## EXHIBIT B

BOARD OF TRUSTEES
Bylaw, Policy, and Curriculum Committee Agenda Items

To: Board of Trustees
From: Office of the President
Date: April 16, 2020

The following Bylaw, Policy, and Curriculum Committee items are recommended to the Ocean County College Board of Trustees for approval at its meeting on Thursday, April 23, 2020:

1. Recommend approval of the following items as accepted by the College Senate at its meeting on April 9, 2020:
a. New Program Option
1) Associate in Arts Degree in Liberal Arts - Photography Option (Exhibit B-1)
b. Revised Course and Course Title
2) CSIT 163, Introduction to C++ to Introduction to Programming Using C++ (Exhibit B-2)

## EXHIBIT B-1

**the differences between the Liberal Arts Option in Photography and the base Liberal Arts program are highlighted below. There is a 15 credit difference between the base and the option. The option specifies particular photography concentration courses that a student will choose versus the open electives allowed in the base liberal arts program. In addition, the option has required PHOT 101 be used specifically as one of the General Education Humanities choices.

Liberal Arts- Option in Photography- A.A. Degree Program<br>Effective Catalog Year: 2020-2021<br>Program Code: AA.LA.PHOT CIP Code: (50.0605)

The Associate in Arts degree in Liberal Arts with an option in Photography provides the first two years of foundational courses that allow students to transfer into a baccalaureate program in photography. This program will prepare students for careers in photojournalism, fine art photography, commercial/industrial photography, studio/portrait photography, and/or freelance photography.

| GENERAL EDUCATION CORE REQUIREMENTS |  |  |
| :---: | :---: | :---: |
| COMMUNICATIONS (9 credits) |  |  |
| ENGL 151 | English I | 3 cr . |
| ENGL 152 | English II | 3 cr . |
| COMM 154 | Fundamentals of Public Speaking | 3 cr . |
| HISTORY (6 credits) |  |  |
| HIST | History course selected from the List of Approved General Education Courses | 3 cr . |
| HIST | History course selected from the List of Approved General Education Courses | 3 cr . |
| HUMANITIES (9 credits) |  |  |
| PHOT 101 | History of Photography | 3 cr . |
|  | Humanities course selected from the List of Approved General Education Courses | 3 cr . |
|  | Humanities course selected from the List of Approved General Education Courses | 3 cr . |
| SOCIAL SCIENCE (6 credits) |  |  |
|  | Social Science course selected from the List of Approved General Education Courses | 3 cr . |
|  | Social Science course selected from the List of Approved General Education Courses | 3 cr . |
| DIVERSITY (3 credits) |  |  |
|  | Diversity course selected from the List of Approved General Education Courses | 3 cr . |
| MATHEMATICS-SCIENCE-TECHNOLOGY |  |  |
|  | Students must select one math course, one lab science course, and one technology course and complete the 12 cr . requirement | 12 cr . |


|  | with any additional math or science course from the list of Approved General Education Courses. Students may attempt to "test out" of the technology requirement. If they succeed, they must take an additional course(s) in math or science from the List of Approved General Education Courses. |  |
| :---: | :---: | :---: |
| STUDENT SUCCESS COURSE |  |  |
| STSC 150 | Student Success Seminar | 2 cr . |
| PHOTOGRAPHY PROGRAMCOURSES |  |  |
| PHOT 181 | Basic Digital Photography | 3 cr . |
| PHOT 187 | Experimental Digital Photography | 3 cr . |
| PHOT 188 | Intermediate Digital Photography | 3 cr . |
| PHOT 195 | Lightroom \& Photoshop for Photographers | 3 cr . |
|  | Elective credits to total 60 credits | 1 cr . |
| Total: 60 cr . |  |  |
| NOTES |  |  |
| * | Course selections should be based on the requirements of the intended transfer to a four-year institution. Students should speak to their advisor for clarification. |  |
|  | cr. (credit) $=$ semester credit hour |  |

