

Academic Affairs Meeting Minutes  
Tuesday, November 11, 2014  
10:30 a.m., EHFA 164

Attendees:

Teresa Burns, Chair, Science	Dustin Thorn, Science
Dennis Rauch, Business	Amy Fynn, Library
Richard Aidoo, Humanities	Jamia Richmond, Education
Michael Ruse, University College	Amanda Craddock, Director of Admissions
John Beard, Office of the Provost	Dan Lawless, University Registrar

Absent:

Richard Costner, Education	Steve Hamelman, Humanities
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Guests:

Jane Guentzel, Science	Will Jones, Science
Prashant Sansgiry, Science	Louis Keiner, Science
Carol Osborne, Humanities	Jen Boyle, Humanities
Steven Bleicher, Humanities	

I. Welcome and Call to Order

Dr. Burns welcomed all in attendance and called the meeting to order. A motion to accept the minutes from the October 7, 2014, meeting was made by Richard Aidoo and seconded by Jamia Richmond. The meeting minutes were approved as written.

II. Chair Report

While Dr. Burns stated that she did not have a true "Chairs Report" there are a few messages that she would like to pass along to the committee members. Dr. Burns reminded visitors that when proposals are "approved pending" they are returned (denied) back to the originator of the form. Once the proposer makes the recommended changes, the proposal must be re-approved back up through the college chain of command. When proposals are denied, it is the submitter's responsibility to have the corrections made, the approvals acquired, and the form must be resubmitted to the Chair of Academic Affairs, for final approval, prior to the deadline for the Faculty Senate Committee. For example, any items that are returned today **MUST** be received by the Chair of Academic Affairs, with corrections made, no later than November 16, 2014. Agenda items for the December Faculty Senate meeting is November 17, 2014. If items are **not** received by November 16<sup>th</sup> they will **NOT** be placed on the agenda for Faculty Senate.

### III. Consent Agenda

#### **Form A: Proposal for Changes In, Restoration of, or Removal of an Undergraduate Course**

##### **College of Humanities and Fine Arts -Department of History**

HIST 492            Topics in History

**Proposed changes:** Course change **Change in prerequisites from: 3 to: 1-3** **Is this class repeatable for credit?** Yes. May be repeated as topics change. **Proposed catalog description:** HIST 492 Topics in History. (1-3) Reading and research on selected historical subjects. May be repeated for credit under different topics. **Justification:** This change will give faculty flexibility in offering one or two credit courses that meet fewer hours per week to explore special topics. **Impact on existing academic programs:** None. **Financial costs associated with this request:** None. This s an existing course. **Semesters offered:** All **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

HIST 493            Topics in History

**Proposed changes:** Course change **Change in prerequisites from: 3 to: 1-3** **Is this class repeatable for credit?** Yes. May be repeated as topics change. **Proposed catalog description:** HIST 493 Topics in History. (1-3) Reading and research on selected historical subjects. May be repeated for credit under different topics. **Justification:** This change will give faculty flexibility in offering one or two credit courses that meet fewer hours per week to explore special topics. **Impact on existing academic programs:** None. **Financial costs associated with this request:** None. This s an existing course. **Semesters offered:** All **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

HIST 494            Topics in History

**Proposed changes:** Course change **Change in prerequisites from: 3 to: 1-3** **Is this class repeatable for credit?** Yes. May be repeated as topics change. **Proposed catalog description:** HIST 494 Topics in History. (1-3) Reading and research on selected historical subjects. May be repeated for credit under different topics. **Justification:** This change will give faculty flexibility in offering one or two credit courses that meet fewer hours per week to explore special topics. **Impact on existing academic programs:** None. **Financial costs associated with this request:** None. This s an existing course. **Semesters offered:** All **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

#### IV. New Business – Form C – Proposal for a New Undergraduate Course

##### College of Humanities and Fine Arts – Office of the Dean

DCD 100            Technology and Humanity

**Number of credits:** 3 **Prerequisites:** None **Co-requisites:** None **Course restrictions:** None. This course is required for a major. **Proposed course description:** DCD 100 Technology and Humanity (3) Technologies play a central role in our culture, in the decisions we make, in our social relationships, in our health, in our safety, in conflict resolution, in the careers we pursue, in the way we work, play, and live. Given this, part of what it means to be human is to be a user of technology. Gaining a clearer and more well articulated understanding of the moral and social-political implications of technologies thus allows for a more considered view of our place in the world and our progress as a human civilization (scientifically, ethically, and socially). The course considers technologies from different human perspectives. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** This course will have a positive impact on existing academic programs, both as a complement to other related majors and as a way to integrate already popular courses into a single program. As explained above, many students are already doing digital humanities and this course will help to give them formal recognition. **Financial costs associated with this request:** Any new costs have been anticipated by the program proposal. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and

resources. **Method of delivery:** Hybrid **Semesters offered:** Fall and Spring **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 101

Humanities in the Digital Age

**Number of credits:** 3 **Prerequisites:** None **Co-requisites:** None **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** DCD 101 Humanities in a Digital Age (3) The first half of this course provides a critical overview of methods, tools, and projects in the Digital Humanities; the second half of the course is devoted to a very basic introduction to building and using such tools in digital humanities projects. Students will leave the course with both a practical introduction to computational methods and a critical lens for understanding the impact of new media and digital tools on humanities inquiry and the liberal arts. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires

and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2014

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DCD 102

Information Design

**Number of credits:** 3 **Prerequisites:** None **Co-requisites:** None **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** DCD 102 Information Design (3) An introductory course that provides students with an overview of the concepts and methods of information design, the process of presenting information in a clear and effective way. This course focuses on information design in the humanities, and covers topics ranging from an introduction to the basic principles of visual information representation to hands-on applications of those concepts in creating digital documents. Students will explore a wide variety of free and professional software applications used in information design, including online mapping applications such as Google Maps and ArcGIS Online, infographics applications such as Piktochart, and interactive presentation applications such as Prezi. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has

blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015  
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DCD 200

Introduction to Digital Humanities

**Number of credits:** 3 **Prerequisites:** None **Corequisites:** None **Course restrictions:** None.

This course is required for a major. **Proposed catalog description:** DCD 200 Introduction to Digital Humanities (3) An introductory course that provides students with a broad overview of the history, concepts, and methods of computing in the humanities. This course focuses not only on how use of computer technology has evolved in humanities disciplines and humanities-centered interdisciplinary research, but also explores basic methods and techniques in digital humanities through the examination of existing projects and hands-on exercises that allow students to build practical skill sets. **Justifications:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As



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DCD 201

Coding for Humanities

**Number of credits:** 3 **Prerequisites:** None **Co-requisites:** None **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** DCD 201 Coding for Humanists (3) This course provides a basic knowledge of how computers operate and are operated, as well as the computational and procedural logics, media, and languages employed in the Digital Humanities. Students will also achieve a basic understanding of the principles of coding. The course also serves as an introduction to modes of collaboration between those who work conceptually with the Digital Humanities and those who are assigned the tasks of implementing the technical side of such projects. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program

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DCD 202

Introduction to Digital Sources

**Number of credits:** 3 **Prerequisites:** None **Co-requisites:** None **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** DCD 202 Introduction to Digital Sources (3) An introductory course that provides students with an overview of digital sources in the humanities. This course focuses not only on how the creation and use of digital sources have evolved in humanities disciplines and humanities-centered interdisciplinary research, but also explores the use of these sources through a critical examination of existing projects that utilize digital images, texts, maps, audio, and other digital media. Students will also develop practical skill sets through hands-on exercises utilizing humanities-based digital resources. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better



supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 301                      Text Methods

**Number of credits:** 3 **Prerequisites:** DCD 345 **Co-requisites:** None **Course restrictions:** None.

This course is required for a major. **This course is to be considered for the QEP. Proposed**

**catalog description:** DCD 301 Text Methods (3)(Prereq: DCD 345) This methods course provides an in depth overview and history of text technologies and the mediation of literary texts.

Students are introduced to concepts of textual mediation, digitalization and archiving, as well as critical debates surrounding intellectual property in digital environments, text interface design, and the politics of reading and translation across modalities. Practically, students gain exposure and facility with text encoding systems and languages including TEI, XML, and metadata platforms (Omeka). **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can

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DCD 302

Visual Methods

**Number of credits:** 3 **Prerequisites:** DCD 345 **Corequisites:** None **Course restrictions:** None.

This course is required for a major. **Proposed catalog description:** DCD 302 Visual Methods (3) [PREREQUISITES: DCD 345] An intermediate course that provides students with an in-depth exploration of the theories and practicum of visual and verbal elements used by visual communicators. This course will build on the issues found in relation to cultural shifts in aesthetic trends and consumer behavior while also discussing solutions created by visual communicators and the software tools used. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In

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**Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015

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DCD 303Q

Sound and Motion Methods

**Number of credits:** 3 **Prerequisites:** DCD 345 **Corequisites:** None **Course restrictions:** None.

This course is required for a major. **Proposed catalog description:** DCD 303Q Sound and Motion Methods (3) [Prerequisite: DCD 345] An intermediate course that provides students both an overview of digital video and audio technologies in humanities projects, and an opportunity to build practical skill sets in utilizing these technologies. This course focuses not only on how the use of digital audio and video has evolved in humanities disciplines and humanities-centered interdisciplinary research, but also explores basic methods and techniques for creating digital audio and video in humanities projects that will allow students to build practical skill sets.

**Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier

Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 304Q                      Interactive Methods

**Number of credits:** 3 **Prerequisites:** DCD 345 **Co-requisites:** None **Course restrictions:** None.

This course is required for a major. **Proposed catalog description:** DCD 304Q Interactive Methods (3) (Prereq: DCD 345) This methods course provides an in depth overview of interactivity and interactive methods within new media and digital culture (this course is meant to be in dialogue with the histories and theories of interactivity explored in DCD 309 of the Digital Humanities sequence; though 309 is not a required prerequisite). Students are introduced to concepts of interactivity, immersion, and virtuality. Practically, students gain exposure and facility with interactive programs, loops and interfaces in code environments or languages such as Processing, HTML 5, and/or Flash. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital

humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively “doing digital humanities”; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015 **Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 309

Interactivity and Culture

**Number of credits:** 3 **Prerequisites:** None **Co-requisites:** None **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** DCD 309 Interactivity and Culture (3) The first half of this course provides a critical overview of concepts of interactivity and immersion, historically and within new media and digital culture; the second half of the course is devoted to a very basic introduction to building and using interactive structures, drawing on and developing skills and methods taught in earlier courses in the sequence. Students will leave the course with both a practical introduction to computational methods across humanities disciplines, and a critical lens for understanding the impact of new media and digital tools on humanities inquiry and the liberal arts. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course



represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015 **Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 312

Social Media

**Number of credits:** 3 **Prerequisites:** None **Co-requisites:** None **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** DCD 312 Social Media (3) This course provides a critical overview of concepts and best practices surrounding social media, historically and within new media and digital culture. Topics addressed will include new research on attention and cognition within digital culture, perceptions and skills necessary for critical consumption of information, best practices of digital participation and collective participatory culture, and the use of collaborative media and methodologies within networked environments. Students will get practice employing social media tools for projects on social media critique, analysis, and development. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our



moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015 **Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 316

Digital Resources in the Humanities

**Number of credits:** 3 **Prerequisites:** DCD 200, DCD 202 **Co-requisites:** None **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** DCD 316 Digital Resources in the Humanities (3) [Prerequisite: DCD 200, 202] An intermediate course that provides students both an overview of digital resources in humanities projects, and an opportunity to build practical skill sets in utilizing these resources. This course focuses not only on how digital resources have evolved in humanities disciplines and humanities-centered interdisciplinary research, but also explores the use of these resources through the examination of existing projects, including interdisciplinary databases, electronic texts, mapping and digital history projects, and New Media projects. Students will also develop practical skill sets through hands-on exercises utilizing humanities-based digital resources. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much

discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015 **Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 345

Knowledge Production and Digital Representation

**Number of credits:** 3 **Prerequisites:** DCD 100, 101, 102, 200, 201, 202 **Co-requisites:** None.

**Course restrictions:** None. This course is required for a major. **Proposed catalog description:** DCD 345 Knowledge Production and Digital Representation (3) (Prereq: DCD 100, 101, 102, 200, 201, 202) Theories of knowledge representation can facilitate our ability to express how we are modeling information in digital and mediated environments. This course is meant to give students foundation knowledge in advanced digital methods and theory. Topics addressed will include: integrated media theory; digital media and meaning making; disciplinary digital knowledge; and symbolic cognition and human meaning making. **Justification:** The Dean of the

Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015 **Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 488Q

Capstone Course

**Number of credits:** 3 **Prerequisites:** DCD 496 or DCD 496 **Corequisites:** None **Course restrictions:** None. This course is required for a major. **Repeatable for credit:** Yes. Repeatable one time for credit. **Proposed catalog description:** DCD 488Q Capstone Course (3) (Prereq: DCD 495 or DCD 496) This course serves as a culminating experience for the program of study in this degree, allowing the student to bring together all the skills and knowledge acquired in the courses to produce and publish online a project of his/her own design. **Justification:** The Dean of

the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015 **Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 495Q

Internship

**Number of credits:** 3 **Prerequisites:** DCD 345 **Co-requisites:** None **Course restrictions:** None.

This course is required for a major. **Repeatable for credit:** Yes. Repeatable one time for credit.

**Proposed catalog description:** DCD 495Q Internship (3) (Prereq: DCD 345)

The guided internship requires 120 hours of on-site work, a journal, a final paper, and artifacts to be included in the student's e-portfolio. The purpose of the course is to provide students with practical application opportunities for their knowledge and skills, to introduce them to local and

regional employers in their field of study, and to enhance networking and collaboration opportunities. Students are professionally supervised in an organization while working 12 weeks at 10 hours per week. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

DCD 496Q

Practicum

**Number of credits:** 3 **Prerequisites:** DCD 345 **Co-requisites:** None **Course restrictions:** None.

This course is required for a major. **Repeatable for credit:** Yes. Repeatable one time for credit.

**Proposed catalog description:** DCD 496Q Practicum (3) (Prereq: DCD 345)



The practicum requires 60 hours of on-site work, a journal, a final paper, and artifacts to be included in the student's e-portfolio. The purpose of the course is to provide students with practical application opportunities for their knowledge and skills within a closely supervised work environment. By working on digital projects within the campus community, students also enhance their skills of collaboration and their understanding of project development and work flow. **Justification:** The Dean of the Edwards College of Humanities and Fine Arts formed an ad hoc committee in the fall of 2012 to investigate the possibility of offering a new, interdisciplinary humanities degree. After much discussion and research, the committee recommended offering a BA in Integrated Humanities and a BA in Digital Content Development. Two Program Planning Summaries were sent to CHE in October 2013. While reviewers questioned the overlap of the proposed Integrated Humanities degree with the existing university IDS degree, CHE (along with our Board of Trustees) enthusiastically supported our moving forward on the second program. After extensive review of existing programs, a subcommittee of faculty already working, teaching, advising, and publishing in the field of digital humanities has created the curriculum for this new BA, and this course represents part of the course offerings being created for the degree. It's important to note that students who are already taking courses in the New Media and Digital Culture and Geographic and Information Systems minors or who are already engaged in digital humanities projects in our college are inquiring about a major in this field. Most importantly, with the development of the QEP projects and their offshoots over the last three years, students and faculty are already actively "doing digital humanities"; we need a home in which to teach, mentor, and give credentials to these students. The Athenaeum Press, the first QEP creation, has produced five digital projects: The Paper Canoe, the Gullah Project, Soldier Stories, Tapestry, and the Cultural Arts Calendar. The second QEP, the Institute for Leadership and Public Policy, has a strong digital presence, and the third QEP initiative is the Digital Humanities Hub. In addition, through the campus-wide lecture-capture initiative, we are also creating the space in which much of this program can flourish. **Impact on existing academic programs:** We anticipate an increase in cross-disciplinary collaboration which will have a positive impact on all departments in the college. In addition, digital projects now being organized under the QEP, the Athenaeum Press, and individual departments will be better supported by having a degree program that trains and mentors students interested in developing their skills in this field. **Financial costs associated with this request:** All costs associated with the new program have been summarized in the program planning summary. During the first year of offering this course, we anticipate no costs other than those already absorbed by existing funding sources. As explained above, facilities and equipment necessary for the degree are already being created and funded by the QEP and other campus-wide initiatives. The COOL budget, for instance, has blossomed with the increase in the technology fee students pay. Individual humanities departments constantly upgrade their library holdings through their own budgets, existing faculty are capable of teaching the courses until the growth of the program necessitates the addition of full-time faculty, and the fine arts majors, particularly Graphic Design and Music, have expanded their digital capabilities in terms of both faculty hires and equipment. Faculty members of the Edwards College have also applied for the NEH Digital Humanities Start-up Grant to help us expand existing activities and resources. **Method of delivery:** Hybrid **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015 **Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.



**College of Humanities and Fine Arts – Department of History**

HIST 311

Modern Environmental World History

**Number of credits:** 3 **Prerequisites:** None **Corequisites:** None. **Course restrictions:** None. This course may be used as an elective or cognate course. **Proposed catalog description:** HIST 311 Modern World Environmental History. (3) An interdisciplinary introduction to modern environmental world history through regional, national, trans-regional, and global case studies. **Justification:** This course will provide expanded coverage of world history and themes in global perspective by making use of existing faculty expertise. **Impact on existing academic programs:** This course will provide expanded coverage of world history and themes in global perspective by making use of existing faculty expertise. **Financial costs associated with this request:** None. This course will figure within the teaching rotations of existing faculty. **Method of delivery:** Classroom **Semesters offered:** All **Date change is to be effective:** Fall 2015  
**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

**College of Humanities and Fine Arts – Department of Politics and Geography**

GEOG 312

Spatial Analysis using GIS

**Number of credits:** 3 **Prerequisites:** GEOG 204 **Corequisites:** None **Course restrictions:** None. This course may be used as an elective or cognate course. **Proposed catalog description:** GEOG 312 Spatial Analysis using GIS (3) (Prerequisite: GEOG 204) An intermediate course that builds on students' Geographic Information Systems (GIS) skills to explore the use of GIS in spatial analysis and modeling. Topics covered include types of GIS analysis functionality, developing models to perform spatial analysis, introduction to specialized spatial analysis techniques such as terrain analysis and network analysis, and presentation of spatial analysis results using appropriate cartographic and geovisualization techniques. **Justification:** Provide students with an intermediate course that will allow them to build on their GIS skill sets, one of the skill sets for a professional utilizing geospatial technologies, a growing field that the U.S. Department of Labor has recognized as a high-growth industry. The Department of Politics and Geography expects to increase its offerings in this area of study to better prepare students to utilize these technologies in their chosen fields, and this course will be included in the curriculum for a proposed Certificate in Geospatial Technologies (Distance Learning), as well as the new minor in Geographic Information Systems (GIS). **Impact on existing academic programs:** This course will provide students who have completed an introductory GIS course with the opportunity to build on those skill sets and fulfill requirements in the proposed Geospatial Technologies certificate program (Distance Learning) and the GIS minor. **Financial costs associated with this request:** None. For on-campus sections, this course will require 1 computer classroom, with Esri ArcGIS software installed on each student machine. CCU maintains a site license for this software so no additional expense is required, and at least one computer classroom is already in use for GIS courses. For distance learning sections, Esri provides students with a free 1-year license to ArcGIS software, so there will be no additional cost required for these sections as well. **Method of delivery:** Classroom, Distance Learning **Semesters offered:** Fall, Spring **Date change is to be effective:** Fall 2015  
**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

**College of Humanities and Fine Arts – Department of Communication/World Languages**

JOUR 311 Principles in Advertising

**Number of credits:** 3 **Prerequisites:** JOUR 201 **Corequisites:** None **Course restrictions:** None.

This course may be used as an elective or cognate course. **Proposed catalog description:** Principles of Advertising (3) (Prereq: JOUR 201) An overview of the broad field of advertising including concepts, strategies, and tactics. Informs students about the role of advertising in the American economy and the procedures involved in planning advertising campaigns.

