.0**

Rationale for the above load factor suggestion: Standard Lecture Course

Appropriate Minimum Qualifications for faculty teaching this course: (Refer to: Minimum Qualifications for Faculty and Administrators in California Community Colleges adopted by The Board of Governors)

- Ecology or
- Environmental Technologies or
- The equivalent

Form 3: Student / Program / Institutional Learning Outcomes

November 10, 2010
Recycling and Resource Management 4

Course Level Student Learning Outcomes: (Must list <u>at least 2</u>)

1. Compare and analyze waste diversion programs utilized by different businesses.

   As assessed by: written papers, presentations (group and individual)
2. Conduct an on-site waste audit, including observations of employee's behavior to determine how to overcome barriers in achieving Zero Waste for businesses.

   As assessed by: oral and written interviews
3. Identify tools for businesses to design, implement and oversee waste reduction and resource management programs.

   As assessed by: written papers, presentations, examinations
4. Define sustainability in terms of business principles and best practices in recycling and resource management.

   As assessed by: written papers, presentations, examinations

Demonstrate how this course supports/maps to <u>at least one</u> program learning outcome. Please include all that apply:

1. Earth Science students will acquire and develop knowledge and skills that will equip them to be informed, engaged, and productive global citizens, capable of leading humanity toward a more sustainable and adaptable future.

   This course examines Zero Waste businesses and provides students the tools for businesses to design, implement, and oversee waste reduction and resource management programs, which are an essential part of a sustainable future.
2. Students will use key concepts and methodologies presented in Earth Science classes to recognize, describe, evaluate and analyze various aspects of human behavior

   This course studies sustainable practices and resource management principles, providing details on implementation of those principles for businesses to work towards Zero Waste. Critical examination of case-studies allows students to assess how companies have resolved issues that arise in implementing successful waste diversion and resource recovery programs.

Demonstrate how this course supports/maps to <u>at least one</u> of the following Institutional Learning Outcomes. Please include all that apply. Through their experiences at SMC, students will

ILO #1 acquire the self-confidence and self-discipline to pursue their intellectual curiosities with integrity in both their personal and professional lives.

Students will be required to participate in group discussions based on readings and lectures. Working alone, or in a group, in preparation for an oral presentation provides the opportunities for students to become more self-confident, more organized and develop self-discipline.

ILO #2 obtain the knowledge and academic skills necessary to access, evaluate, and interpret ideas, images, and information critically in order to communicate effectively, reach conclusions, and solve problems.

This course studies sustainable practices and resource management principles, providing details on implementation of those principles for businesses to work towards Zero Waste. Critical examination of case-studies allows students to assess how companies have resolved issues that arise in implementing successful waste diversion and resource recovery programs.

ILO#3 respect the inter-relatedness of the global human environment, engage with diverse peoples, and acknowledge the significance of their daily actions relative to broader issues and events.

Students will gain knowledge of sustainable business principles and best practices in resource management, which are being applied globally to avoid pollution and waste and improve Environmental Justice.

ILO #4 take responsibility for their own impact on the earth by living a sustainable and ethical life style.

Students will produce a paper that reviews a real business to develop a Zero Waste plan identifying leadership roles, training strategies, goals, measurements, vender relations, benchmarking, waste audits and corporate policies. By recognizing the various strategies that aid businesses in their pursuit of Zero Waste, students will learn how to reduce their own impact on the Earth and lead a sustainable and ethical lifestyle. These principles can also be employed in the students' daily life, as well as at special events and venues, schools, colleges and other institutions.

S/ILO Committee Use Only reviewed by: CKS 11/11/10

Form 4: Associate Degree Course Criteria and Standards, as per Title V, Section 55002

Recycling and Resource Management 4

Section I – Course Criteria

Items 1 through 14 below. If any criterion is not met, course credit is non-applicable toward the associate degree.

