To Whom It May Concern:

This cover letter outlines the proposed curricular changes to the Computing in the Arts (CITA), BA degree. These changes are introduced to:

a) strengthen the computer programming skills of students, so they can be better prepared for the CITA capstone experience, and

b) improve the organization/structure of the curriculum.

In particular, the proposed changes are as follows:

1. Change the course title of CITA/CSCI 120 from “Building-Virtual Worlds” to “Animation and Virtual Worlds” to better reflect the nature of the course.

2. Change the course number of CITA/CSCI 240, "Game Programming", to CITA/CSCI 280 to improve organization; also strengthen its prerequisites.

3. Move CSCI 230, "Data Structure and Algorithms", from a CSCI elective to a CSCI required course to strengthen student preparation for the capstone.

4. Change the course number of CITA 295 to 395 to reflect its junior standing; also increase its credits from 1 to 3 to better reflect the effort required; and also strengthen its prerequisites.

5. Change the course title of CITA 495 from "Capstone Seminar" to "Capstone Practicum" to better reflect the software development nature of the course; also strengthen its prerequisites.


All required forms are attached.

Respectfully submitted,

Bill Manaris, Ph.D.
Director, Computing in the Arts Program
Professor, Computer Science Department
FACULTY CURRICULUM COMMITTEE
SIGNATURE PAGE

- In section A, list ALL of the forms covered by this signature page. If you submit a form that is not listed in A, your proposal will be held back until we receive a new, updated signature page.
- You must obtain the signature of your department chair and dean before submitting your proposal.

A. FORMS COVERED BY THIS SIGNATURE PAGE. List each form you are submitting—for instance, PSYC 383, Course Form; PSYC, Change of Major Form; PSYC, Change of Minor Form.

1. CITA 120 Course Change Form
2. CITA 210 Course Change Form
3. CSCI 210 Course Change Form
4. CITA295 Course Change Form
5. CITA 495 Course Change Form
6. CITA Program Change Form

B. APPROVAL AND SIGNATURES.

1. Signature of Department Chair or Program Director:
   [Signature]
   Date: FEB. 18, 2015

2. Signature of Academic Dean:
   [Signature]
   Date: 2/18/2015

3. Signature of Provost:
   [Signature]
   Date: 3/10/15

4. Signature of Business Affairs (only for course fees):
   [Signature]
   Date: ________________ ☐ fee approved on __________ ☐ BOT approval pending

5. Signature of Curriculum Committee Chair:
   [Signature]
   Date: ________________

6. Signature of Budget Committee Chair (only for new programs):
   [Signature]
   Date: ________________

7. Signature of Academic Planning Committee Chair (only for new programs):
   [Signature]
   Date: ________________

8. Signature of Faculty Senate Secretary:
   [Signature]
   Date: ________________

Date Approved by Faculty Senate: ________________
FACULTY CURRICULUM COMMITTEE
COURSE FORM

Instructions:
- Please fill out one of these forms for each course you are adding, changing, deactivating, or reactivating.
- Fill out the parts of the form specified in part B. You must do this before your request can move forward!
- Remember that your changes will not be implemented until the next catalog year at the earliest.
- If you have questions, start by checking the instructions on the website. Please feel free to contact the committee
  chairs with any remaining questions you might have.

A. CONTACT/COURSE INFORMATION.

Name: Bill Manaris 
Phone: x38159 
Email: manarisb@cofc.edu 

Department or Program: CITAR 
School: SSM 

Subject Acronym and Course Number: CITAR 120 (cross listed as CSCI 120) 

Catalog Year in which changes will take effect: FALL 2015 

B. TYPE OF REQUEST. Please check all that apply, then fill out the specified parts of the form.

☐ Add a New Course (complete parts C, D, F, G, H, I, J)
☒ Change Part of an Existing Course (complete parts C, D, E, F, G, I, J)
☐ Course Number (you must submit a course deactivation request for the old course number)
☒ Course Name
☒ Course Description
☐ Credit/Contact Hours
☐ Restrictions (prerequisites, co-requisites, junior/senior standing, etc.)
☐ Deactivate an Existing Course (complete parts C, D, E, G, I, J)
☐ Reactivate a Previously-Deactivated Course (complete parts C, D, E, G, I, J) 

C. RATIONALE AND EXPLANATION. Please describe your request and explain why you are making it.

Change name to "Animation and Virtual Worlds" (from "Building Virtual Worlds").

Also change course description to: "This course allows students to author on-screen movie animations while learning the fundamentals of visual storytelling, lighting, and cameras using a 3D animation package. Students will learn to think algorithmically and abstractly while gaining an appreciation for the complexity of building software systems and a skill set for writing elegant code."

(Old course description: "This course allows students to author on-screen movie animations and interactive games while learning the fundamentals of object-oriented programming using a user-friendly environment. Students will learn to think algorithmically and abstractly while gaining an appreciation of the complexity of building software systems and a skill set for writing elegant code.")

Changes Rationale:

Changes reflect how this course has evolved over time to focus more on animation and less on object-oriented programming and game programming (topics covered in subsequent courses, i.e. CSCI 220/220L and CITAR/CSCI 210).
D. IMPACT ON EXISTING PROGRAMS AND COURSES. Please briefly describe the impact of your request on your own programs and courses as well other programs and courses. If another program requires the course, you must submit their written acknowledgement with this proposal. Also, the affected program must describe any change in the number of credit hours they require. Include a list of similar courses in other departments and explain any overlap.

None.
E. EXISTING COURSE INFORMATION. If you are proposing a new course, just leave this blank. Otherwise, please fill out all fields.

Department: CSCI  School: SSM  Subject Acronym: CITA  Course Number: 120

Credit hours: ___ lecture ___ lab ___ seminar ___ independent study
Contact hours: ___ lecture ___ lab ___ seminar ___ independent study

Course title: Building Virtual Worlds

Course description (maximum 50 words, exactly as it appears in the catalog):

This course allows students to author on-screen movie animations and interactive games while learning the fundamentals of object-oriented programming using a user-friendly environment. Students will learn to think algorithmically and abstractly while gaining an appreciation of the complexity of building software systems and a skill set for writing elegant code.