**Justification:** This course will serve as a component in the public relations and integrated communication specialization that has been approved by the CHE. This course is designed to provide students the foundation necessary to understand the fundamentals of advertising as a discipline and emphasize critical thinking skills in evaluating the elements of advertisements from different media (print, video, digital, interactive, etc.). **Impact on existing academic programs:** The hire of Dr. Clay Craig was designed to teach courses in this area. Additionally, Ms. Muckensturm was hired, in part, to assist in this concentration. **Financial costs associated with this request:** None. Cost anticipated with the hire of Dr. Craig and Ms. Muchensturm was hired to assist in this concentration **Method of delivery:** Classroom, Distance Learning, Hybrid **Semesters offered:** All **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

**College of Science – Department of Chemistry and Physics**

ENGR 201 Engineering Problem Solving

**Number of credits:** 3 **Prerequisites:** ENGR 101 **Corequisites:** None **Course restrictions:** None.

This course is required for a major. **Proposed catalog description:** Engineering Problem Solving. (3) (Prereq: ENGR 101) In this course, students work in multi-disciplinary teams to formulate and solve engineering problems using robotics systems and MATLAB. The course covers reading, interpreting, and writing programs, debugging, loops, and conditional statements. Project management principles are also introduced as the framework in which group members cooperate. The course culminates in a design challenge that requires teams to devise a system, component, or process to meet desired needs with given constraints. **Justification:** This course is part of a proposal for a new BS program in Engineering Science. This course will be part of the general engineering foundation, and aligns with the general engineering curriculum at Clemson University. It will also serve the existing dual degree engineering program established with Clemson University, since we expect the course to be approved for transfer and count as part of the Clemson general engineering curriculum. **Impact on existing academic programs:** This course is part of a proposal for a new BS program in Engineering Science. It is a necessary foundation course for the goals of the new program's curriculum. Some possible negative impacts include the FTEs required to teach this course being shifted from the current Applied Physics program, without the course supporting that program. We anticipate resolving this issue through hiring to support the new program. **Financial costs associated with this request:** This course will utilize Lego EV3 robotic systems combined with the Matlab coding environment. Hardware and software will need to be purchased for this course. The department currently owns several Matlab licenses, but will need to increase the number of seats due to this course (~\$2,500). Also, a classroom set of Lego EV3 robotics systems will need to be purchased (~\$6,000). These costs are included in the proposal for the Engineering Science B.S. program. This will be a new course offering, and requires 0.07 FTEs. It will be offered every other year

(alternating with ENGR 202) in the spring. **Method of delivery:** Classroom **Method of delivery:** Classroom **Semesters offered:** Spring **Date change is to be effective:** Fall 2015  
**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

#### ENGR 202

#### Engineering Graphics

**Number of credits:** 3 **Prerequisites:** ENGR 101 **Corequisites:** None **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** Engineering Graphics. (3) (Prereq: ENGR 101) This course is a project-based introduction to engineering graphics using SolidWorks. Topics include sketching, 3D part and assembly creation, and documented drawings. Students will utilize the principles of engineering graphics to visualize, communicate, and analyze solutions to engineering problems. **Justification:** This course is part of a proposal for a new BS program in Engineering Science. This course will be part of the general engineering foundation, and aligns with the general engineering curriculum at Clemson University. It will also serve the existing dual degree engineering program established with Clemson University, since we expect the course to be approved for transfer and count as part of the Clemson general engineering curriculum. **Impact on existing academic programs:** This course is part of a proposal for a new BS program in Engineering Science. It is a necessary foundation course for the goals of the new program's curriculum. Some possible negative impacts include the FTEs required to teach this course being shifted from the current Applied Physics program, without the course supporting that program. We anticipate resolving this issue through hiring to support the new program. **Financial costs associated with this request:** This course requires specialized software. Students will be required to purchase student licenses for their home use; however, enough licenses will be necessary for use in-class using university owned computers. An annual license will be approximately \$5,000. This cost is a recurring annual cost, and not a one-time cost. This is a new course that will be taught every other year in the spring. This results in an addition of 0.07 FTEs. **Method of delivery:** Classroom **Semesters offered:** Spring **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

#### ENGR 234

#### Statistics

**Number of credits:** 3 **Prerequisites:** PHYS 211 **Corequisites:** None **Course restrictions:** None. This course is required for a major. **Cross-list course with:** PHYS 234 **Proposed catalog description:** Statics. (3) (=PHYS 234)(Prereq: PHYS 211) This course deals with systems of forces acting on particles and rigid bodies at rest. The course addresses the finding of resultant forces and torques for various bodies. The covered topics include concentrated and distributed forces, equilibrium in two- and three-dimensions, moments, couples, and other key principals used in engineering design of structures that must remain static while bearing stress or performing a task. **Justification:** This course is part of a proposal for a new BS program in Engineering Science. This course will be part of the general engineering foundation, and aligns with the mechanical engineering curriculum at Clemson University. It will also serve the existing dual degree engineering program established with Clemson University, since we expect the course to be approved for transfer and count as part of the Clemson mechanical and electrical engineering curriculum. **Impact on existing academic programs:** This course is part of a proposal for a new BS program in Engineering Science. It is a necessary foundation course for the goals of the new program's curriculum. Some possible negative impacts include the FTEs required to teach this course being shifted from the current Applied Physics program, without the course

supporting that program. We anticipate resolving this issue through hiring to support the new program. **Financial costs associated with this request:** A cross-listed version of this course is already taught every other year in the Department of Chemistry and Physics. It represents 0.07 FTEs and serves as a technical elective for the current Applied Physics program. **Method of delivery:** Classroom **Semesters offered:** Fall **Date change is to be effective:** Fall 2015 **Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

ENGR 235                      Electric Circuits

**Number of credits:** 3 **Prerequisites:** PHYS 137 and MATH 160, or PHYS 212 **Corequisites:** None **Course restrictions:** None. This course is required for a major. **Cross-list course with:** PHYS 235 **Proposed catalog description:** Electric Circuits. (3) (Prereq: PHYS 137 and MATH 160, or PHYS 212) This course is an introduction to electrical circuit theory and its application to practical direct and alternating current circuits. Topics include: Kirchhoff's laws, fundamental principles of network theorems, transient and steady-state response of RC, RL and RLC circuits by classical methods, time-domain and frequency-domain relationships, phasor analysis and power. **Justification:** This course is part of a proposal for a new BS program in Engineering Science. This course will be part of the general engineering foundation, and aligns with the general engineering curriculum at Clemson University. It will also serve the existing dual degree engineering program established with Clemson University, since we expect the course to be approved for transfer and count as part of the Clemson electrical and mechanical engineering curriculum. **Impact on existing academic programs:** This course is part of a proposal for a new BS program in Engineering Science. It is a necessary foundation course for the goals of the new program's curriculum. Some possible negative impacts include the FTEs required to teach this course being shifted from the current Applied Physics program, without the course supporting that program. We anticipate resolving this issue through hiring to support the new program. **Financial costs associated with this request:** This course will require the acquisition of equipment. In particular, circuit trainers will need to be obtained at a cost of approximately \$10,000 over the course of three years. This cost is included in the program proposal for the new program. Also, this course will require approximately 0.7 FTEs. This course will be offered every other year during the fall semester. A cross listed version is already offered as PHYS 137, so there is no addition to the total FTEs, only reallocation from Applied Physics to the new Engineering Science program. **Method of delivery:** Classroom **Semesters offered:** Fall **Date change is to be effective:** Fall 2014 **Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

ENGR 321                      Electronics

**Number of credits:** 3 **Prerequisites:** ENGR 235 or PHYS 235 **Corequisites:** None **Course restrictions:** None. This course is may be used as an elective. **Cross-list course with:** PHYS 321 **Proposed catalog description:** Electronics. (3) (Prereq: ENGR 235 or PHYS 235) This course covers the analysis, modeling and design of electrical circuits that contain electronic devices. Topics include: properties of electronic materials, behavior of devices such as p-n junction diodes, field effect transistors and bipolar junction transistors, operational amplifiers, and transistors in digital circuits. Electronics design principles via a systems approach is emphasized. **Justification:** This course is part of a proposal for a new BS program in Engineering Science. This course will be part of the general engineering foundation, and aligns with the general engineering curriculum at Clemson University. It will also serve the existing dual degree

engineering program established with Clemson University, since we expect the course to be approved for transfer and count as part of the Clemson electrical engineering curriculum.

**Impact on existing academic programs:** This course is part of a proposal for a new BS program in Engineering Science. It is a necessary foundation course for the goals of the new program's curriculum. Some possible negative impacts include the FTEs required to teach this course being shifted from the current Applied Physics program, without the course supporting that program.

We anticipate resolving this issue through hiring to support the new program. **Financial costs associated with this request:** The cross-listed version of this course is already taught as an upper-level elective for the physics program every other year, representing 0.07 FTEs.