		Criterion Met	Criterion Not Met
1.	This course is a collegiate course meeting the needs of students eligible for admission. It will be offered as described in the course outline of record (attached).	X	
2.	This course is to be taught by an instructor with a masters or higher degree, or the equivalent, in an approved discipline.	X	
3.	The course outline of record specifies the unit value, scope, student objectives and content in terms of a specific body of knowledge.	X	
4.	The course outline of record specifies requested reading and writing assignments, and other assignments to be done outside of class (homework).	X	
5.	The course outline of record specifies instructional methodology and methods of evaluation for determining whether the stated student objectives have been met.	X	
6.	This course will be taught in accordance with a set of instructional objectives common to all students enrolled in the course (all sections).	X	
7.	This course will provide for the measurement of student performance in terms of the stated course objectives. A formal grade based upon uniform standards of student evaluation will be issued for the permanent record of each student.	X	
8.	This formal grade will be based on student ability to demonstrate proficiency in the subject matter by means of either (1) written essays, (2) problem solving exercises, or (3) student skill demonstrations.	X	
9.	The number of units of credit assigned to the course is based upon the number of lecture, laboratory, and/or activity hours as specified in the course outline.	X	
10.	A minimum of three hours of work per week (including class time) is required for each unit of credit, prorated for short term, lab and activity courses.	X	
11.	Subject matter is treated with a scope and intensity which requires students to study independently outside of class time.	X	
12.	Learning skills and a vocabulary deemed appropriate for a college course are required. Educational materials used are judged to be college level.	X	
13.	Repeated enrollments are not allowed, except as permitted by provisions of Division 2, Title V, Sections 55761-55763 and 58161.	X	
14.	Student ability to (1) think critically and (2) understand and apply concepts at a college level is required in order to participate in the course.	X	

Section II – Recommendations for Prerequisites

15. Are entrance skills and consequent prerequisites for the course required? **No**

    If yes, state the recommended prerequisites:

16. Is eligibility for enrollment in a certain level of English and/or mathematics necessary for success in this course? **No**

    If yes, state the English and/or math level necessary for success:

    English level recommended: _____ Math level recommended: _____

FORM 5: APPROVALS PAGE

Recycling and Resource Management 4

Department/Area Vote(s):

	Yes	No	Not voting	Date of vote
Earth Science	11	0	0	Nov 5, 2010
Additional Department or Area (if applicable)				
Please list any other Departments, Areas, or Chairpersons consulted regarding this course: • Interdisciplinary Studies Program—Environmental Studies				

Department Chair Approval:	Vicki Drake	Date:	Nov 5, 2010
Additional Department Chair Approval: (if applicable)		Date:	

SMC Librarian:

List of suggested materials has been given to librarian?	Yes	x	No	
Library has adequate materials to support course?	Yes	x	No	
Librarian Approval:	Carol Womack	Date:	11/17/2010	

Approvals:

Articulation Officer:		Date:	
Instructional Dean:		Date:	
Curriculum Committee:		Date:	
Academic Senate:		Date:	
Board of Trustees:		Date:	

DESIGN TECHNOLOGY DEPARTMENT
ENTERTAINMENT TECHNOLOGY PROGRAM
11/10/2010

OVERVIEW OF ANIMATION CURRICULUM CHANGES

Over the past few years, we have seen an increasing demand from industry employers for entry-level candidates to specialize within an area of production. We have also noticed an alarmingly low rate of completion among students pursuing the Animation certificate of achievement. To address these issues, the Entertainment Technology program is proposing several changes to courses and certificates.

We have developed several new department certificates in areas of specialization within the entertainment industry. Students who are interested in professional development to refine their existing skills will be able to complete one or more of these department certificates within a relatively short period of time.

These new department certificates will also be integrated into the Animation certificate of achievement in a way that will allow students to choose an area of specialization within the required curriculum. To ensure that students are able to complete the certificate of achievement within a two-year time frame, we are proposing to reduce the required units from 58 to 49 or 50, depending on which final project course a student chooses.

It is our hope that these changes will allow our students to achieve lasting success whether their objective is to find immediate employment or to transfer to a four-year institution.