Restrictions (pre-requisites, co-requisites, majors only, etc.):

None.

Cross-listing, if any: CSCI 120

Is this course repeatable? ☐ yes ☒ no  If yes, how many total credit hours may the student earn? ___

F. NEW COURSE INFORMATION. If you are deactivating a course, leave this blank. Otherwise, please fill out all fields. For changed courses, use boldface for the information that is changing.

Department: CSCI  School: SSM  Subject Acronym: CITA  Course Number: 120

Credit hours: ___ lecture ___ lab ___ seminar ___ independent study
Contact hours: ___ lecture ___ lab ___ seminar ___ independent study

Course title: Animation and Virtual Worlds

Course description (maximum 50 words, exactly as it appears in the catalog):

This course allows students to author on-screen movie animations while learning the fundamentals of visual storytelling, lighting, and cameras using a 3D animation package. Students will learn to think algorithmically and abstractly while gaining an appreciation for the complexity of building software systems and a skill set for writing elegant code.

Restrictions (pre-requisites, co-requisites, majors only, etc.):

None.

If this is a newly-created course, is it intended to be the equivalent of an existing course? ☐ yes ☐ no
If so, which course? ________________

If equivalent, will the newly-created course replace the existing course? ☐ yes ☐ no

This form was last updated on 12/13/13 and replaces all others.
Note: If yes, you must deactivate that course by submitting an additional Course Form.

Cross-listing, if any (submit approval from relevant department): ______________

Note: Cross-listed courses are equivalent.

Is this course repeatable? □ yes □ no  If yes, how many total credit hours may the student earn? ___

Is there an activity, lab, or other fee associated with this course? □ yes □ no  What is the fee? $____

Note: The Senate cannot approve new fees; Business Affairs will submit any such request to the Board of Trustees. The course can still be created, but the fee will not be attached until the Board has approved it.

G. COSTS. List all of the new costs or cost savings (including new faculty/staff requests, library, equipment, etc.) associated with your request.

None.

H. STUDENT LEARNING OUTCOMES AND ASSESSMENT.

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Assessment Method and Performance Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Students will create on-screen movie animations via a general-purpose animation package</td>
<td>Homework assignments, tests, and final. Students need to earn C- or higher.</td>
</tr>
<tr>
<td>2. Students will apply fundamental concepts of computer programming (sequence, selection, iteration)</td>
<td>Same as above.</td>
</tr>
<tr>
<td>3. Students will develop algorithms synthesizing storytelling, lighting and visual animation</td>
<td>Same as above.</td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>
How does this course align with the student learning outcomes articulated for the major, program, or general education? What program-level outcome or outcomes does it support? Is the content or skill introduced, reinforced, or demonstrated in this course?

The CITA major synthesizes art and computer programming. This course combines visual animation, storytelling, and lighting with fundamentals of computer programming (sequence, selection, iteration).

I. PROGRAM CHANGES. Will this course be added to the existing degree requirements or list of approved electives of a major, minor, or concentration? ☐ yes ☒ no

If yes, please attach a Change Minor and/or Change Major/Program Form as appropriate.

J. CHECKLIST.

☒ I have completed all relevant parts of the form.

☒ I have attached a cover letter that describes my request and lists all the documents I am submitting.

☐ (For new courses only) I have attached a syllabus.

☐ (For courses used in any way by other departments, including cross-listing) I have attached an acknowledgement from the relevant department.

☐ (For courses intended to fulfill a Gen Ed requirement) I have submitted the proposal to the Gen Ed committee.

☒ I have submitted one Signature Form that lists all of the different forms I am submitting.

This form was last updated on 12/13/13 and replaces all others.
FACULTY CURRICULUM COMMITTEE
COURSE FORM

Instructions:
• Please fill out one of these forms for each course you are adding, changing, deactivating, or reactivating.
• Fill out the parts of the form specified in part B. You must do this before your request can move forward!
• Remember that your changes will not be implemented until the next catalog year at the earliest.
• If you have questions, start by checking the instructions on the website. Please feel free to contact the committee chairs with any remaining questions you might have.

A. CONTACT/COURSE INFORMATION.

Name: Bill Manaris Phone: x38159 Email: manarisb@cofc.edu

Department or Program: CSCI School: SSM

Subject Acronym and Course Number: CSCI 210 (cross listed as CIT A 210)

Catalog Year in which changes will take effect: FALL 2015

B. TYPE OF REQUEST. Please check all that apply, then fill out the specified parts of the form.

☐ Add a New Course (complete parts C, D, F, G, H, I, J)
☒ Change Part of an Existing Course (complete parts C, D, E, F, G, I, J)
☐ Course Number (you must submit a course deactivation request for the old course number)
☐ Course Name
☐ Course Description
☐ Credit/Contact Hours
☒ Restrictions (prerequisites, co-requisites, junior/senior standing, etc.)
☐ Deactivate an Existing Course (complete parts C, D, E, G, I, J)
☐ Reactivate a Previously-Deactivated Course (complete parts C, D, E, G, I, J)

C. RATIONALE AND EXPLANATION. Please describe your request and explain why you are making it.

Change to CIT A/CSCI 280 "Game Programming" (3) PR: CSCI/CIT A 120 or CSCI/CIT A 180, and C- or better in CSCI 220, or instructor permission.

(Currently it is CIT A/CSCI 210 "Game Programming" (3) PR: CSCI/CIT A 120 or CSCI/CIT A 180 or instructor permission.)

Prerequisite Rationale:

Currently, we get two groups of students in this course -- those who have already taken CSCI 220 and those who have not. As a result, the instructor is forced to duplicate intro to programming and generic problem-solving material that is also covered in CSCI 220.