Equipment for this course is the same as for ENGR 235, so no new equipment beyond that described for that course is necessary. **Method of delivery:** Classroom **Semesters offered:** Spring **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

ENGR 398                      Project Management and Communication

**Number of credits:** 1 **Prerequisites:** ENGR 201 **Corequisites:** None **Course restrictions:** None.

This course is required for a major. **Cross-list course with:** PHYS 398 **Proposed catalog**

**description:** Project Management and Communication. (1) (Prereq: ENGR 201) This course focuses on effective participation, communication, and collaboration in engineering and other applied science fields. The professional and ethical responsibilities of applied scientists and engineers will be discussed, along with project management principles and current topics of importance in the field. **Justification:** This course is part of a proposal for a new BS program in Engineering Science. This course will be part of the general engineering foundation, and aligns with the general engineering curriculum at Clemson University. It will also serve the existing dual degree engineering program established with Clemson University, since we expect the course to be approved for transfer and count as part of the Clemson general engineering curriculum. **Impact on existing academic programs:** This course is part of a proposal for a new BS program in Engineering Science. It is a necessary upper-level course for the goals of the new program's curriculum. Some possible negative impacts include the FTEs required to teach this course being shifted from the current Applied Physics program, without the course supporting that program. We anticipate resolving this issue through hiring to support the new program. **Financial costs associated with this request:** This course will be cross-listed with the currently existing PHYS 398, so no increase in FTEs are required. **Method of delivery:** Classroom **Semesters offered:** Spring **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

ENGR 399                      Integrated Science and Design

**Number of credits:** 1-3 **Prerequisites:** Permission of the Instructor and Approved Contract

**Corequisites:** None **Course restrictions:** None. This course is required for a major. **Repeatable for credit:** Yes. Student may repeat this course for up to three credit hours. **Proposed catalog**

**description:** Integrated Science and Design. (1-3) (Prereq: permission of the instructor and approved contract) In this independent study course, students take concepts of their choosing learned in advanced applied science elective courses and use an engineering approach to either design a solution to a problem integrating those science principles, or study in depth an existing engineering solution. This student experience serves as a bridge between mathematics, the basic sciences and engineering practice. **Justification:** This course is part of a proposal for a new



BS program in Engineering Science. This course will be part of the general engineering foundation, and aligns with the general engineering curriculum at Clemson University. It will also serve the existing dual degree engineering program established with Clemson University, since we expect the course to be approved for transfer and count as part of the Clemson general engineering curriculum as "creative inquiry." **Impact on existing academic programs:** This course is part of a proposal for a new BS program in Engineering Science. It is a necessary foundation course for the goals of the new program's curriculum. Some possible negative impacts include the FTEs required to teach this course being shifted from the current Applied Physics program, without the course supporting that program. We anticipate resolving this issue through hiring to support the new program. **Financial costs associated with this request:** This course will be taught as an independent study course with student selecting appropriate faculty to direct the study. These faculty will teach sections through the existing credit banking system. **Method of delivery:** Other: Independent study course with direction and supervision by a faculty member. **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

ENGR 430                      Fluid Mechanics

**Number of credits:** 3 **Prerequisites:** PHYS 212 or PHYS 213 **Corequisites:** MATH 320 **Course restrictions:** None. This course may be used as an elective. **Cross-list course with:** PHYS 430 **Proposed catalog description:** Fluid Mechanics. (3) (Prereq: PHYS 212 or PHYS 213) (Coreq: MATH 320) This course is an introduction to fluid mechanics, and emphasizes fundamental concepts and problem-solving techniques. Topics to be covered include fluid properties, fluid statics, fluid kinematics, control volume analysis, Reynolds Transport Theorem, momentum theorem, differential analysis and exact solutions, dimensional analysis and an introduction to turbulence. Applications of fluid mechanics will be highlighted. **Justification:** This course is part of a proposal for a new BS program in Engineering Science. This course will be part of the general engineering foundation, and aligns with the general engineering curriculum at Clemson University. It will also serve the existing dual degree engineering program established with Clemson University, since we expect the course to be approved for transfer and count as part of the Clemson mechanical engineering curriculum. **Impact on existing academic programs:** This course is part of a proposal for a new BS program in Engineering Science. It is a necessary foundation course for the goals of the new program's curriculum. Some possible negative impacts include the FTEs required to teach this course being shifted from the current Applied Physics program, without the course supporting that program. We anticipate resolving this issue through hiring to support the new program. **Financial costs associated with this request:** The cross-listed version of this course is already taught every other year as an upper level elective for the physics program, representing 0.07 FTEs. No equipment or software is required. **Method of delivery:** Classroom **Semesters offered:** Spring **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

ENGR 499                      Senior Design

**Number of credits:** 3 **Prerequisites:** Permission of the Instructor **Corequisites:** None **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** Senior Design. (3) (Prereq: permission of the instructor) Students will engage in a structured project



either under the direction of a faculty member, via an external internship, or through a project of their own design with instructor permission. This major design experience serves to integrate the knowledge and skills that students have developed in earlier course work through the completion of an original project. Students will be required to utilize project management principles throughout the experience and develop a detailed report to be presented both orally in a public forum and in written form. **Justification:** This course is part of a proposal for a new BS program in Engineering Science. This course will be part of the general engineering foundation, and aligns with the general engineering curriculum at Clemson University. It will also serve the existing dual degree engineering program established with Clemson University, since we expect the course to be approved for transfer and count as part of the Clemson general engineering curriculum as "creative inquiry". **Impact on existing academic programs:** This course is part of a proposal for a new BS program in Engineering Science. It is a necessary foundation course for the goals of the new program's curriculum. Some possible negative impacts include the FTEs required to teach this course being shifted from the current Applied Physics program, without the course supporting that program. We anticipate resolving this issue through hiring to support the new program. **Financial costs associated with this request:** This course is an independent study course directed by faculty. Faculty will teach this course through the existing credit banking system. **Method of delivery:** Classroom **Semesters offered:** Fall, Spring, Summer **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

PHYS 205                      Introductory Physics for Life Sciences I

**Number of credits:** 3 **Prerequisites:** MATH 131 OR MATH 135 OR Placement Test **Corequisites:**

PHYS 205L **Course restrictions:** None. This course is required for a major. **Proposed course**

**description:** Introductory Physics for Life Sciences I. (3) (Prereq: MATH 131 OR MATH 135 OR

equivalent) (Coreq: PHYS 205L) The first of a two-semester sequence intended to introduce life

science majors to the concepts of physics in a biological context. Topics include Mechanics,

Energy, Fluids and Waves. This three-credit lecture and one-credit lab combine for six hours of

in-class work each week. F, S **Justification:** Recently, in order to better serve the majors of the

life sciences (Biology and Exercise and Sports Science), the Physics Program decided to develop a

dedicated introductory sequence to serve those majors. While the existing introductory

sequence does prepare students for the current MCAT, upcoming changes in that exam and

changes in the nature of Biology as a whole necessitated a new look at the content that was

being taught to these majors. The content for the new sequence is being developed in

conjunction with the faculty of the life sciences departments. It will include several topics that

are not covered in the traditional introductory physics sequence, and will reduce or eliminate

several topics that are of little use to life science majors. **Impact on existing academic**

**programs:** Probably about half the enrollment in PHYS 211 will be transferred to this new

course, but the initial result should be a zero-sum situation for staffing and rooms. If other

departments decide to require this for the major in the future, there would be the need for

more staffing at that time. **Financial costs associated with this request:** The only costs would be

lab equipment which would be paid for by student lab fees - this is listed in the form for PHYS

205L. **Method of delivery:** Classroom **Semesters offered:** F, S **Date change is to be effective:** Fall

2015.

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

PHYS 205L

Introductory Physics for Life Sciences I Laboratory

**Number of credits:** 1 **Prerequisites:** MATH 131 OR MATH 135 OR Placement Test **Corequisites:**

PHYS 205 **Course restrictions:** None. This course is required for a major. **Proposed course**

**restrictions:** Introductory Physics for Life Sciences I Laboratory. (1) (Coreq: PHYS 205) The

laboratory demonstrates the topics and principles presented in the lecture. Three hours of problem sessions and laboratory per week. F, S **Justification:** Recently, in order to better serve the majors of the life sciences (Biology and Exercise and Sports Science), the Physics Program decided to develop a dedicated introductory sequence to serve those majors. While the existing introductory sequence does prepare students for the current MCAT, upcoming changes in that exam and changes in the nature of Biology as a whole necessitated a new look at the content that was being taught to these majors. The content for the new sequence is being developed in conjunction with the faculty of the life sciences departments. It will include several topics that are not covered in the traditional introductory physics sequence, and will reduce or eliminate several topics that are of little use to life science majors. **Impact on existing academic**

**programs:** Probably about half the enrollment in PHYS 211L will be transferred to this new course, but the initial result should be a zero-sum situation for staffing and rooms. If other departments decide to require this for the major in the future, there would be the need for more staffing at that time. **Financial costs associated with this request:** This laboratory will require some new equipment, but that will be covered by student lab fees. The cost of new equipment should be below \$3000 each semester. \*Per Sallie Clarkson, a \$30 lab fee will be associated with this proposal. **Method of delivery:** Laboratory **Semesters offered:** F, S **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

PHYS 206

Introductory Physics for Life Sciences II

**Number of credits:** 3 **Prerequisites:** PHYS 205, 205L **Corequisites:** PHYS 206L **Course**

**restrictions:** None. This course is required for a major. **Proposed catalog description:**

Introductory Physics for Life Sciences II. (3) (Prereq: PHYS 205) (Coreq: PHYS 206L) The second of a two-semester sequence intended to introduce life science majors to the concepts of physics in a biological context. Topics include Waves & Optics, Electricity & Magnetism, Energy and Atomic Physics. This three-credit lecture and one-credit lab combine for six hours of in-class work each week. F, S **Justification:** Recently, in order to better serve the majors of the life sciences (Biology and Exercise and Sports Science), the Physics Program decided to develop a dedicated introductory sequence to serve those majors. While the existing introductory sequence does prepare students for the current MCAT, upcoming changes in that exam and changes in the nature of Biology as a whole necessitated a new look at the content that was being taught to these majors. The content for the new sequence is being developed in conjunction with the faculty of the life sciences departments. It will include several topics that are not covered in the traditional introductory physics sequence, and will reduce or eliminate several topics that are of little use to life science majors. **Impact on existing academic programs:** Probably about half the enrollment in PHYS 212 will be transferred to this new course, but the initial result should be a zero-sum situation for staffing and rooms. If other departments decide to require this for the major in the future, there would be the need for more staffing at that time. **Financial costs associated with this request:** The only costs would be lab equipment which would be paid for

by student lab fees - this is listed in the form for PHYS 206L. **Method of delivery:** Classroom  
**Semesters offered:** F, S **Date change is to be effective:** Fall 2015  
**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the Fall 2015 semester.