The following is a summary of the course-level revisions we are proposing:

ET 13 – Non-substantial content updates and title change
ET 18 – Substantial course update and title change; unit increase; advisories added
ET 19A – Substantial course update and title change; unit increase; advisories added
ET 19B – Substantial course update and title change; unit increase
ET 23 – Substantial course update; unit increase
ET 24 – SLOs update; prerequisites removed, advisory added; distance education conversion
ET 25 – Minor course content update and title change; unit reduction
ET 25C – New course
ET 26 – Minor course content and SLO update; unit reduction
ET 64 – Minor course content and SLO update
ET 72 – Substantial course content update and title change

NEW DEPARTMENT CERTIFICATES

2D ANIMATION (16 Units)

ET 19A, Beginning 2D Animation (3)
ET 19B, Advanced 2D Animation (3)
ET 34, Web Animation 1 (3)
ET 75, Digital Production for 2D Animation (3)
ET 30, Animation Project (4)

3D ANIMATION (16 Units)

ET 19A, Beginning 2D Animation (3)
ET 19B, Advanced 2D Animation (3)
ET 24B, 3D Character Animation 1 (3)
ET 24C, 3D Character Animation 2 (3)
ET 30, Animation Project (4)

3D MODELING (16 Units)

ET 25, 3D Modeling (3)
ET 25B, 3D Character Creation (3)
ET 25C, 3D Character Rigging (3)
ET 26, 3D Rendering (3)
ET 30, Animation Project (4)

3D RENDERING (16 Units)

ET 25, 3D Modeling (3)
ET 26, 3D Rendering (3)
ET 32, Digital Compositing (3)
ET 38, Digital Imaging for Design 2 (3)
ET 30, Animation Project (4)

REVISED ANIMATION CERTIFICATE OF ACHIEVEMENT (49-50 UNITS)

SEMESTER 1

ET 2, Storytelling (3)
ET 18*, Digital Storyboarding (3)
ET 24*, 3D Fundamentals (4)
ET 91, Perspective Drawing (2)
ET 94, Color Theory (2)

INTERSESSION 1

ET 61, History of Animation (3)

SEMESTER 2

ET 31A, Digital Video Fundamentals (3)
ET 37, Digital Imaging for Design (3)

And:
ET 15, Beginning 3D Level Design (3)
ET 42, Principles of Game Development (3)
or
ET 19A*, Beginning 2D Animation (3)
ET 34, Web Animation 1 (3)
or
ET 19A*, Beginning 2D Animation (3)
ET 24B, 3D Character Animation 1 (3)
or
ET 25*, 3D Modeling (3)
or
ET 25*, 3D Modeling (3)
ET 32, Digital Compositing (3)
or
ET 32, Digital Compositing (3)
ET 64, Digital Effects 1 (3)

INTERSESSION 2

ET 3, Project Management (3)

SEMESTER 3

ET 20, Visual Development (3)
ET 40, Digital Audio Fundamentals (3)

And:
ET 17, Advanced 3D Level Design (3)
ET 44, Game Design/Play Mechanics (3)
or
ET 19B*, Advanced 2D Animation (3)
ET 75, Digital Production for 2D Animation (3)
or
ET 19B*, Advanced 2D Animation (3)
ET 24C, 3D Character Animation (3)
or
ET 25B, 3D Character Creation (3)
ET 25C*, 3D Character Rigging (3)
or
ET 26*, 3D Rendering (3)
ET 38, Digital Imaging for Design 2 (3)
or
ET 63, Digital Tracking and Integration (3)
ET 65, Digital Effects 2 (3)

INTERSESSION 3

ET 72*, Career Development (2)

SEMESTER 4

ET 30, Animation Project (4)
or
ET 49, Game Development Project (4)
or
ET 80, Digital Effects Project (3)

*Requires course revision

DESIGN TECHNOLOGY DEPARTMENT
ENTERTAINMENT TECHNOLOGY PROGRAM
11/10/2010

NEW DEPARTMENT CERTIFICATE

2D ANIMATION (16 Units)

ET 19A, Beginning 2D Animation (3)
ET 19B, Advanced 2D Animation (3)
ET 34, Web Animation 1 (3)
ET 75, Digital Production for 2D Animation (3)
ET 30, Animation Project (4)

DESIGN TECHNOLOGY DEPARTMENT
ENTERTAINMENT TECHNOLOGY PROGRAM
11/10/2010

NEW DEPARTMENT CERTIFICATE

3D ANIMATION (16 Units)

