

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

Courses must be submitted by October 15, 2013, and finalized by the end of the fall semester to make the next catalog (2014-15) production

DATE (CHANGE DATE EACH TIME REVISED): 9/18/13

PROGRAM AREA(S): COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

Directions: All of sections of this form must be completed for course modifications. Use **YELLOWED** areas to enter data. All documents are stand alone sources of course information.

1. Indicate Changes and Justification for Each. *[Mark an X by all change areas that apply and follow-up your justification. Be as brief as possible but, use as much space as necessary.]*

<input type="checkbox"/> Course title	<input type="checkbox"/> Course Content
X Prefix/suffix	<input type="checkbox"/> Course Learning Outcomes
<input type="checkbox"/> Course number	X References
<input type="checkbox"/> Units	<input type="checkbox"/> GE
<input type="checkbox"/> Staffing formula and enrollment limits	<input type="checkbox"/> Other <input type="checkbox"/>
<input type="checkbox"/> Prerequisites/Corequisites	<input type="checkbox"/> Reactivate Course
<input type="checkbox"/> Catalog description	
<input type="checkbox"/> Mode of Instruction	

Justification: We would like to cross-list this course with Art to open the class to more students and to be consistent with COMP 466 Graphics II

2. Course Information.

[Follow accepted catalog format.] (Add additional prefixes i f cross-listed)

OLD

Prefix COMP/IT Course# 464
 Title Computer Graphic Systems and Design I Units (3)
 2 hours lecture per week
 3 hours laboratory per week

X Prerequisites: Comp350 and Math240 or Comp 221 and Math301

☐ Consent of Instructor Required for Enrollment
 Corequisites: ☐

Catalog Description (Do not use any symbols):

Topics include fundamental concepts of computer graphics.; graphics devices; graphics languages; interactive systems; applications to art, science, engineering and business; trade-offs between hardware devices and software support

General Education Categories: ☐

Grading Scheme (Select one below):

X A – F

☐ Credit/No Credit

☐ Optional (Student's Choice)

Repeatable for up to ☐ units

Total Completions ☐

Multiple Enrollment in Same Semester Y/N ☐

Course Level:

X Undergraduate

☐ Post-Baccalaureate

☐ Graduate

NEW

Prefix COMP/IT/ART Course# 464
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 3 hours laboratory

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☐ Optional (Student's Choice)

Repeatable for up to ☐ units

Total Completions ☐

Multiple Enrollment in Same Semester Y/N ☐

Course Level:

X Undergraduate

☐ Post-Baccalaureate

☐ Graduate

3. Mode of Instruction (Hours per Unit are defaulted)

Hegis Code(s) _____

Existing**Proposed**

	Units	Hours Per Unit	Benchmark Enrollment	Graded		Units	Hours Per Unit	Benchmark Enrollment	Graded	CS No. (filled out by Dean)
Lecture	<u>2</u>	<u>1</u>	<u>24</u>	y	Lecture	<u>2</u>	<u>1</u>	<u>24</u>	y	
Seminar		<u>1</u>			Seminar		<u>1</u>			
Lab	<u>1</u>	<u>3</u>	<u>24</u>	y	Lab	<u>1</u>	<u>3</u>	<u>24</u>	y	
Activity		<u>2</u>			Activity		<u>2</u>			
Field Studies					Field Studies					
Indep Study					Indep Study					
Other blank					Other blank					
Online					Online					

4. Course Attributes:

General Education Categories: All courses with GE category notations (including deletions) must be submitted to the GE website: <http://summit.csuci.edu/ge>. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for further processing.

A (English Language, Communication, Critical Thinking)

- A-1 Oral Communication
- A-2 English Writing
- A-3 Critical Thinking

B (Mathematics, Sciences & Technology)

- B-1 Physical Sciences
- B-2 Life Sciences – Biology
- B-3 Mathematics – Mathematics and Applications
- B-4 Computers and Information Technology

C (Fine Arts, Literature, Languages & Cultures)

- C-1 Art
- C-2 Literature Courses
- C-3a Language
- C-3b Multicultural

D (Social Perspectives)**E (Human Psychological and Physiological Perspectives)****UDIGE/INTD Interdisciplinary**

Meets University Writing Requirement (Graduation Writing Assessment Requirement)

Meets University Language Requirement

American Institutions, Title V Section 40404: ☐ Government ☐ US Constitution ☐ US History
Regarding Exec Order 405, for more information: <http://senate.csuci.edu/comm/curriculum/resources.htm>

Service Learning Course (Approval from the Center for Community Engagement must be received before you can request this course attribute).

Online Course (Answer YES if the course is ALWAYS delivered online).