PHYS 206L

Introductory Physics for Life Sciences II Laboratory

**Number of credits:** 1 **Prerequisites:** PHYS 205, 205L **Corequisites:** PHYS 206 **Course restrictions:** None. This course is required for a major. **Proposed catalog description:** Introductory Physics for Life Sciences II Laboratory. (1) (Coreq: PHYS 206) The laboratory demonstrates the topics and principles presented in the lecture. Three hours of problem sessions and laboratory per week. F, S **Justification:** Recently, in order to better serve the majors of the life sciences (Biology and Exercise and Sports Science), the Physics Program decided to develop a dedicated introductory sequence to serve those majors. While the existing introductory sequence does prepare students for the current MCAT, upcoming changes in that exam and changes in the nature of Biology as a whole necessitated a new look at the content that was being taught to these majors. The content for the new sequence is being developed in conjunction with the faculty of the life sciences departments. It will include several topics that are not covered in the traditional introductory physics sequence, and will reduce or eliminate several topics that are of little use to life science majors. **Impact on existing academic programs:** Probably about half the enrollment in PHYS 212L will be transferred to this new course, but the initial result should be a zero-sum situation for staffing and rooms. If other departments decide to require this for the major in the future, there would be the need for more staffing at that time. **Financial costs associated with this request:** This laboratory will require some new equipment, but that will be covered by student lab fees. The cost of new equipment should be below \$3000 each semester. \* Per Sallie Clarkson, a \$30 lab fee will be associated with this proposal. **Method of delivery:** Laboratory **Semesters offered:** F, S **Date change is to be effective:** Fall 2015  
**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

**College of Science – Department of Marine Science**

MSCI 461

Marine Biological Invasions

**Number of credits:** 3 **Prerequisites:** Permission of instructor, and MSCI 302/L or BIOL 370/L  
**Corequisites:** None **Course restrictions:** None. This course may be used as an elective course.  
**Proposed catalog description:** Marine Biological Invasions. (3) (Prereq: Permission of instructor, and MSCI 302/L or BIOL 370/L). An integrated overview of background, theory, natural history, biogeography, physiological ecology, and current status of biological invasions in marine habitats. Proven and potential impacts to estuarine and marine communities, ecosystems, fisheries, and conservation will be discussed and integrated with current models. Life history traits and vectors will be evaluated and related to control strategies, resource management, and policy as well as global climate change, biodiversity, and aquaculture using the primary literature as a foundation. Three lecture hours per week. (S, odd years). **Justification:** Marine biological invasions are discussed briefly in MSCI 302 and MSCI 478 because they provide an opportunity to integrate marine biota with practical examples related to the basic principles of ecology, biozoogeography, physiological tolerances, species diversity, and conservation. We introduce the broad topic and then are forced to move on to cover the required content in those courses. Each semester, many upper level MSCI students have expressed an interest in learning more about this field after the brief introduction in other courses and have specifically

requested (verbally to Harding), a course focusing on this topic. Students who have taken the proposed MSCI 461 will have an advantage when applying to graduate programs in marine science as well as entry (B.S level) natural resource technician, environmental educator, and laboratory specialist positions. The course will also make our students more competitive for summer internships and/or REU experiences in this field. **Impact on existing academic programs:** The Marine Biological Invasions course would expand the introduction to marine invasions given in MSCI 302/L and MSCI 478/L by providing an integrated overview of background, theory, natural history, biogeography, physiological ecology, and current status of biological invasions in marine habitats with practical examples and emphasis on potential resource management and policy implications. The course would support and strengthen existing upper level MSCI course offerings that include Marine Invertebrate Zoology (MSCI 478/L), Diseases and parasites of aquatic organisms (MSCI 466/L), Fisheries Science (MSCI 458/L), Population biology of marine organisms (MSCI 472/L), Marine plankton (MSCI 476/L), Ecology of coral reefs (MSCI 477), and Marine benthic ecology (MSCI 479/L). **Financial costs associated with this request:** The course would benefit from a one-time expenditure of \$300 to purchase additional materials for Kimbel Library. Dr. Guentzel has suggested using funds from the Department of Marine Science's annual library fund allocation for these purchases. **Method of delivery:** Classroom **Semesters offered:** Spring, Odd Years **Date change is to be effective:** Fall 2015

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

#### V. Proposal for Changes in an Undergraduate Program

##### **College of Science – Department of Computer Science and Information Systems**

###### BS Computer Science Degree

**Proposed changes:** Removal of courses from program: Changing program in response to recent visit from the ABET accreditation team. Needed to add 4 hours of MATH/SCIENCE. **Addition of courses to program:** Changing program in response to recent visit from the ABET accreditation team. Needed to add 4 hours of MATH/SCIENCE. **Explanation:** Changing program in response to recent visit from the ABET accreditation team. Needed to add 4 hours of MATH/SCIENCE. See attached for details. **Proposed catalog description:**

###### MISSION STATEMENT

The Department of Computer Science and Information Systems serves students seeking degrees in computing --related fields, those who are interested in the application of computing to other fields, and other majors with computing --related educational needs. The faculty is committed to following the teacher--scholar model and providing high--quality educational experiences for students through dynamic classroom and laboratory experiences, collaborative research and scholarship opportunities, internship programs, and innovative course offerings, with the goal of preparing students to become knowledgeable, productive, responsible citizens. Graduates with a degree in Computer Science, Information Systems, or Information Technology will be prepared to excel in graduate studies and professional careers, conduct themselves ethically as professionals in the field of computing and consider the impacts of technology on society, and adapt to ongoing technological advances in the discipline. In addition to providing a high--quality, student--centered learning

environment for its majors, the Department will assist other departments as needed by providing computing education tailored to the needs of their majors.

#### STUDENT LEARNING GOALS

Graduating Computer Science and Information Systems students should be:

1. Contributing to society and/or economic development through the application of strong core competencies in the field.
2. Advancing in their careers and/or education by applying:
  - a. communication and collaboration skills,
  - b. problem solving abilities,
  - c. appreciation of, and commitment to, professional ethics, and
  - d. knowledge of computer science/information systems.
3. Successfully adapting to technical, societal, and environmental changes by building upon strong foundational competencies and continuing lifelong learning in computer science/information systems or related areas.

#### STUDENT LEARNING OUTCOMES

After completing the degree students should have:

Computer Science, Information Systems, and Information Technology

- a) An ability to apply fundamental principles of computing and mathematics.
- b) An ability to analyze a problem, and identify and define the requirements appropriate to its solution.
- c) An ability to design, implement, and evaluate a solution to meet specific requirements subject to a set of constraints.
- d) An ability to function effectively on multi-disciplinary teams to accomplish a common goal.
- e) An understanding of professional and ethical responsibilities.
- f) An ability to communicate effectively, both verbally and in writing.
- g) An ability to analyze the local and global impact of computing on individuals, organizations, and society.
- h) Recognition of the need for and an ability to engage in life-long learning.
- i) An ability to use current techniques, skills and tools necessary for computing practice.

Computer Science

- j) An ability to apply mathematical foundations, algorithmic principles, computer science theory in the modeling and design of computer based systems through the critical analysis of the trade-offs involved in design choices.
- k) An ability to apply design and development principles in the construction of complex software systems.

Information Systems

- l) An understanding of processes that support the development, deployment, and management of informational systems within an application environment.

Information Technology

- m)An ability to use and apply current technical concepts and practices in the core information technologies.
- n)An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems.
- o)An ability to effectively integrate IT-based solutions into the user environment.
- p)An understanding of best practices and standards and their application.
- q)An ability to assist in the creation of an effective project plan.

To achieve these educational goals, the Computer Science and Information Systems Department offers three degrees.

1.The Bachelor of Science in Computer Science requires additional courses in Computer Science, Mathematics, and the Sciences. This degree is designed to prepare students for graduate work in Computer Science and for computer related careers in industry.

Note: The Bachelor of Science in Computer Science has been accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

2. The Bachelor of Science in Information Systems requires additional courses in Computer Science, Information Systems, and an application domain of the student's choice. This degree is designed to prepare students for graduate work in Information Systems and for related positions in business and industry.

3. The Bachelor of Science in Information Technology aims to provide high-quality training in the latest technologies to prepare graduates for both rewarding positions in technology and technology management, as well as for future graduate work in the field. It requires additional courses in Information Systems, Information Technology, and an application domain of the student's choice.

#### INTERNSHIP EDUCATION

Internship Education is a mutually--beneficial partnership among students, employers and the Department of Computer Science and Information Systems at Coastal Carolina University. Through Internship Education, computer science students can participate in full time professional work experience related to their major while earning academic credit. Thus, Internship Education provides an excellent way to apply skills and information learned in the classroom to a real world setting while gaining invaluable experience.

Computer Science and Information Systems students who have completed their first year may apply to participate in Internship Education by submitting a resume to the Chair of the Department. As in the marketplace, Internship Education positions are competitive. If the student's background matches the employer's needs, then the student is sent on a job interview with the prospective employer. When a student is selected, he or she registers for CSCI 497 Computer Science Internship. The Internship experience may be repeated two times for a total of six credits.