Since CSCI 220 is already a requirement for CIT A students, requiring that ALL students have taken CSCI 220 before enrolling in CSCI 280 will allow instructor to focus more on computer game development, and less on duplicating material being covered in CSCI 220.

Course Number Rationale:

This form was last updated on 12/13/13 and replaces all others.
Changing the course number to CSCI 280 will better reflect the placement of the course within the sophomore year, and also will avoid confusion (the current number, CITA/CSCI 210, comes before the new prerequisite, CSCI 220 - this becomes an issue as the course is cross-listed).

If a student has taken the old version of the course, they should NOT earn additional credit for taking the new version.

D. IMPACT ON EXISTING PROGRAMS AND COURSES. Please briefly describe the impact of your request on your own programs and courses as well other programs and courses. If another program requires the course, you must submit their written acknowledgement with this proposal. Also, the affected program must describe any change in the number of credit hours they require. Include a list of similar courses in other departments and explain any overlap.

None.
E. EXISTING COURSE INFORMATION. If you are proposing a new course, just leave this blank. Otherwise, please fill out all fields.

Department: CSCI  School: SSM  Subject Acronym: CSCI  Course Number: 210

Credit hours: ___ 3 ___ lecture ___ lab ___ seminar ___ independent study
Contact hours: ___ 3 ___ lecture ___ lab ___ seminar ___ independent study

Course title: **Game Programming**

Course description (maximum 50 words, exactly as it appears in the catalog):

*A course introducing principles of game programming, including computer modeling, data visualization and animations, media transformations, and video game ethics. Students will be exposed to several game engines, a scripting language, and develop at least one game.*

Restrictions (pre-requisites, co-requisites, majors only, etc.):

CSCI 120 or CSCI 180 or permission of the instructor.

Cross-listing, if any: CSCI 210

Is this course repeatable? ☐ yes  ☒ no  If yes, how many total credit hours may the student earn? _____

F. NEW COURSE INFORMATION. If you are deactivating a course, leave this blank. Otherwise, please fill out all fields. For changed courses, use boldface for the information that is changing.

Department: CSCI  School: SSM  Subject Acronym: CSCI  Course Number: 280

Credit hours: ___ 3 ___ lecture ___ lab ___ seminar ___ independent study
Contact hours: ___ 3 ___ lecture ___ lab ___ seminar ___ independent study

Course title: **Game Programming**

Course description (maximum 50 words, exactly as it appears in the catalog):

*A course introducing principles of game programming, including computer modeling, data visualization and animations, media transformations, and video game ethics. Students will be exposed to several game engines, a scripting language, and develop at least one game.*

Restrictions (pre-requisites, co-requisites, majors only, etc.):

CSCI/CITA 120 or CSCI/CITA 180, and C- or better in CSCI 220, or instructor permission.

If this is a newly-created course, is it intended to be the equivalent of an existing course? ☐ yes  ☐ no
If so, which course? ________________

If equivalent, will the newly-created course replace the existing course? ☐ yes  ☐ no

Note: If yes, you must deactivate that course by submitting an additional Course Form.

Cross-listing, if any (submit approval from relevant department): ________________

This form was last updated on 12/13/13 and replaces all others.
Note: Cross-listed courses are equivalent.

Is this course repeatable? □ yes ☒ no. If yes, how many total credit hours may the student earn? 

Is there an activity, lab, or other fee associated with this course? □ yes ☒ no. What is the fee? $____

Note: The Senate cannot approve new fees; Business Affairs will submit any such request to the Board of Trustees. The course can still be created, but the fee will not be attached until the Board has approved it.

G. COSTS. List all of the new costs or cost savings (including new faculty/staff requests, library, equipment, etc.) associated with your request.

None.

H. STUDENT LEARNING OUTCOMES AND ASSESSMENT.

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<tr>
<td>What will students know and be able to do when they complete the course?</td>
<td>How will each outcome be measured? Who will be assessed, when, and how often? How well should students be able to do on the assessment?</td>
</tr>
<tr>
<td>1. Learn fundamentals of computer game development.</td>
<td>Students will develop several game prototypes and at least one complete computer game throughout the semester as homework assignments (4-6). Students need to earn C- or higher.</td>
</tr>
<tr>
<td>2. Explore different game engines.</td>
<td>Same as above.</td>
</tr>
<tr>
<td>3. Apply appropriate critical thinking skills and problem-solving techniques in the context of game development.</td>
<td>Same as above.</td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>

This form was last updated on 12/13/13 and replaces all others.
How does this course align with the student learning outcomes articulated for the major, program, or general education? What program-level outcome or outcomes does it support? Is the content or skill introduced, reinforced, or demonstrated in this course?

The CITA major synthesizes art and computer programming. This course combines game design, exposure to different game engines, and computer programming.

I. PROGRAM CHANGES. Will this course be added to the existing degree requirements or list of approved electives of a major, minor, or concentration? □ yes ☒ no

If yes, please attach a Change Minor and/or Change Major/Program Form as appropriate.

J. CHECKLIST.

☒ I have completed all relevant parts of the form.

☒ I have attached a cover letter that describes my request and lists all the documents I am submitting.

☐ (For new courses only) I have attached a syllabus.

☐ (For courses used in any way by other departments, including cross-listing) I have attached an acknowledgement from the relevant department.

☐ (For courses intended to fulfill a Gen Ed requirement) I have submitted the proposal to the Gen Ed committee.

☒ I have submitted one Signature Form that lists all of the different forms I am submitting.
FACULTY CURRICULUM COMMITTEE
COURSE FORM

Instructions:
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- Fill out the parts of the form specified in part B. You must do this before your request can move forward!
- Remember that your changes will not be implemented until the next catalog year at the earliest.
- If you have questions, start by checking the instructions on the website. Please feel free to contact the committee chairs with any remaining questions you might have.