5. Justification and Requirements for the Course. *[Make a brief statement to justify the need for the course]***OLD**

This course is an elective for the BSCS and the BSIT degrees

- ☐ Requirement for the Major/Minor
- X Elective for the Major/Minor
- ☐ Free Elective

NEW

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- ☐ Requirement for the Major/Minor
- X Elective for the Major/Minor
- ☐ Free Elective

Submit Program Modification if this course changes your program.

6. Student Learning Outcomes. (List in numerical order. Please refer to the Curriculum Committee's "Learning Outcomes" guideline for measurable outcomes that reflect elements of Bloom's Taxonomy: <http://senate.csuci.edu/comm/curriculum/resources.htm>. The committee recommends 4 to 8 student learning outcomes, unless governed by an external agency (e.g., Nursing).

Upon completion of the course, the student will be able to:

OLD

1. Identify the components of a computer graphics system.
2. Analyze the Perspective Projection
3. Identify the advantages of a Raster Graphics system
4. Identify the advantages of a Vector Graphics system
5. Evaluate the trade-offs between different graphic display systems
6. Compare and evaluate different computational methods in computer graphics.
7. Organize and express ideas convincingly in oral and written form

Upon completion of the course, the student will be able to:

NEW

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2. Analyze the Perspective Projection
3. Identify the advantages of a Raster Graphics system
4. Identify the advantages of a Vector Graphics system
5. Evaluate the trade-offs between different graphic display systems
6. Compare and evaluate different computational methods in computer graphics.
7. Organize and express ideas convincingly in oral and written form

7. Course Content in Outline Form. (Be as brief as possible, but use as much space as necessary)

OLD

- 1 Components of a Computer Graphics system
- 2 Perspective Projection
- 3 Vector Graphics
- 4 Raster Graphics
- 5 Computational Methods
- 6 2D simulations
- 7 3D simulations
8. Virtual Reality

NEW

- 1 Components of a Computer Graphics system
- 2 Perspective Projection
- 3 Vector Graphics
- 4 Raster Graphics
- 5 Computational Methods
- 6 2D simulations
- 7 3D simulations
8. Virtual Reality

Does this course content overlap with a course offered in your academic program? Yes ☐ No X

If YES, what course(s) and provide a justification of the overlap. ☐

Does this course content overlap a course offered in another academic area? Yes ☐ No X

If YES, what course(s) and provide a justification of the overlap. ☐

Overlapping courses require Chairs' signatures.

8. Cross-listed Courses (Please note each prefix in item No. 1)

- A. List cross-listed courses (Signature of Academic Chair(s) of the other academic area(s) is required).
COMP464, IT464, ART464
- B. List each cross-listed prefix for the course: COMP, IT, ART
- C. Program responsible for staffing: Computer Science and Information Technology

9. References. [Provide 3-5 references]

OLD Introduction to Computer Graphics, Foley, Addison-Wesley, 1993

NEW Interactive Computer Graphics: A Top-Down Approach with OpenGL (6th Edition) by Edward Angel (2011)

Computer Graphics: Principles and Practice (3rd Edition) by
John F. Hughes, Andries van Dam, Morgan McGuire, David F. Sklar, James D. Foley, Steven K. Feiner, Kurt Akeley
(2013)

10. Tenure Track Faculty qualified to teach this course.

All Computer Science Faculty

11. Requested Effective Date or First Semester offered: Fall 2014

12. New Resource Requested: Yes ☐ No ☒

If YES, list the resources needed.

A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)

☐

B. Library Needs (streaming media, video hosting, databases, exhibit space, etc.)

☐

C. Facility/Space/Transportation Needs:

☐

D. Lab Fee Requested: Yes ☐ No ☐ (Refer to the Dean's Office for additional processing)

E. Other. ☐

13. Will this course modification alter any degree, credential, certificate, or minor in your program? Yes ☐ No ☒

If, YES attach a program update or program modification form for all programs affected.

Priority deadline for New Minors and Programs: **October 1, 2013** of preceding year.

Priority deadline for Course Proposals and Modifications: **October 15, 2013**.

Last day to submit forms to be considered during the current academic year: **April 15th**.

Peter Smith, Luke Matjas

9/18/13

Proposer(s) of Course Modification

Date

Type in name. Signatures will be collected after Curriculum approval.

Approval Sheet

Course: COMP/IT/ART 464

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

The CI program review process includes a report from the respective department/program on its progress toward accessibility requirement compliance. By signing below, I acknowledge the importance of incorporating accessibility in course design.

Program Chair		
Signature		Date
Program Chair		
Signature		Date
Program Chair		
Signature		Date
General Education Chair		
Signature		Date
Center for Intl Affairs Director		
Signature		Date
Center for Integrative Studies Director		
Signature		Date
Center for Multicultural Engagement Director		
Signature		Date
Center for Civic Engagement and Service Learning Director		
Signature		Date
Curriculum Chair		
Signature		Date
AVP		
Signature		Date