#### NOTEBOOK COMPUTER REQUIREMENT

As an integral part of the University's goal to utilize and integrate technology into the teaching and learning experience, the Department of Computer Science and



Information Systems requires all students enrolled in CSCI 130 Introduction to Computer Science, CSCI 131L Algorithmic Thinking, CSCI 140/140L Introduction to Algorithmic Design I/Laboratory, or CSCI 150/150L Introduction to Algorithmic Design II/Laboratory to have their own personal notebook computers.

## COMPUTER SCIENCE MAJOR

Degree: Bachelor of Science

Students must earn a grade of C or better in all Foundation and Major Requirement Courses.

### COMPUTER SCIENCE MAJOR (120 Credits)

I. CORE CURRICULUM (39--44Credits).....39--44

II. FRESHMAN GRADUATION REQUIREMENT (0--3 Credits) Minimum grade of C is required.  
UNIV 110 The First--Year Experience.....0--3

UNIV 110 is required for all new entering freshmen and for new transfer students with fewer than 12 transfer credit hours unless the transfer student has satisfactorily completed a college transition course.

### III. FOUNDATION COURSES (44-52 Credits)\*

CSCI 130\* Introduction to Computer Science.....3  
CSCI 131L Algorithmic Thinking .....1  
CSCI 140/140L Introduction to Algorithmic Design I/Laboratory.....4  
CSCI 150/150L Introduction to Algorithmic Design II/Laboratory.....4  
CSCI 170 Ethics in Computer Science.....1  
CSCI 210 Computer Organization and Programming .....3  
CSCI 220 Data Structures.....3

Choose one from the following: (3 Credits).....3

CSCI 203 Introduction to Web Application Development (3)  
CSCI 207 Programming in C++ (3)  
CSCI 225 Introduction to Relational Database and SQL (3)  
Any CSCI course 300 or above\*\* (3)

MATH 160\*Calculus I.....4

MATH 161Calculus II .....4

MATH 174 Introduction to Discrete Mathematics.....3

STAT 201/201L\* Elementary Statistics/Laboratory.....4

Choose one from the following: (3--4 Credits).....3--4

CSCI 360 Numerical Calculus (3)

MATH 215 Introduction to Operations Research (3)

MATH 220 Mathematical Proofs and Problem Solving (3)

MATH 242/242L Modeling for Scientists I/Laboratory (4)

MATH 260 Calculus III (4)

MATH 320 Elementary Differential Equations (3)

MATH 344 Linear Algebra (3)

MATH 307 Combinatorics (3)	
MATH 308 Graph Theory (3)	
Choose one from the following **: (4 Credits).....	4
BIOL 121/121L* Biological Science I/Laboratory (4)	
CHEM 111/111L General Chemistry I/Laboratory (4)	
MSCI 111/111L Introduction to Marine Science/ Laboratory (=GEOL 111/111L) (4)	
PHYS 137/137L Conceptual Physics/Laboratory (4)	
PHYS 201/201L General Physics I/Laboratory (4)	
PHYS 211/211L Essentials of Physics I/Laboratory (4)	
MATH 242/242L Modeling for Scientist I/Laboratory (4)	
MATH 260 Calculus III (4)	
MATH 342/342L Modeling for Scientist II/Laboratory (4)	
Choose one from the following: (4 Credits).....	4
BIOL 122/122L* Biological Science II/Laboratory (4)	
CHEM 112/112L General Chemistry II/Laboratory (4)	
MSCI 112/112L The Origin and Evolution of the Marine Environment Laboratory (=GEOL 112/112L) (4)	
PHYS 202/202L General Physics II/Laboratory (4)	
PHYS 211/211L Essentials of Physics I/Laboratory (4)	
PHYS 212/212L Essentials of Physics II/Laboratory (4)	
Choose one from the following: (3 Credits).....	3
COMM 140* Oral Communication(3)	
ENGL 390 Business and Professional Communication (3)	

\*Credits for courses taken as part of the Core Curriculum are not counted elsewhere in the major.

\*\* Courses taken in the Core and Foundation may not be used to satisfy this requirement.

#### IV. MAJOR REQUIREMENTS (30Credits)

CSCI 310 Introduction to Computer Architecture.....	3
CSCI 330 Systems Analysis & Software Engineering.....	3
CSCI 350 Organization of Programming Languages.....	3
CSCI 356 Operating Systems.....	3
CSCI 380 Introduction to the Analysis of Algorithms.....	3
CSCI 390 Theory of Computation.....	3
CSCI 450 Principles of Compiler Design.....	3
Choose three from the following: (9 Credits).....	9
CSCI 360 Numerical Calculus (3)	
CSCI 425 Database Systems Design (3)	
CSCI 440 Introduction to Computer Graphics (3)	
CSCI 445 Image Processing and Analysis (3)	
CSCI 460 Algorithms in Bioinformatics (3)	
CSCI 473 Introduction to Parallel Systems (3)	
CSCI 480 Introduction to Artificial Intelligence (3)	
CSCI 485Introduction to Robotics (3)	
CSCI 490 Software Engineering II (3)	

#### V.ELECTIVES (0--9 Credits).....0--9

TOTAL CREDITS REQUIRED.....120

#### COMPUTER SCIENCE MINOR (24Credits)

MATH 174 Introduction to Discrete Mathematics.....3  
CSCI 130 Introduction to Computer Science.....3  
CSCI 131L Algorithmic Thinking .....1  
CSCI 140/140L Introduction to Algorithmic Design I/Laboratory.....4  
CSCI 150/150L Introduction to Algorithmic Design II/Laboratory.....4  
CSCI 210 Computer Organization and Programming.....3  
CSCI 220 Data Structures .....3  
Choose one CSCI course numbered 300 or above .....3

TOTAL CREDITS REQUIRED.....24

Additional Requirement: Computer Science Minor students must earn a grade of C or better in each course taken that is applied toward the Minor Requirements.

#### SCIENTIFIC COMPUTING MINOR

Scientific Computing is a field of applied Computer Science where computing theories and software techniques are used to serve and advance many diverse fields, including but not limited to business, science, engineering, and social science. The Scientific Computing minor program is designed to help students understand the development and use of Scientific Computing, as it relates to specific disciplines.

In order to select courses that meet the program requirements, students pursuing the minor must consult with both their major advisor and with the advisor of Computational Science in the Computer Science and Information Systems Department.

#### SCIENTIFIC COMPUTING MINOR (21 Credits)

MATH 242/242L Modeling for Scientist I/Laboratory .....4  
CSCI 140/140L Introduction to Algorithmic Design I/Laboratory .....4  
CSCI 150/150L Introduction to Algorithmic Design II/Laboratory.....4  
Choose three approved courses at the 300 level or above in the area of interest....9

TOTAL CREDITS REQUIRED.....21

Additional Requirements: Scientific Computing Minor students must earn a grade of C or better in each course taken that is applied toward the Minor Requirements, and the three approved cognate courses in the area of interest must be determined in advance by: the minor advisor, the Chair(s) of the disciplines of the cognate courses in question, and by the Chair of the Computer Science and Information Systems.

#### INFORMATION SYSTEMS MAJOR

Degree: Bachelor of Science

#### INFORMATION SYSTEMS MAJOR (120 Credits)

I. CORE CURRICULUM(39--44Credits).....39--44

## II. FRESHMAN GRADUATION REQUIREMENT (0--3 Credits)

Minimum grade of C is required.

UNIV 110 The First--Year Experience.....0--3

UNIV 110 is required for all new entering freshmen and for new transfer students with fewer than 12 transfer credit hours unless the transfer student has satisfactorily completed a college transition course.

## III. FOUNDATION COURSES (50-64Credits)\*

Choose one from the following: (3--4 Credits).....3--4

ENGL 211\* Introduction to Technical and Professional Writing(3)

ENGL 102\* Composition and Critical Reading (4)

### Communication

Choose one from the following : (3 Credits).....3

ENGL 290\* Introduction to Business Communication (3)

ENGL 390 Business and Professional Communication (3)

COMM 140\* Oral Communication (3)

### Statistics

Choose one from the following: (3--4 Credits).....3--4

CBAD 291\* Business Statistics (3)

STAT 201/201L\* Elementary Statistics/Laboratory (4)

PSYC 225/225L\* Psychological Statistics/Laboratory (4)

### Calculus

Choose one from the following: (3--4 Credits).....3--4

MATH 160\*Calculus I (4)

MATH 132\* Calculus for Business and Social Science (3)

MATH 174 Introduction to Discrete Mathematics .....3

Choose one from the following: (3--4 Credits).....3--4

MATH 215 Introduction to Operations Research(3)

MATH 242/242L Modeling for Scientists/Laboratory (4)

MATH 344 Linear Algebra (3)

CSCI 130\* Introduction to Computer Science.....3

CSCI 131L Algorithmic Thinking.....1

CSCI 140/CSCI 140L Introduction to Algorithmic Design I/Laboratory.....4

CSCI 150/CSCI 150L Introduction to Algorithmic Design II/Laboratory...4

CSCI 170 Ethics in Computer Science.....1

CSCI 203 Introduction to Web Application Development.....3

CSCI 225 Introduction to Relational Database SQL.....3

Choose one CSCI course numbered 200 or above (except CSCI 399).....3

\*Credits for courses taken as part of the Core Curriculum are not counted elsewhere in the major.

## IV. MAJOR REQUIREMENTS (24Credits)

CSCI 330 Systems Analysis & Software Engineering.....3

CSCI 335 Software Project Management.....	3
CSCI 370 Data Communication Systems and Networks.....	3
Choose four CSCI courses numbered 300 or above(except CSCI 399)	
Independent Study or CSCI 497 Computer Science Internship	
CSCI 499 may count for up to 6 credit hours in this category).....	12
CSCI 495 Information Systems Capstone Course and Project.....	3

V. Minor(18 Credits).....18  
 (Web Application Development minor or Computer Science minor may not be used to satisfy this requirement. As an alternative to the minor, students may do a Computer Science cognate option outlined below.)