A. CONTACT/COURSE INFORMATION.

Name: Bill Manaris Phone: x38159 Email: manarisb@cofc.edu
Department or Program: CITA School: SSM
Subject Acronym and Course Number: CITA 295
Catalog Year in which changes will take effect: FALL 2015

B. TYPE OF REQUEST. Please check all that apply, then fill out the specified parts of the form.

☐ Add a New Course (complete parts C, D, F, G, H, I, J)
☒ Change Part of an Existing Course (complete parts C, D, E, F, G, I, J)
  ☐ Course Number (you must submit a course deactivation request for the old course number)
  ☐ Course Name
  ☒ Course Description
  ☒ Credit/Contact Hours
  ☐ Restrictions (prerequisites, co-requisites, junior/senior standing, etc.)
☐ Deactivate an Existing Course (complete parts C, D, E, G, I, J)
☐ Reactivate a Previously-Deactivated Course (complete parts C, D, E, G, I, J)

C. RATIONALE AND EXPLANATION. Please describe your request and explain why you are making it.

Change course number from CITA 295 to CITA 395.

Course Number Rationale: Changing the course number to CITA 395 will better reflect the placement of the course within the junior year.

Change course description:

New: "A seminar course to develop a proposal for the capstone project that synthesizes creativity in the arts with the tools and conceptual modeling systems of computing. Through readings, discussion, and writing, students will explore using computational tools/techniques to achieve an artistic vision, or develop new tools/techniques to assist the creative process. Open to CITA majors only."

Old: "A seminar course to develop through readings, discussion, and writing exercises the integration of themes developed across computing in the arts. Students will benefit from participating with junior and senior majors in a group seminar in preparation for their own enrollment in CITA 495. Open to CITA majors only."

Course Description Rationale:

This form was last updated on 12/13/13 and replaces all others.
The new description better reflects the content of the course (as it has evolved over time).

Change credit/contact hours from 1 to 3

Credit/contact hours Rationale:
The course meets 3 hours per week. Students are expected to put the necessary amount of effort equivalent to a 3-hour course.

Change prerequisites:

New prerequisites: CSCI/CITA 280, C- or better in CSCI 221, 9 hours in an art concentration

Old prerequisites: CSCI/CITA 240, CSCI 221, 9 hours in an art concentration

Prerequisite Rationale:
CSCI/CITA 210 has been renumbered (enclosed proposal) as 280.

Requirement of C- or better in 221 will help students develop realistic proposals for their capstone project, in terms of computer programming requirements.

D. IMPACT ON EXISTING PROGRAMS AND COURSES. Please briefly describe the impact of your request on your own programs and courses as well other programs and courses. If another program requires the course, you must submit their written acknowledgement with this proposal. Also, the affected program must describe any change in the number of credit hours they require. Include a list of similar courses in other departments and explain any overlap.

None.
E. EXISTING COURSE INFORMATION. If you are proposing a new course, just leave this blank. Otherwise, please fill out all fields.

Department: CSCI  School: SSM  Subject Acronym: CITA  Course Number: 295

Credit hours: _1_ lecture _1_ lab _1_ seminar _1_ independent study
Contact hours: _3_ lecture _1_ lab _1_ seminar _1_ independent study

Course title: CITA Seminar

Course description (maximum 50 words, exactly as it appears in the catalog):

A seminar course to develop through readings, discussion, and writing exercises the integration of themes developed across computing in the arts. Students will benefit from participating with junior and senior majors in a group seminar in preparation for their own enrollment in CITA 495. Open to CITA majors only.

Restrictions (pre-requisites, co-requisites, majors only, etc.):

CSCI/CITA 210, CSCI 221, 9 hours in an art concentration

Cross-listing, if any:

Is this course repeatable? ☑ yes  ☒ no  If yes, how many total credit hours may the student earn? _____

F. NEW COURSE INFORMATION. If you are deactivating a course, leave this blank. Otherwise, please fill out all fields. For changed courses, use boldface for the information that is changing.

Department: CSCI  School: SSM  Subject Acronym: CITA  Course Number: 395

Credit hours: _3_ lecture _1_ lab _1_ seminar _1_ independent study
Contact hours: _3_ lecture _1_ lab _1_ seminar _1_ independent study

Course title: CITA Seminar

Course description (maximum 50 words, exactly as it appears in the catalog):

A seminar course to develop a proposal for the capstone project that synthesizes creativity in the arts with the tools and conceptual modeling systems of computing. Through readings, discussion, and writing, students will explore using computational tools/techniques to achieve an artistic vision, or develop new tools/techniques to assist the creative process. Open to CITA majors only.

Restrictions (pre-requisites, co-requisites, majors only, etc.):

CSCI/CITA 280, C- or better in CSCI 221, 9 hours in an art concentration

If this is a newly-created course, is it intended to be the equivalent of an existing course? ☑ yes  ☒ no
If so, which course? ____________

If equivalent, will the newly-created course replace the existing course? ☑ yes  ☒ no

This form was last updated on 12/13/13 and replaces all others.
Note: If yes, you must deactivate that course by submitting an additional Course Form.

Cross-listing, if any (submit approval from relevant department): ______________________
Note: Cross-listed courses are equivalent.

Is this course repeatable? □ yes  ☒ no  If yes, how many total credit hours may the student earn? ____

Is there an activity, lab, or other fee associated with this course? □ yes  ☒ no  What is the fee? $_____ 
Note: The Senate cannot approve new fees; Business Affairs will submit any such request to the Board of Trustees. The course can still be created, but the fee will not be attached until the Board has approved it.

G. COSTS. List all of the new costs or cost savings (including new faculty/staff requests, library, equipment, etc.) associated with your request.

None.