ET 19A, Beginning 2D Animation (3)
ET 19B, Advanced 2D Animation (3)
ET 24B, 3D Character Animation 1 (3)
ET 24C, 3D Character Animation 2 (3)
ET 30, Animation Project (4)

DESIGN TECHNOLOGY DEPARTMENT
ENTERTAINMENT TECHNOLOGY PROGRAM
11/10/2010

NEW DEPARTMENT CERTIFICATE

3D MODELING (16 Units)

ET 25, 3D Modeling (3)
ET 25B, 3D Character Creation (3)
ET 25C, 3D Character Rigging (3)
ET 26, 3D Rendering (3)
ET 30, Animation Project (4)

DESIGN TECHNOLOGY DEPARTMENT
ENTERTAINMENT TECHNOLOGY PROGRAM
11/10/2010

NEW DEPARTMENT CERTIFICATE

3D RENDERING (16 Units)

ET 25, 3D Modeling (3)
ET 26, 3D Rendering (3)
ET 32, Digital Compositing (3)
ET 38, Digital Imaging for Design 2 (3)
ET 30, Animation Project (4)

CCC-501

Rev. March 2009

Application Date

California Community Colleges

APPLICATION FOR APPROVAL—NEW CREDIT PROGRAM

Associate of Science in Mathematics
PROPOSED PROGRAM TITLE

Santa Monica College
COLLEGE

Santa Monica College Community College District
DISTRICT

Fall 2011
PROJECTED PROGRAM START DATE

Georgia Lorenz
CONTACT PERSON
Dean of Instruction
TITLE
310-434-4277
PHONE NUMBER
lorenz_georgia@smc.edu
E-MAIL ADDRESS

GOAL(S) OF PROGRAM (CHECK ALL THAT APPLY):

☐ CAREER TECHNICAL EDUCATION (CTE) ✠ TRANSFER ☐ OTHER

TYPE OF PROGRAM (CHECK ALL THAT APPLY):

A.A. DEGREE X A.S. DEGREE CERTIFICATE OF ACHIEVEMENT: ○ 18+ semester (or 27+ quarter) units ○ 12-18 semester (or 18-27 quarter) units

PLANNING SUMMARY

Recommended T.O.P. Code		Estimated FTE Faculty Workload	0
Units for Degree Major or Area of Emphasis	21 units	Number of New Faculty Positions	0
Total Units for Degree	60 units	Est. Cost, New Equipment	$0
Required Units-Certificate	21 Units	Cost of New/Remodeled Facility	$0
Projected Annual Completers	20	Est. Cost, Library Acquisitions	$0
Projected Net Annual Labor Demand (CTE)		When will this program undergo review as part of college's Program Evaluation Plan?	Month/Semester **February** Year **2016**

DEVELOPMENT CRITERIA NARRATIVE & DOCUMENTATION

Attach a document that describes the development of the proposed program, addressing the five criteria as listed below. **Number** the sections of the narrative to match the lists below. If appropriate, you may note that a section is "not applicable" but **do not re-number** the sections. Provide documentation in the form of attachments as indicated.

Criteria A. Appropriateness to Mission

1. Statement of Program Goals and Objectives
2. Catalog Description
3. Program Requirements
4. Background and Rationale

Criteria B. Need

5. Enrollment and Completer Projections
6. Place of Program in Curriculum/Similar Programs
7. Similar Programs at Other Colleges in Service Area
8. Labor Market Information & Analysis (CTE only)
9. Employer Survey (CTE only)
10. Explanation of Employer Relationship (CTE only)
11. List of Members of Advisory Committee (CTE only)
12. Recommendations of Advisory Committee (CTE only)

Attachment: Labor / Job Market Data (CTE only)
Attachment: Employer Survey (CTE only)
Attachment: Minutes of Key Meetings

Criteria C. Curriculum Standards

13. Display of Proposed Sequence
14. Transfer Applicability (if applicable)

Attachment: Outlines of Record for Required Courses
Attachment: Transfer Documentation (if applicable)

Criteria D. Adequate Resources

15. Library and/or Learning Resources Plan
16. Facilities and Equipment Plan
17. Financial Support Plan
18. Faculty Qualifications and Availability