LIBERAL ARTS: PHOTOGRAPHY-PROGRAM OUTCOMES:

| Students who successfully complete this program will be able to: |  |
| :--- | :--- |
| $\# 1$ | Demonstrate overall proficiency in the use of photography equipment, <br> including post production digital editing. |
| $\# 2$ | Produce photographic images for a variety of applications including fashion <br> photography, wedding photography, portrait photography, corporate photography, <br> food photography, architecture photography, film set photography. |
| $\# 3$ | Build and plan digital media projects from concept to completion. |
| $\# 4$ | Apply independent thinking, problem solving, and creativity to their work. |
| $\# 5$ | Categorize important historical movements and social influences on photography. |

PHOTOGRAPHY - An Option to Liberal Arts
Board of Trustees Approval Date: April 23, 2020

## EXHIBIT B-2

## OCEAN COUNTY COLLEGE

OFFICIAL COURSE DESCRIPTION

## SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS

1. COURSE NUMBER AND TITLE: CSIT 163: Introduction to Programming Using C++
2. SEMESTER HOURS: 4
CONTACT HOURS: $(4+0+0)$
Lecture Lab Practicum

## 3. CATALOG DESCRIPTION

This course introduces the student to the fundamental techniques used in the development of software applications. The course teaches basic programming concepts and principles using C/C++. Students will learn good programming practices in an integrated and interactive software development environment. The topics covered include classes, objects, algorithms, data types, control structures, one-dimensional arrays, attributes, and methods. Working knowledge of windows required. Open lab time required.
4. PREREQUISITES: MATH 023 with grade of C or higher, or Mathematics placement requiring no remediation. ENGL 095 with grade of C or higher, or English placement requiring no remediation.

COREQUISITES: NONE
5. COURSE FEE CODE: 3

COURSE TYPE FOR PERKINS REPORTING:
X vocational (approved for Perkins funding)
__ non-vocational (not approved for Perkins funding)

## 6. JUSTIFICATION

a. Describe the need for this course.

This is a course that will satisfy a General Education technology requirement.
This course addresses two key topics addressed by the Association for Computing Machinery (ACM).
i. Finding new and better ways of teaching programming
ii. Trying to place computing in a context that would serve to motivate and inspire students
b. Relationship to courses within the College
i. Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course which satisfies a general education requirement? _ X yes $\qquad$ no

If yes, mark with an " $x$ " the appropriate category below.

| ___ Communication | Social Science | __ History |
| :--- | :--- | :--- |
| Humanities | Lab Science | __ Science (Non-Lab) |
| Mathematics | _X_ Technology | Diversity |

ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:
_- Program-specific requirement for the following degree program(s):

- Elective
iii. If the course is a program specific requirement, please list the program objective that this course fulfills:
iv. This course is recommended for the following:

The Limited Load List
The Writing Across the Curriculum List $\qquad$
c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

This course addresses the College's vision, mission, and Academic Master Plan by:

- Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
- Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)
- Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)
- Seeking to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)
- Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)

7. Related courses in other institutions
[NOTE: The two charts below need to be completed when submitting a new course proposal. When revising a course, this section must be completed if the transfer area is blank or in need of updating.]
a. List any comparable course(s) at other community colleges by completing the table below. Insert "None" if there are no comparable courses. If "none" was inserted, please explain here: $\qquad$

| Comparable Courses at NJ Community Colleges |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Institution <br> (ex., Brookdale CC, <br> Mercer CC, <br> Atlantic Cape CC, <br> etc.) | Course <br> Title | Course <br> Number | Number <br> of Credits | Comments |
| 1 Essex County <br> College | Computer <br> Science I | CSC121 | 4 | C++ |
| 2 Rowan College <br> of Gloucester <br> County | Programming <br> in C++ | CSC-205 | 4 |  |
| 3 Passaic County <br> Community <br> College | Fundamentals <br> of Computer <br> Science II | CIS161 | 4 | C++ used. |

b. Complete the table below. The four-year institutions listed below comprise the top six institutions queried on NJTransfer by OCC students.