H. STUDENT LEARNING OUTCOMES AND ASSESSMENT.

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<td>How will each outcome be measured? Who will be assessed, when, and how often? How well should students be</td>
</tr>
<tr>
<td></td>
<td>able to do on the assessment?</td>
</tr>
<tr>
<td>1. Learn to integrate/synthesize computing with a particular art discipline.</td>
<td>Students will make several presentations and develop and defend a comprehensive proposal outlining their</td>
</tr>
<tr>
<td></td>
<td>CITA capstone project (CITA 495). Students need to earn C- or higher.</td>
</tr>
<tr>
<td>2. Explore common, creative computational themes between concentrations in the arts.</td>
<td>Same as above.</td>
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<td></td>
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</tr>
<tr>
<td>3. Identify and present research papers and projects that integrate computing and the arts</td>
<td>Same as above.</td>
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<td>in a particular CITA area.</td>
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<td></td>
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<td></td>
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How does this course align with the student learning outcomes articulated for the major, program, or general education? What program-level outcome or outcomes does it support? Is the content or skill introduced, reinforced, or demonstrated in this course?

The CITA major synthesizes art and computer programming. This course helps identify background research and a plan for the student to produce their own, original synthesis in the form of a capstone project, which combines computing and the arts.

I. PROGRAM CHANGES. Will this course be added to the existing degree requirements or list of approved electives of a major, minor, or concentration? ☑ yes ☑ no

If yes, please attach a Change Minor and/or Change Major/Program Form as appropriate.

J. CHECKLIST.

☒ I have completed all relevant parts of the form.

☒ I have attached a cover letter that describes my request and lists all the documents I am submitting.

☐ (For new courses only) I have attached a syllabus.

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☒ I have submitted one Signature Form that lists all of the different forms I am submitting.
A. CONTACT/COURSE INFORMATION.

Name: Bill Manaris Phone: x38159 Email: manarisb@cofc.edu

Department or Program: CITA School: SSM

Subject Acronym and Course Number: CITA 495

Catalog Year in which changes will take effect: FALL 2015

B. TYPE OF REQUEST. Please check all that apply, then fill out the specified parts of the form.

☐ Add a New Course (complete parts C, D, F, G, H, I, J)
☒ Change Part of an Existing Course (complete parts C, D, E, F, G, I, J)
☐ Course Number (you must submit a course deactivation request for the old course number)
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☒ Course Description
☐ Credit/Contact Hours
☒ Restrictions (prerequisites, co-requisites, junior/senior standing, etc.)
☐ Deactivate an Existing Course (complete parts C, D, E, G, I, J)
☐ Reactivate a Previously-Deactivated Course (complete parts C, D, E, G, I, J)

C. RATIONALE AND EXPLANATION. Please describe your request and explain why you are making it.

Change course name from "Capstone Seminar" to "Capstone Practicum".

Course Name Rationale: Changing the course name to Practicum better communicates the hands-on, computer development nature of the capstone experience.

Change course description to "A capstone course to provide a synthesizing experience for CITA majors across all concentrations. Students will read and analyze the latest research in the expanding field of computing in the arts, and will develop individual software projects integrating computing and the arts. Open only to CITA majors with senior standing."

Course Description Change Rationale: New description emphasizes the software development nature of the CITA capstone project.

Change prerequisites from CITA 295 to CITA 395, and C- or better in CSCI 230.

This form was last updated on 12/13/13 and replaces all others.
Prerequisite Rationale: CITA 295 has been renumbered (enclosed proposal) as 395. Requirement of C- or better in 230 will better prepare students to implement their capstone projects.

D. IMPACT ON EXISTING PROGRAMS AND COURSES. Please briefly describe the impact of your request on your own programs and courses as well other programs and courses. If another program requires the course, you must submit their written acknowledgement with this proposal. Also, the affected program must describe any change in the number of credit hours they require. Include a list of similar courses in other departments and explain any overlap.

None.
E. EXISTING COURSE INFORMATION. If you are proposing a new course, just leave this blank. Otherwise, please fill out all fields.

Department: CSCI  
School: SSM  
Subject Acronym: CITA  
Course Number: 495

Credit hours:  _3_ lecture  _lab  _seminar  _independent study
Contact hours:  _3_ lecture  _lab  _seminar  _independent study

Course title: CITA Capstone Seminar

Course description (maximum 50 words, exactly as it appears in the catalog):  

A capstone course to provide a synthesizing experience for CITA majors across all concentrations. Students will read and analyze the latest research in the expanding field of computing in the arts, and will develop individual research projects integrating their skills and knowledge for both written and oral presentations. Open only to CITA majors with senior standing.

Restrictions (pre-requisites, co-requisites, majors only, etc.):

CITA 295

Cross-listing, if any:

Is this course repeatable?  □ yes  □ no  If yes, how many total credit hours may the student earn? ___

F. NEW COURSE INFORMATION. If you are deactivating a course, leave this blank. Otherwise, please fill out all fields. For changed courses, use boldface for the information that is changing.

Department: CSCI  
School: SSM  
Subject Acronym: CITA  
Course Number: 495

Credit hours:  _3_ lecture  _lab  _seminar  _independent study
Contact hours:  _3_ lecture  _lab  _seminar  _independent study

Course title: CITA Seminar

Course description (maximum 50 words, exactly as it appears in the catalog):

A capstone course to provide a synthesizing experience for CITA majors across all concentrations. Students will read and analyze the latest research in the expanding field of computing in the arts, and will develop individual software projects integrating computing and the arts. Open only to CITA majors with senior standing.

Restrictions (pre-requisites, co-requisites, majors only, etc.):

CITA 395, and C- or better in CSCI 230.

If this is a newly-created course, is it intended to be the equivalent of an existing course?  □ yes  □ no  
If so, which course? ____________________

If equivalent, will the newly-created course replace the existing course?  □ yes  □ no

This form was last updated on 12/13/13 and replaces all others.
Note: If yes, you must deactivate that course by submitting an additional Course Form.

Cross-listing, if any (submit approval from relevant department): ______________
Note: Cross-listed courses are equivalent.