Criteria E. Compliance

19. Based on model curriculum (if applicable)
20. Licensing or Accreditation Standards
21. Student Selection and Fees

SUBMIT ORIGINAL AND ONE COPY OF THIS FORM AND ALL ATTACHMENTS

Criteria A. Appropriateness to Mission

1) Statement of Goals and Objectives:

Part of Santa Monica College's mission is to provide high quality associate degrees. Our proposal is for the Mathematics Department to offer an associate degree for the first time in its eighty-one year history. This associate degree would fulfill the lower division mathematics course requirements for students wanting to transfer and complete either a Bachelor of Arts or Bachelor of Science degree in mathematics, physics, engineering, or computer science for both the University of California and California State University systems. A successful candidate would have certified competencies in Differential Calculus and Integration and Infinite Series, Calculus of Several Variables, and Linear Algebra.

The specific knowledge base obtained by the student would be in the following topics:

a) Limits, continuity, and derivatives and integrals of algebraic and trigonometric functions, with mathematical and physical applications.

b) Derivatives and integrals of transcendental functions with mathematical and physical applications, indeterminate forms and improper integrals, infinite sequences and series, and curves, including conic sections, described by parametric equations and polar coordinates.

c) Vectors and analytic geometry in two and three dimensions, vector functions with applications, partial derivatives, extrema, Lagrange multipliers, multiple integrals with applications, vector fields, Green's Theorem, Divergence Theorem, and Stokes' Theorem.

d) Matrices and linear transformations; abstract vector spaces and subspaces; linear independence and bases; determinants; systems of linear equations; eigenvalues and eigenvectors.

With this background, the student will not only have the prerequisite mathematical knowledge to successfully complete any university upper division math, science, or engineering course but will also have the skill set necessary to be an instructional assistant, tutor, or supplemental instruction leader at any college or university. The degree itself will also make the student more attractive to university admission committees, as well as give him/her an advantage over other undergraduate students applying for internships.

2) Catalog Description

Upon successful completion of Santa Monica College's A. S. in Mathematics, the student will have demonstrated an understanding of Calculus of one and several variables, Linear Algebra as well as other applied math courses and courses from other disciplines that utilize mathematics in their content. This course work will satisfy the lower division mathematics requirements at many institutions at both the University of California and the California State University systems. This degree is intended for students who are interested in the theory of mathematics and are planning on transferring to a four year university and majoring in Mathematics, Physics, Engineering, or Computer Science.

3) New Program Requirements (60 Units)

A.S. in Mathematics for Transfer (21 units required)

Math 7: Calculus 1 (5 units)
Math 8: Calculus 2 (5 units)
Math 11: Multivariable Calculus (5 units)
Math 13: Linear Algebra (3 units)

Choose at least one course (3 units minimum):

Math 10: Discrete Structures (3 units) (strongly recommended)
Math 15: Ordinary Differential Equations (3 units) (strongly recommended)
CS 10 : Discrete Structures (3 units)
Physics 8: General Physics with Calculus (4 units)
Physics 21: Mechanics with Lab (5 units)

The Associate of Science Degree in Mathematics requires the 21 units described above as the major. In addition, the student must complete general education requirements and additional electives to total 60 units.

Effective Spring 2010, to complete the A.S. degree students can choose to complete the local GE requirements or the IGETC or CSUGE patterns. Students intending to transfer are advised to follow the IGETC or CSUGE pattern.

4) Discussion of background and rationale

As we become a more technology-based society, mathematics has taken center stage in education. The need for math, science, and engineering majors has grown exponentially; yet the supply is lagging far behind. One reason for this is a severe shortage of students who have a solid mathematical background. Students feeling insecure about their lower division mathematics will most likely not pursue a baccalaureate degree in math, science, or engineering. Here at Santa Monica College, we have assembled a premier mathematics department and staff with a reputation for teaching students in a challenging but supportive environment. Not only will students completing our proposed A.S. degree in mathematics be able to compete at any university to which they transfer, but the first-class education obtained here at our college will enable them to become leaders in their fields. Such a rigorous background in any discipline deserves the honor that degree recognition bestows.