| Transferability of Proposed Course |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Institution | Course Code, <br> Title, <br> and Credits | Transfer <br> Category <br> (Major, <br> General Ed., <br> or Elective) | Will NOT <br> Transfer <br> (Place an <br> "x" in <br> box) | Unable to <br> Determine <br> Status <br> (Place "U" <br> in box) |
| Georgian <br> Court <br> University | CS123 Computer <br> Programming I, 4 credits | Elective |  |  |
| Kean <br> University | CPSX1003, <br> Computer Science <br> Elective, <br> 4 Credits | Elective |  |  |
| Monmouth <br> University | CS175 <br> Introduction to Computer <br> Science I, <br> 4 credits | Major |  |  |
| Stockton <br> University | CSIS2101 <br> Programming <br> and Problem Solving I <br> 4 credits | Major |  |  |
| Rowan | CS04103 | Major |  |  |


| University | Computer Science and <br> Programming <br> 4 credits |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Rutgers - New <br> Brunswick | Elective Credit 4 credits | Elective |  |  |

i. If a "U" was inserted above, document the course transferability by providing either (a) the name of a contact person at the four-year institution, or (b) an email from the contact person (attach to this proposal): $\qquad$
ii. If not transferable to any institution, explain:

There is no known course on the Rutgers New Brunswick campus to which transfer credit will be given.

## 8. SPECIFIC COURSE LEARNING OBJECTIVES

Students who successfully complete this course will be able to:
a. Identify the steps required in problem solving using $\mathrm{C}++$.
b. Identify the properties of an algorithm.
c. Differentiate between an algorithm and a computer program.
d. Identify the basic data types available in $\mathrm{C}++$.
e. Design, code, test and debug simple programs written in an object-oriented language.
f. Write programs that use conditional control structures and methods.
g. Write programs in $\mathrm{C}++$ utilizing repetition structures and methods.
h. Apply the technique of decomposition in program construction.
i. Differentiate between a void method and one that returns a value.
j. Construct and manipulate one-dimensional arrays.
9. Topical Outline (include as many themes/skills as needed):

| Major Themes/Skills | Assignments <br> (Recommended <br> but not limited <br> to) | Assessment <br> (Recommended <br> but not limited <br> to) | Related <br> Course <br> Learning <br> Outcome(s) |
| :---: | :--- | :--- | :--- |
| 1. Introduction to Computers and Programming <br> 1)History of Computers and Programming <br> Languages <br> 2)How to set up the C++ Programming <br> Environment <br> Exam 8 8: a |  |  |  |


| 3) Using an Integrated Development Environment (IDE) |  |  |  |
| :---: | :---: | :---: | :---: |
| 2. Problem Solving and Algorithms <br> 1) Problem Solving Techniques <br> 2) Algorithms <br> 3) Decomposition | In-class exercise | Programming Exercises Exam | 8: a, b, c |
| 3. Data Representation <br> 1) Data Types <br> 2) Identifiers <br> 3) Arithmetic Operations <br> 4) Variable and Declaration Statements <br> 5) Data Type Conversions <br> 6) Assignment Statements | In-class exercise | Lab assignment | 8: d |
| 4. Programming by Example <br> 1) Simple keyboard input <br> 2) Simple console output <br> 3) Formatting output | Hands-on, Lab exercises | Programming Exercises | 8: e |
| 5. Using common Library Classes <br> 1) Math Library <br> 2) String Class <br> 3) Reading and using the C++ API | Hands-on | Programming Exercises | 8: e |
| 6. Selection Structures <br> 1) Selection Criteria - Relational and Logical Operators <br> 2) One and Two-way Selection <br> 3) Multi-way Selection <br> 4) Compound Conditions <br> 5) Problem Solving - Data Validation | Hands-on \& Lab Exercises | Programming Exercises Exam | 8: f |
| 7. Repetition Structures <br> 1) Pre-test Loops <br> 2) Post-test Loops <br> 3) Counter Loops <br> 4) Interactive Loops <br> 5) Nested loops | Hands-on \& Lab Exercises | Programming Exercises Exam | 8: g |
| 8. Methods <br> 1) Creating methods <br> 2) Invoking methods <br> 3) Passing parameters | Hands-on \& Lab Exercises | Programming Exercises Exam | 8: h, i |


| 4) Returning Values |  |  |  |
| :---: | :--- | :--- | :--- |
| 9. Arrays | Hands-on \& | Programming | $8: \mathrm{j}$ |
| 1) Creating arrays | Lab Exercises | Exercises |  |
| 2) Examples |  | Exam |  |
| 3) Using arrays in a loop |  |  |  |