Is this course repeatable? ☐ yes ☒ no If yes, how many total credit hours may the student earn? __

Is there an activity, lab, or other fee associated with this course? ☐ yes ☒ no What is the fee? $_____
Note: The Senate cannot approve new fees; Business Affairs will submit any such request to the Board of Trustees. The course can still be created, but the fee will not be attached until the Board has approved it.

G. COSTS. List all of the new costs or cost savings (including new faculty/staff requests, library, equipment, etc.) associated with your request.

None.

H. STUDENT LEARNING OUTCOMES AND ASSESSMENT.

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Assessment Method and Performance Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>What will students know and be able to do when they complete the course?</td>
<td>How will each outcome be measured? Who will be assessed, when, and how often? How well should students be able to do on the assessment?</td>
</tr>
<tr>
<td>1. Learn to integrate/synthesize computing with a particular art discipline.</td>
<td>Students will make several presentations and develop and defend their CITI capstone software project. Students need to earn C- or higher.</td>
</tr>
<tr>
<td>2. Explore common, creative computational themes between concentrations in the arts.</td>
<td>Same as above.</td>
</tr>
<tr>
<td>3. Develop a capstone software project that integrates computing and the arts in a particular CITI area.</td>
<td>Same as above.</td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>

This form was last updated on 12/13/13 and replaces all others.
How does this course align with the student learning outcomes articulated for the major, program, or general education? What program-level outcome or outcomes does it support? Is the content or skill introduced, reinforced, or demonstrated in this course?

The CITA major synthesizes art and computer programming. This course focuses on students developing an original synthesis in the form of a capstone software project, which combines computing and the arts.

I. PROGRAM CHANGES. Will this course be added to the existing degree requirements or list of approved electives of a major, minor, or concentration? ☐ yes ☒ no

If yes, please attach a Change Minor and/or Change Major/Program Form as appropriate.

J. CHECKLIST.

☒ I have completed all relevant parts of the form.

☒ I have attached a cover letter that describes my request and lists all the documents I am submitting.

☐ (For new courses only) I have attached a syllabus.

☐ (For courses used in any way by other departments, including cross-listing) I have attached an acknowledgement from the relevant department.

☐ (For courses intended to fulfill a Gen Ed requirement) I have submitted the proposal to the Gen Ed committee.

☒ I have submitted one Signature Form that lists all of the different forms I am submitting.
FACULTY CURRICULUM COMMITTEE
CHANGE/DELETE PROGRAM FORM

Instructions:
• Please fill out all of the portions of the form that are specified in section B. You must do this before your request can move forward!
• Remember that your changes will not be implemented until the next catalog year at the earliest.
• If you have questions, please start by checking the detailed instructions on the website.
• Please feel free to contact the committee chair with any remaining questions you might have.

A. CONTACT INFORMATION.

Name: Bill Manaris  Phone: x38159  Email: manarish@cofc.edu

School: SSM  Department or Program: Computing in the Arts (CITA)

Name and Acronym of Major: CITA

B. CATEGORY OF REVIEW. Please check all that apply, then fill out the specified parts of the form.

☐ Change Request (fill out all sections)
  ☑ Add an existing course to requirements or electives
  ☐ Add a new course to requirements or electives (attach completed course form for each)
  ☐ Delete courses from requirements or electives
  ☐ Add or modify concentration*
  ☐ Add or modify cognate*

*Note: Only concentrations and cognates requiring 18 or more credit hours will be tracked in Banner and Degree Works and noted on the transcript.

☐ Terminate Program (fill out E, G, H, and I)
  ☐ Terminate degree
  ☐ Terminate major
  ☐ Terminate concentration
  ☐ Terminate cognate

C. GENERAL INFORMATION

Number of Current Credit Hours (for existing program): 50+
Number of Proposed Credit Hours (for changed program): 52+
Catalog Year in which changes will take effect: FALL 2015

D. CURRICULUM. Please list every change you are making below AND attach the current Program of Study Worksheet for this major (http://registrar.cofc.edu/program-of-study-resources/program-of-study-worksheets/index.php) with changes marked in RED. Additions should show where the course will be inserted, deletions should be noted by crossing out the course, and moves indicated with arrows. Distinguish between required and elective courses, and note any prerequisites, co-requisites, sequencing, or other restrictions. Provide the catalog description and course list exactly as they should appear in the catalog. For each new course, submit the Curriculum Committee’s Course Form and a sample syllabus.

This form was last updated on 6/6/2013 and replaces all others.  Page 1 of 4
E. RATIONALE AND EXPLANATION. Please provide a narrative addressing the request you are making and why you are making it.

1) Add CSCI 230 to the list of required CSCI courses.

Change Rationale:

CSCI 230 is the third course in the intro to Computer Science (CSCI) sequence. Making it a requirement will ensure that students have sufficient foundation in programming and software development (i.e., Data Structures) so that they can adequately develop their capstone project in CITA 495.

2) Add CSCI 315 to the list of CSCI Elective Requirements.

Change Rationale:

This course focuses on server-side website development, which prepares students interested in Internet application development to complete a related capstone project in CITA 495.

3) Change the CSCI Elective Requirements from 9 hours to 6 hours (since we have increased the number of required credits hours by 3 - see (1) above.

Change Rationale:

This will keep the number of required hours unaffected by this change.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT.

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Assessment Method and Performance Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>What will students know and be able to do when they complete the major or program?</td>
<td>How will each outcome be measured? Who will be assessed, when, and how often? How well should students be able to do on the assessment?</td>
</tr>
<tr>
<td>1. Model processes, particularly those in arts applications.</td>
<td>Students will develop several software projects throughout the curriculum incorporating modeling of processes. Students should be able to earn a C- or better on all CITA synthesis courses (CITA 120/180, CITA 280, CITA 395, CITA 495).</td>
</tr>
<tr>
<td>2. Investigate, visualize, speculate, and invent using computing and computational thinking.</td>
<td>Same as above.</td>
</tr>
<tr>
<td>3. Synthesize innovative software applications and media combining music, images, sounds, lighting and stage design, and other digital artifacts.</td>
<td>Same as above.</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>

Additional Outcomes or Comments:

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G. IMPACT ON EXISTING PROGRAMS AND COURSES. Please describe the impact of this request on other programs and courses. If you are deleting a program, please describe the effect on all programs that will be impacted; if you are adding or changing a program, please explain any overlap with existing programs at the College.