Criteria B. Need

5) Enrollment and Completer Projections

Number of course sections offered during the 2009 – 2010 school year (Fall 2009, Winter 2010, Spring 2010, Summer 2010):

- Math 7: Calculus 1 (5 units) – 32 sections offered with 45 students per section
- Math 8: Calculus 2 (5 units) – 19 sections offered with 45 students per section
- Math 11: Multivariable Calculus (5 units) – 9 sections offered with 45 students per section
- Math 13: Linear Algebra (3 units) – 4 sections offered with 45 students per section

Using the above numbers we expect that we will have twenty program completers the first year, around twenty-five in the second year, and may increase to as many as 35-40 in five years.

6) Place of Program in Curriculum/Similar Programs:

A similar program that is offered at Santa Monica College is our General Science Degree. However, the proposed Associate of Science degree is aimed more specifically at those students who will be majoring in Mathematics, Engineering, and Computer Science. Because these courses are shared with other programs it insures that the courses necessary to complete the degrees will consistently be offered. These courses also fulfill the transfer needs of a large and diverse pool of students outside of the targeted group. The only enrollment change that we

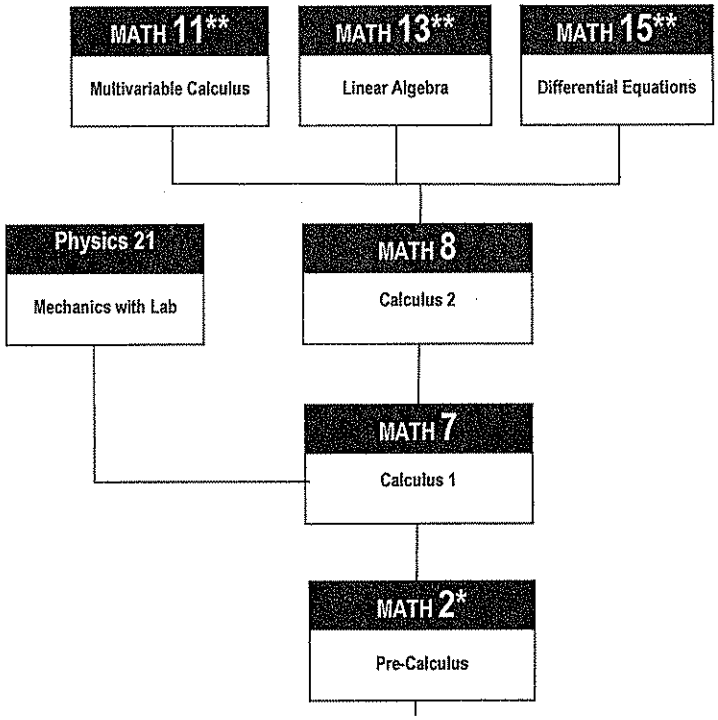
foresee is a larger demand in our higher level mathematics courses. We anticipate with the new degree available our enrollment in Linear Algebra and Ordinary Differential Equations should increase.

7) **Some other Community Colleges that offer an Associate in Mathematics** – The following community colleges all offer an A.S, A.A or both in Mathematics: Los Angeles Community College, El Camino College, Fullerton College, Foothill College, Diablo Canyon College, Santa Barbara College, Santa Ana College, Cerritos College, San Diego City College. However, since the need for math and science is increasing our new offering of this degree should in no way negatively impact the programs of the surrounding colleges.

Criteria C. Curriculum Standards

13) Display of Proposed Sequence

**These courses may be taken in any order after completion of Math 8; however, students are advised to complete Math 11 and Math 15 before enrolling in Math 13.



*Sequence to Math 2

Students preparing for Math 2 need both Math 20 and Math 32. The courses may be taken in any order or concurrently. Alternatively a student may complete Math 26 and Math 32 in any order or concurrently.

14) Transfer Applicability

The Santa Monica College Associate of Science Degree in Mathematics fulfills the common core of lower division math requirements for math, science, and engineering majors wanting to transfer to any California State University or University of California campus.

Attached: course outlines of record
Attached: Transfer Documentation