# **Clackamas Community College**

Online Course/Outline Submission System

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## Section #1 General Course Information

## Department:Art/ DMC

Submitter

First Name: Nora Last Name: Brodnicki Phone: 503-594-3036 Email: norab@clackamas.edu

## Course Prefix and Number: DMC - 250

#### # Credits:4

Contact hours

Lecture (# of hours): 30 Lec/lab (# of hours): Lab (# of hours): 30 Total course hours: 60

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

## Course Title:Motion Capture

#### Course Description:

Introduction to the fundamentals of motion capture. This project-based course will prepare students to work in the field of motion capture. Students will plan and direct sessions as well as process data for maximum efficiency. Through this process students will learn how to create professional level, 3D based motion capture driven projects that can be used in video game development and film. Students will learn the basics of Motion Builder to create successful motion capture projects. Previous experience with motion graphics and 3D animation is recommended.

## Type of Course:Lower Division Collegiate

#### Reason for the new course:

This course will provide technical training in the use of motion capture systems that are used in video game development and in the motion picture industry.

Is this class challengeable?

## No

Can this course be repeated for credit in a degree?

## No

Is general education certification being sought at this time?

## No

Does this course map to any general education outcome(s)?

## Yes

Check which General Education requirement:

✓ Arts and Letters✓ Science & Computer Science

Is this course part of an AAS or related certificate of completion?

#### No

Are there prerequisites to this course?

Yes

Pre-reqs:ART/ DMC 106 or instructor's consent

Have you consulted with the appropriate chair if the pre-req is in another program? Yes (A 'Yes' certifies you have talked with the chair and have received approval.)\*

Are there corequisites to this course?

#### No

Are there any requirements or recommendations for students taken this course?

#### Yes

Recommendations: DMC-205, DMC-104, ART/DMC-107

Requirements: ART/DMC-106 or instructor's consent

Are there similar courses existing in other programs or disciplines at CCC?

## No

Will this class use library resources?

## No

Is there any other potential impact on another department?

## No

Does this course belong on the Related Instruction list?

#### No

GRADING METHOD:

A-F or Pass/No Pass

#### Audit:Yes

When do you plan to offer this course?

## ✓ Not every term

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

#### Yes

Will this course appear in the schedule?

#### Yes

Student Learning Outcomes:

Upon successful completion of this course, students will be able to:

1. demonstrate fundamental knowledge of all aspects and stages of motion capture production,

2. implement motion capture for use in the film and interactive entertainment industries including: entertainment film production, commercial production, serious games and simulation production, video game production, general interactive entertainment production;

3. produce a portfolio and reel of motion capture exercises created through the class,

4. configure and calibrate equipment including set up and maintenance of suits and sensors,

5. demonstrate proficiency in Motion Builder software and file management,

6. demonstrate an ability to direct both single and dual actors in various production scenarios using standard mocap process of actions and poses.

## AAOT/ASOT GENERAL EDUCATION OUTCOMES COURSE OUTLINE MAPPING CHART

#### Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
- Mark "S" if this course substantially addresses the outcome. More than one course is required for the outcome to be completely addressed. Students who successfully complete all of the required courses are likely to have attained this learning outcome.
- Mark "P" if this course partially addresses the outcome. Students will have been exposed to the outcome as part of the class, but the class is not a primary means for attaining the outcome and assessment for general education purposes may not be necessary.

#### As a result of completing the AAOT/ASOT general education requirements, students will be able to:

#### WR: Writing Outcomes

1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.

- 2. Locate, evaluate, and ethically utilize information to communicate effectively.
- 3. Demonstrate appropriate reasoning in response to complex issues.

#### SP: Speech/Oral Communication Outcomes

- 1. Engage in ethical communication processes that accomplish goals.
- 2. Respond to the needs of diverse audiences and contexts.
- 3. Build and manage relationships.

#### MA: Mathematics Outcomes:

1. Use appropriate mathematics to solve problems.

2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

#### AL: Arts and Letters Outcomes

**P** 1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.

2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

#### SS: Social Science Outcomes

1. Apply analytical skills to social phenomena in order to understand human behavior.

2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

#### SC: Science or Computer Science Outcomes

- **P** 1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.
- **P** 2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.

3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

Outcomes Assessment Strategies:

✓ Projects

Major Topic Outline:

:

- 1. Introduction to motion capture workflow.
- 2. Motion capture and data processing.
- 3. Intermediate directing and data processing.
- 4. Advance student group motion capture.
- 5. Integration of props in a motion capture environment.
- 6. Processing and cleanup of data.
- 7. Directing subjects in a motion capture session.
- 8. Rendering and output.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	No
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- 2. Produce renewable energy No
- 3. Prevent environmental degradation No
- 4. Clean up natural environment **No**
- 5. Supports green services No

Percent of course:0%

#### Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

- 1. Is there an equivalent lower division course at the University?
- 2. Will a department accept the course for its major or minor requirements?
- 3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

## ✓ general elective

Provide evidence of transferability: (minimum one, more preferred)

## ✓ Other. Please explain.

There are other colleges and universities in the United States who offer comparable courses. Courses like this are very new and we are the first public institution in the OUS system to offer a course like this.

First term to be offered:

:

## Next available term after approval