None.

H. COSTS ASSOCIATED WITH THE REQUESTED ACTION. List all of the new costs or cost savings (including new faculty/staff requests, library, or equipment) associated with your request.

None.

I. CHECKLIST

- [ ] I have completed all relevant parts of the form.
- [ ] I have attached a cover letter that describes my request and lists all the documents I am submitting.
- [ ] I have attached a Course Form for each newly-created or modified course.

This form was last updated on 6/6/2013 and replaces all others.
☐ (For proposals that affect other departments in any way) I have attached an acknowledgement from the relevant department.

☒ I have provided the complete curriculum for the program, concentration, emphasis, etc., including the description and course list, exactly as it should appear in the catalog.

☒ I have submitted one Signature Form that lists all of the different forms I am submitting.
Complete Updated CITA Curriculum for Catalog

This document contains the complete curriculum exactly as it should appear in the catalog.

Changes are enclosed in boxes.

Computing in the Arts Major Requirements

Degree: Bachelor of Arts

Credit Hours: 52+

"PR" indicates a pre-requisite. "CO" indicates a co-requisite.

Courses within this major may also satisfy general education requirements.

Please consult http://registrar.cofc.edu/general-edu for more information.

Required Courses

Choose one of the following:

CITA 120 Animation and Virtual Worlds (cross-listed with CSCI 120) (3) PR: None

OR

CITA 180 Computers, Music, and Art (cross-listed with CSCI 180) (3) PR: None

Required CITA Courses

CITA 280 Game Programming (cross-listed with CSCI 280) (3) PR: CSCI/CITA 120 or CSCI/CITA 180, and C- or better in CSCI 220, or instructor permission

CITA 395 Seminar (3) PR: CSCI/CITA 280, C- or better in CSCI 221, 9 hours in an art concentration

CITA 495 Capstone Practicum (3) PR: CITA 395, and C- or better in CSCI 230

Required CSCI Courses

CSCI 220 Computer Programming I (3) PR: CSCI 120 or CSCI 180 or CSCI 210 or MATH 1 CSCI 220L

CSCI 220L Computer Programming I Lab (1) CO: CSCI 220
CSCI 221  Computer Programming II (3) PR: CSCI 220, CSCI 220L; CO or PR: MATH 207
CSCI 230  Data Structure and Algorithms (3) PR: CSCI 221, MATH 207

CSCI Elective Requirement: Select 8 credit hours from the following:

CSCI 250  Introduction to Computer Organization and Assembly Language Programming (3) PR: CSCI 220 and CSCI 220L; CO or PR: MATH 207
CSCI 315  Server-Side Web Programming (3) PR: Prerequisites: CSCI 215 and CSCI 221
CSCI 320  Programming Language Concepts (3) PR: CSCI 221, MATH 207
CSCI 325  Functional and Logic Programming (3) PR: CSCI 221, MATH 207
CSCI 350  Digital Logic and Computer Organization (3) PR: CSCI 250; PR or CO: MATH 307
CSCI 360  Software Architecture and Design (3) PR: CSCI 230, MATH 207; CO: COMM 104
CSCI 380  User Interface Development (3) PR: CSCI 221, MATH 207, or instructor permission
CSCI 399  Tutorial (3, Repeatable up to 12) PR: Junior standing, tutor permission, department chair permission
CSCI 470  Principles of Artificial Intelligence (3) PR: CSCI 230, MATH 307
CSCI 480  Principles of Computer Graphics (3) PR: CSCI 230, MATH 220, MATH 307
CSCI 490  Special Topics (3) PR: Instructor permission

Math Requirement

MATH 105  Calculus for Business and Social Sciences (3) PR: MATH 101 or placement

OR

MATH 111  Pre-Calculus Mathematics (4) PR: C- or better in MATH 101 or placement

AND

MATH 207  Discrete Structures I (3) PR: MATH 105, MATH 111, or MATH 120

Select a concentration area from the following (Art, Music or Theatre):