Computer Science Cognate Option (15 Credits).....15  
 Choose 15 hours (in addition to any foundation or major requirements;  
 courses counted here may not be used toward foundation or major  
 requirements) from the following options:

- CSCI 210 Computer Organization and Programming (3)
- CSCI 220 Data Structures (3)
- CSCI 310 Introduction to Computer Architecture (3)
- CSCI 350 Organization of Programming Languages (3)
- CSCI 356 Operating Systems (3)
- CSCI 380 Introduction to the Analysis of Algorithms (3)
- CSCI 390 Theory of Computation (3)
- CSCI 440 Introduction to Computer Graphics (3)
- CSCI 445 Image Processing and Analysis (3)
- CSCI 450 Principles of Compiler Design (3)
- CSCI 460 Algorithms in Bioinformatics (3)
- CSCI 473 Introduction to Parallel Systems (3)
- CSCI 480 Introduction to Artificial Intelligence (3)
- CSCI 485 Introduction to Robotics (3)

VI. ELECTIVES (0--11 Credits).....0--11

TOTAL CREDITS REQUIRED .....120

#### WEB APPLICATION DEVELOPMENT MINOR (18 Credits)

The purpose of the minor in Web Application Development is to provide programming--  
 level training in the technology needed to develop database--driven web applications.

CSCI 120 Introduction to Web Page Applications.....	3
CSCI 135 Introduction to Programming.....	3
CSCI 203 Introduction to Web Application Development .....	3
CSCI 225 Introduction to Relational Database and SQL .....	3
CSCI 365 Advanced Topics in Web Development .....	3
CSCI 409 Advanced Web Application Development .....	3

TOTAL CREDITS REQUIRED.....18



## INFORMATION TECHNOLOGY MAJOR

Degree: Bachelor of Science

Students must earn a grade of C or better in all Foundation and Major Requirement courses.

I. CORE CURRICULUM (39-44Credits).....39-44

II. FRESHMAN GRADUATION REQUIREMENT (0-3 Credits)

Minimum grade of C is required.

UNIV 110 The First-Year Experience.....0-3

UNIV 110 is required for all new entering freshmen and for new transfer students with fewer than 12 transfer credit hours unless the transfer student has satisfactorily completed a college transition course.

III. FOUNDATION COURSES (25-43Credits)\*

Choose one of the following: (3-4 Credits).....3-4

ENGL 102\* Composition and Critical Reading (4)

ENGL 211\* Introduction to Technical and Professional Writing (3)

Choose one of the following: (3 Credits).....3

COMM 140\* Oral Communication (3)

ENGL 290\* Introduction to Business Communication(3)

ENGL 390 Business and Professional Communication (3)

Choose one of the following: (3-4 Credits).....3-4

CBAD 291\* Business Statistics (3)

PSYC 225/225L\* Psychological Statistics/Laboratory (4)

STAT 201/201L\* Elementary Statistics/Laboratory (4)

Choose one of the following: (3-4 Credits).....3-4

MATH 132\* Calculus for Business and Social Science (3)

MATH 160\* Calculus I (4)

Choose one of the following: (3 Credits).....3

CSCI 101\* Introduction to the Internet and World-Wide Web(3)

CSCI 130\* Introduction to Computer Science (3)

CSCI 110 Enterprise Business Applications.....3

CSCI 120 Introduction to Web Page Applications.....3

Choose one of the following: (3 Credits).....3

CSCI 135 Introduction to Programming(3)

CSCI 140/140L Introduction to Algorithmic Design I/Laboratory (4)

CSCI 170 Ethics in Computer Science.....1

CSCI 203 Introduction to Web Application Development.....3

CSCI 211 Computer Infrastructure.....3

CSCI 225 Introduction to Relational Database and SQL.....3

Problem Solving, Critical Reasoning, Professional Development (6 Credits).....6

Choose 6 credit hours from the following (these courses may not overlap with the minor):

BINF 101/101L Introduction to Bioinformatics/Laboratory (4)

BIOL 122/122L Biological Science II/Laboratory (4)  
 BSHA 455 Managing Health Information (3)  
 CBAD 203 Fraud Detection (3)  
 CBAD 292 Decision Analysis (3)  
 CBAD 364 Operations Management (3)  
 CBAD 393 Management Information Systems (3)  
 CHEM 112/112L General Chemistry II/Laboratory (3)  
 COMM 274 Organizational Communication (3)  
 COMM 341 Advanced Public Speaking (3)  
 CSCI 150/150L Introduction to Algorithmic Design II/Laboratory (4)  
 CSCI 210 Computer Organization and Programming (3)  
 Any CSCI 300 course or above (3)  
 ECON 321 Government and Business (3)  
 ENGR 101 Introduction to Engineering (3)  
 ENVI 201/201L Introduction to Environmental Science (4)  
 ENVI 331/331L Introduction to GIS and Remote Sensing (4) (=MSCI 331/331L)  
 GEOG 200 Digital Earth (3)  
 GEOG 204 Introduction to Geographic Information Systems (3)  
 GEOG 311 Earth Observation (3)  
 GEOG 400 Geospatial Intelligence (3)  
 GEOL 112/112L The Origin and Evolution of the Marine Environment/Laboratory  
 (4) (=MSCI 112/112L)  
 HPRO 380 Essentials of the U.S. Health Care System (3)  
 MATH 161 Calculus II (4)  
 MATH 174 Introduction to Discrete Mathematics (3)  
 MATH 220 Mathematical Proofs and Problem Solving (3)  
 MATH 242/242L Modeling for Scientists I/Laboratory (4)  
 MATH 260 Calculus III (4)  
 MATH 320 Elementary Differential Equations (3)  
 MATH 408 Cryptography (3)  
 PHIL 110 Introduction to Logic and Critical Thinking (3)  
 PHIL 220 Science and Pseudoscience (3)  
 PHIL 315 Technology and Human Values (3)  
 PHIL 321 Symbolic Logic (3)  
 PHYS 212/212L Essentials of Physics II/Laboratory (4)  
 PHYS 213/213L Fundamentals of Physics I/Laboratory (4)  
 PHYS 321 Electronics (3)  
 PHYS 432 Remote Sensing of the Environment (3)  
 POLI 311 Introduction to Game Theory (3)  
 POLI 421 Sustainable Development (3)  
 PSYC 303 Interpersonal Communication Skills (3)  
 ROTC 201/201L Fundamentals of Military Leadership/Laboratory (3)  
 RSM 394 Sport Technology (3)  
 STAT 318 Applied Statistical Methods (3)  
 THEA 255 Computer Aided Drafting and Design (3)  
 THEA 356 Lighting Design (3)

\*Credits for courses taken as part of the Core Curriculum are not counted elsewhere in

the major.

IV. MAJOR REQUIREMENTS (24 Credits)

CSCI 335 Software Project Management.....	3
CSCI 370 Data Communication Systems and Networks.....	3
CSCI 385 Introduction to Information Systems Security.....	3
CSCI 415 Systems Administration.....	3
CSCI 416 Linux System Administration.....	3
CSCI 427 Systems Integration.....	3
CSCI 444 Human Computer Interaction.....	3
CSCI Elective (300 level or above).....	3

V. MINOR (18-24 Credits).....18-24

(Computer Science Minor or Web Application Development Minor may not be used to satisfy this requirement)

Students who transfer with an approved A.A.S. in Computer Technology from a South Carolina Technical College may waive the minor requirement.

VI. ELECTIVES (0-6 Credits).....0-6

TOTAL CREDITS REQUIRED.....120

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

VI. Proposal for a New Undergraduate Program or Minor

**College of Humanities and Fine Arts – Office of the Dean**

BA Digital Culture and Design Degree

**Proposed catalog description:**

**MISSION STATEMENT**

The B.A. in Digital Culture and Design is designed to provide students with the opportunity to pursue interdisciplinary study in the humanities, arts, and social sciences, with a focus on developing critical perspectives and practical skill sets in creating and utilizing digital media and content.

The mission of the Digital Culture and Design program is to prepare students to conduct advanced research across disciplinary boundaries, to synthesize information, and to present that information in a range of digital formats that suit the needs of a variety of audiences. Students in the B.A. in Digital Culture and Design program investigate the reflexive imbrication of technology and humanities and fine arts. They practice critical thinking skills not only on their assignments within the foundational theory and methods courses, but in the design and completion of digital projects in each of the advanced methods courses and in either an internship or practicum experience. The development of these skills culminates with their individually-designed capstone projects. They become adept at collaboration with colleagues in other fields of study; they

investigate and pursue practical applications of disciplinary knowledge through digital technologies and content creation; they become more proficient in writing and in representing humanistic knowledge through other forms of media; they utilize technology for presentations, visual media and print documents; and they learn professional procedures appropriate for a variety of both public sector and private industry settings.

Students majoring in Digital Culture and Design must earn a C or above in each course used to satisfy requirements for the Major.

## STUDENT LEARNING OUTCOMES

Students who complete the requirements for a degree in Digital Culture and Design will be able to:

1. Read comparatively and critically analog and digital texts, identifying, analyzing, and critiquing relevant cultural, aesthetic, and technical/structural themes.
2. Articulate concisely through written and oral expression the issues (e.g. social, cultural, aesthetic, technical, and economic) common to digital humanities research.
3. Collaborate with peers through not only the use of new technologies but also an agreed upon structure and democratic workflow that employs critical and affective feedback for revision of concepts and project development.
4. Demonstrate applied fluency and facility with the concepts, projects, and applications within the digital humanities.
5. Articulate an understanding of the relevance of the medium of code to humanistic topics.
6. Synthesize text/codes, images, and narratives across a variety of mediated formats (including but not limited to written essays, online forums, human-machine performance platforms, hypertexts, computer models, and web interfaces).
7. Understand, analyze, and use data.
8. Utilize the basic elements of coding to design elementary markup artifacts and real time applications.