Art Concentration

ARTS 119  Drawing I (3) PR: None
ARTH 287  New Media in Contemporary Art (3) PR: None
**Elective Requirement: Select 12 credit hours from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 101</td>
<td>History of Art: Prehistoric Through Medieval (3)</td>
<td>PR: None</td>
</tr>
<tr>
<td>ARTH 102</td>
<td>History of Art: Renaissance to Modern (3)</td>
<td>PR: None</td>
</tr>
<tr>
<td>ARTH 104</td>
<td>Themes in the History of Art (3)</td>
<td>PR: None</td>
</tr>
<tr>
<td>ARTH 293</td>
<td>Introduction to Film Art (3)</td>
<td>PR: None</td>
</tr>
<tr>
<td>ARTS 215</td>
<td>Photography I (3)</td>
<td>PR: ARTS 119</td>
</tr>
<tr>
<td>ARTS 216</td>
<td>Painting I (3)</td>
<td>PR: ARTS 119</td>
</tr>
<tr>
<td>ARTS 218</td>
<td>Printmaking I (3)</td>
<td>PR: ARTS 119 or instructor permission</td>
</tr>
<tr>
<td>ARTS 220</td>
<td>Sculpture I (3)</td>
<td>PR: None</td>
</tr>
<tr>
<td>ARTH 306</td>
<td>Studies in Modern, Contemporary, and Film Arts (3)</td>
<td>PR: instructor permission or 6 hours of ARTH or ARTH 299</td>
</tr>
<tr>
<td>ARTH 391</td>
<td>Contemporary Art (3)</td>
<td>PR: instructor permission or 6 hours of ARTH or ARTH 299</td>
</tr>
<tr>
<td>ARTH 392</td>
<td>The Camera and Visual Perception (3)</td>
<td>PR: instructor permission or 6 hours of ARTH or ARTH 299</td>
</tr>
<tr>
<td>ARTH 490</td>
<td>Independent Study in Art History (3)</td>
<td>PR: Junior or senior standing, declared ARTH major, overall GPA of at least 3.00 and ARTH major GPA of at least 3.30</td>
</tr>
<tr>
<td>ARTS 315</td>
<td>Photography II (3)</td>
<td>PR: ARTS 215</td>
</tr>
<tr>
<td>ARTS 319</td>
<td>Drawing II (3)</td>
<td>PR: ARTS 119</td>
</tr>
<tr>
<td>ARTS 322</td>
<td>Painting II (3)</td>
<td>PR: ARTS 216</td>
</tr>
<tr>
<td>ARTS 323</td>
<td>Printmaking II (3)</td>
<td>PR: ARTS 218 or instructor permission</td>
</tr>
<tr>
<td>ARTS 324</td>
<td>Sculpture II (3)</td>
<td>PR: ARTS 119, ARTS 220, or instructor permission</td>
</tr>
<tr>
<td>ARTS 326</td>
<td>Drawing III (3)</td>
<td>PR: ARTS 319 or instructor permission</td>
</tr>
<tr>
<td>ARTS 327</td>
<td>Advanced Photographic Techniques (3)</td>
<td>PR: ARTS 215, ARTS 315, or instructor permission</td>
</tr>
<tr>
<td>ARTS 328</td>
<td>Painting III (3)</td>
<td>PR: ARTS 322</td>
</tr>
<tr>
<td>ARTS 330</td>
<td>Sculpture III (3)</td>
<td>PR: ARTS 324 or instructor permission</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Prerequisites</td>
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<tr>
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<tr>
<td>ARTS 331</td>
<td>Painting IV (3) PR: ARTS 328</td>
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<tr>
<td>ARTS 332</td>
<td>Advanced Printmaking (3) PR: ARTS 323 or ARTS 329 or instructor permission</td>
<td></td>
</tr>
<tr>
<td>ARTS 333</td>
<td>Sculpture IV (3) PR: ARTS 330 or instructor permission</td>
<td></td>
</tr>
<tr>
<td>ARTS 334</td>
<td>Advanced Photography IV (3) PR: ARTS 215, ARTS 315, or instructor permission</td>
<td></td>
</tr>
<tr>
<td>ARTS 335</td>
<td>Selected Topics in Advanced Studio Practice (3) PR: Vary according to topic</td>
<td></td>
</tr>
<tr>
<td>ARTS 339</td>
<td>Drawing IV (3) PR: ARTS 326 or instructor permission</td>
<td></td>
</tr>
<tr>
<td>ARTS 430</td>
<td>Independent Study in Studio Art (3) PR: Department chair approval</td>
<td></td>
</tr>
<tr>
<td>MUSC 146</td>
<td>Fundamentals of Music (3) PR: None</td>
<td></td>
</tr>
<tr>
<td>MUSC 246</td>
<td>Music Theory I (3) PR: Instructor permission</td>
<td></td>
</tr>
</tbody>
</table>

**Elective Requirements: Select 12 credit hours from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 247</td>
<td>Music Theory II (3) PR: MUSC 246, MUSC 238, or instructor permission</td>
<td></td>
</tr>
<tr>
<td>MUSC 345</td>
<td>Jazz Theory (3) PR: None</td>
<td></td>
</tr>
<tr>
<td>MUSC 351</td>
<td>Seminar in Music Composition (3) PR: MUSC 237</td>
<td></td>
</tr>
<tr>
<td>MUSC 352</td>
<td>Seminar in Music Composition II (3) PR: MUSC 351</td>
<td></td>
</tr>
<tr>
<td>MUSC 381</td>
<td>Music History I (3) PR: MUSC 247 or instructor permission</td>
<td></td>
</tr>
<tr>
<td>MUSC 382</td>
<td>Music History II (3) PR: MUSC 381 or instructor permission</td>
<td></td>
</tr>
<tr>
<td>MUSC 399</td>
<td>Tutorial (3, Repeatable up to 12) PR: Junior standing, tutor permission, department chair permission</td>
<td></td>
</tr>
<tr>
<td>MUSC 460</td>
<td>Senior Independent Study in Music Theory or Composition (3 or 6) PR: MUSC 352 or instructor permission, overall GPA of at least 2.75, department permission</td>
<td></td>
</tr>
<tr>
<td>MUSC 481</td>
<td>Music Theory III (3) PR: MUSC 247</td>
<td></td>
</tr>
<tr>
<td>MUSC 482</td>
<td>Music Theory IV (3) PR: MUSC 481</td>
<td></td>
</tr>
<tr>
<td>MUSC 499</td>
<td>Bachelor's Essay (6) PR: department permission</td>
<td></td>
</tr>
</tbody>
</table>

**Theatre Concentration**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 276</td>
<td>Script Analysis (3)</td>
<td>PR: None</td>
</tr>
</tbody>
</table>
THTR 277  Acting I: Basic Approach (3) PR: None
THTR 355  Playwriting I (3) PR or CO: THTR 276

Select one course from the following:
THTR 240  Costume I: Introductory Studies (3) PR: None
THTR 209  Stagecraft I (3) PR: None

Select one course from the following:
THTR 310  Theatre History and Literature to 1750 (3) PR: Junior or senior standing
THTR 311  Theatre History and Literature after 1750 (3) PR: Junior or senior standing

Select one course from the following:
THTR 207  Rendering for Theatre (3) PR: THTR 209 or THTR 240
THTR 221  Creative Drama I (3) PR: None
THTR 340  Costuming II: Pattern Drafting and Advanced Sewing Techniques (3) PR: THTR 240
THTR 350  Selected Topics in Communication Production (3) PR: None
THTR 455  Playwriting II (3) PR: THTR 355