## DIGITAL CULTURE AND DESIGN MAJOR (120 Credits)

I. CORE CURRICULUM (39-44 Credits) .....	39-44
II. FRESHMAN GRADUATION REQUIREMENT (0-3 Credits)	
Minimum grade of <b>C</b> is required.	
UNIV 110 The First-Year Experience .....	0-3
UNIV 110 is required for all new entering freshmen and for new transfer students with fewer than 12 transfer credit hours unless the transfer student has satisfactorily completed a college transition course.	
III. FOUNDATION COURSES (18 Credits)	
<u>Theory (9 Credits)</u>	
DCD 100 Technology and Humanity .....	3
DCD 101 Humanities in the Digital Age .....	3
DCD 102 Information Design .....	3
<u>Methods (9 Credits)</u>	
DCD 200 Introduction to Digital Humanities .....	3
DCD 201 Coding for Humanists .....	3
DCD 202 Introduction to Digital Sources .....	3

IV. MAJOR REQUIREMENTS (36 Credits)

Digital Humanities Sequence (15 Credits)

ENGL 231 Film, New Media, and Culture .....	3
DCD 309 Interactivity and Culture .....	3
Choose one from the following: (3 Credits) .....	3
DCD 312 Social Media (3)	
JOUR 350 Interactive Media and Society (3)	
DCD 316 Digital Resources in the Humanities .....	3
DCD 345 Knowledge Production and Digital Representation .....	3

Methods Sequence (15 Credits)

Choose three from the following: (9 Credits) .....	9
DCD 301 Text Methods (3)	
DCD 302 Visual Methods (3)	
DCD 303 Sound and Motion Methods (3)	
DCD 304 Interactive Methods (3)	
Choose two from the following: (6 Credits) .....	6
GEOG 310 Digital Cartography (3)	
GEOG 311 Earth Observation (3)	
HFA 391 Press Project Workshop (1) (repeated for 3 credit hours)	
HIST 396 Manuscripts and Archives: An Introduction (3)	
HIST 397 Digital History (3)	
JOUR 304 Writing for Interactive Journalism (3)	
JOUR 305 Journalism News Writing and Reporting for Media (3)	
JOUR 314 Video Journalism Production (3)	
MCJ 391 Recording Technology I (3)	
MCJ 392 Recording Technology II (3)	
POLI 305 Introduction to Empirical Political Inquiry (3)	
THEA 255 Computer Aided Drafting and Design (3)	

Practicum/Internship (3 Credits)

Choose one from the following: (3 Credits) .....	3
DCD 495 Internship (3)	
DCD 496 Practicum (3)	

Capstone (3 Credits)

DCD 488 Capstone Course .....	3
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V. Humanities Content (12 Credits)

Take four upper-level humanities courses related to the topic of the capstone project.

VI. Electives (7-16 Credits) ..... 7-16

TOTAL CREDITS REQUIRED ..... 120

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.



## **College of Science – Department of Chemistry and Physics**

### **ENGINEERING SCIENCE MAJOR**

Degree: Bachelor of Science

### **MISSION STATEMENT**

The mission of the Engineering Science program is to train problem solvers who can integrate science and engineering principles. Engineering science is the study of the combined disciplines of engineering, the applied sciences, and mathematics. This combination of disciplines results in graduates that can bring a deep understanding of science and broad training in engineering design and practice together to solve new challenges. The focus of the program is on general problem solving combined with fundamental scientific and engineering skills and content knowledge, resulting in graduates having the ability to keep pace with the continuous innovations occurring with technology, and the multidisciplinary approach required for many emerging technical challenges. The program's faculty is committed to providing meaningful undergraduate experiences for both majors and non-majors through high-quality, student-centered teaching and undergraduate research/design mentoring. Students completing a degree in Engineering Science should be well prepared for either a general engineering career or graduate school in engineering, applied science, or a related discipline.

### **STUDENT LEARNING OUTCOMES**

After completing the program in Engineering Science, students will be able to:

- (a) apply knowledge of mathematics, science, and engineering
- (b) design and conduct experiments, as well as to analyze and interpret data
- (c) design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- (d) function on multidisciplinary teams
- (e) identify, formulate, and solve engineering problems
- (f) demonstrate professional and ethical responsibility
- (g) communicate effectively
- (h) understand the impact of engineering solutions in a global, economic, environmental, and societal context
- (i) engage in life-long learning
- (j) apply knowledge and skills to contemporary issues
- (k) use the techniques, skills, and modern engineering tools necessary for engineering practice.

The Engineering Science program at CCU focuses on the application of the applied sciences integrated with engineering principles to create technical solutions to problems. Through either a major or minor, students can easily merge their interest in engineering with other disciplines taught in the College of Science such as biology, chemistry, computer science, marine science, mathematics and/or physics. Engineering Science students can also pursue one of the dual-degree engineering programs with either Clemson University or Horry Georgetown Technical College.

All students pursuing a major in Engineering Science complete a foundation in mathematics and basic sciences, followed by more advanced courses in engineering and applied science. The major requirements focus on the following core academic competencies: (1) problem solving and

communication, (2) epistemological methodologies, (3) design practice, and (4) technical practice. Students pursuing the minor in Engineering Science complete a basic curriculum in general engineering. Students must earn a grade of **C or better** in all Foundation and Major Requirement courses.

#### ENGINEERING SCIENCE MAJOR (120 Credits)

##### I. CORE CURRICULUM (34-41 Credits) ..... 34-41

##### II. FRESHMAN GRADUATION REQUIREMENT (0-3 Credits)

Minimum grade of C is required.

UNIV 110 The First-Year Experience ..... 3

UNIV 110 is required for all new entering freshman and for new transfer students with fewer than 12 transfer credit hours unless the transfer student has satisfactorily completed a college transition course.

##### III. FOUNDATION COURSES (23-41 Credits)\*

ENGR 101\* Introduction to Engineering ..... 3

PHYS 211/211L Essentials of Physics I/Laboratory ..... 4

PHYS 212/212L Essentials of Physics II/Laboratory ..... 4

CHEM 111/111L\* General Chemistry I/Laboratory ..... 4

MATH 160\* Calculus I ..... 4

MATH 161 Calculus II ..... 4

MATH 260 Calculus III ..... 4

MATH 320 Differential Equations ..... 3

PHIL 102\* Introduction to Ethics ..... 3

Choose one of the following: (3-4 Credits) ..... 3-4

MATH 174 Introduction to Discrete Mathematics (3)

MATH 242/242L Modeling for Scientists/Laboratory (4)

MATH 344 Linear Algebra (3)

STAT 201/201L\* Elementary Statistics/Laboratory (4)

Choose one of the following: (4 Credits) ..... 4

PHYS 214/L Fundamentals of Physics II/Laboratory (4)

CSCI 130/131L Introduction to Computer Science/Algorithmic Thinking (4)

CHEM 112/112L General Chemistry II/Laboratory (4)

MSCI 111/111L\* Introduction to Marine Science/Laboratory (4)

BIOL 121/121L\* Biological Science I/Laboratory (4)

GEOL 111/111L\* Introduction to Geology/Laboratory (4)

\*Credits for courses taken as part of the Core Curriculum are not counted elsewhere in the major.

##### IV. MAJOR REQUIREMENTS (43-44 Credits)

ENGR 201 Engineering Problem Solving ..... 3

ENGR 202 Engineering Graphics ..... 3

ENGR 234 Statics ..... 3

ENGR 235 Electric Circuits ..... 3

PHYS 310 Mathematical Methods in Applied Physics ..... 3

PHYS 351 Applied Physics Workshop I ..... 3

PHYS 352 Applied Physics Workshop II ..... 3

ENGR 398 Project Management and Communication ..... 3

ENGR 399 Integrated Science and Design .....	3
ENGR 499 Senior Design .....	3
Choose five from the following: (15-20 Credits) .....	15-20
ENGR 321 Electronics (3)	
ENGR 430 Fluid Dynamics (3)	
PHYS 301 Analytical Mechanics (3)	
PHYS 302 Electricity and Magnetism (3)	
PHYS 303 Quantum Mechanics (3)	
PHYS 341 Thermodynamics and Statistical Mechanics (3)	
CSCI 210 Computer Organization and Programming (3)	
CSCI 310 Introduction to Computer Architecture (3)	
CSCI 330 Systems Analysis and Software Engineering (3)	
CSCI 473 Introduction to Parallel Systems (3)	
CSCI 485 Introduction to Robotics (3)	
Other 300 level or above Science or Engineering courses with prior approval from the department (3-4 Credits)	
V. ELECTIVES (0-20 Credits) .....	0-20
TOTAL CREDITS REQUIRED .....	120

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.

VII. Change to the Committee Membership Description in the Faculty Manual – Teresa Burns

### **MOTION**

Change the Academic Affairs Committee Membership from

“Membership: Nine to eleven faculty (two elected from each College, one of whom must be a tenured faculty member, and one elected from the Library); two students (non-voting); and Ex-Officio: Provost’s designee, Vice President of Enrollment Management, and Registrar. The Chair will be elected from among the voting members who are in their third year of consecutive service.”

to

“Membership: Nine to eleven faculty (two elected from each College, one of whom must be a tenured faculty member, and one elected from the Library); two students (non-voting); and Ex-Officio: Provost’s designee, Admissions Office designee, and Registrar. The Chair will be elected from among the tenured voting elected representatives who have served for at least 2 years.”

**Justification:** Due to administrative changes at the level of vice president, the current description of the membership of the Academic Affairs Committee, as found in Faculty Manual 2014-15 is in need of change. Specifically, there is no longer a Vice President of Enrollment Management. Instead, the appropriate equivalent administrator is currently titled Director of Admissions. This is the now the

appropriate descriptor for the committee member who will represent admissions on the committee. To reflect this administrative change, the description of the committee needs to change as above.

**Committee action:** This proposal was approved as written and will be submitted to Faculty Senate for the December, 2014, meeting.