10. Methods of Instruction - In the structuring of this course, what major methods of instruction will be utilized?

- Class lecture
- Discussion
- Demonstrations
- Lab assignments
- Programs and online presentations

11. General Education Goals addressed by this course (this section is to fulfill state requirements):
a. In column 1, please check off any General Education Goal that is applicable to this course (definitions for each goal are available in the College Catalog).
b. For each General Education Goal checked in column 1, in column 2 you must list the related course learning objective from section 8 of this form. c.
c. In column 3, you will also need to list the section of your outline (section 9 of this form) that relates to each goal you have chosen. List the row number from the outline in section 9 .
d. In column 4, list how each checked off General education goal will be assessed within the course (including but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.)

| General Education. <br> Goals | 1.Applicable | 2. Related <br> Outcome | 3. Outline <br> Component | 4. Assessment <br> (Recommended but not <br> limited to) |
| :--- | :--- | :--- | :--- | :--- |
| Communication- <br> Written and Oral |  |  |  |  |
| Quantitative <br> Knowledge and <br> Skills |  |  |  |  |
| Scientific <br> Knowledge and <br> Reasoning |  |  |  |  |
| Technological <br> Competency | X | 8: b, d-j | $9: 2-9$ | Programming Exercises <br> Exam |
| Information Literacy |  |  |  |  |


| Society and Human <br> Behavior |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Humanistic <br> Perspective |  |  |  |  |
| Historical <br> Perspective |  |  |  |  |
| Global and Cultural <br> Awareness |  |  |  |  |
| Ethical Reasoning <br> and Action |  |  |  |  |
| Independent/Critical <br> Thinking | X | 8: a, b | 9:1-2 | Programming Exercises <br> Exam |

## 12. NEEDS:

- Instructional Materials (text etc.):

Appropriate textbooks and/or open educational resources will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials.

- Technology Needs:

College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

- Human Resource Needs (Presently Employed vs. New Faculty):

Four (4) presently employed full-time faculty plus additional Adjunct Professors as needed.

- Facility Needs:

Laboratory classrooms equipped with computer workstations, each configured to support program development using $\mathrm{C}++$. Podium computer similarly equipped plus the ability to present audio-video presentations to the class.

- Library needs (list specific needs and must be initialed by library director):


## 13. GRADE DETERMINANTS

The final grade in the course will be the cumulative grade based on the following letter grades or their numerical equivalents for the course assignments and examinations:

| A | Excellent | C + | Above Average | F | Failure |
| :--- | :--- | :--- | :--- | :--- | :--- |
| B+ | Very Good | C | Average | I | Incomplete |
| B | Good | D | Below Average | W | Withdrawn |

## APPROVAL PROCESS FOR REVISED COURSE PROPOSALS

In order to maintain a central file of current course documents on Ocean Connect, any changes to the Course Proposal Format or to an Official Course Description must be sent to the Curriculum Committee, College Senate, and Board of Trustees for action or "For Information Only." This process will ensure that current course information is accessible to Advising, Financial Aid, and the college community and that accurate information will appear in the OCC College Catalog.

| Revisions to the following items must <br> receive action by the Curriculum <br> Committee, College Senate, and Board of <br> Trustees. | Revisions to the following items must be sent <br> "For Information Only" to the Curriculum <br> Committee, College Senate, and Board of <br> Trustees. |
| :--- | :--- |
| \#1 Course Number \& Title | \#5 Maximum Class Size/Lab Fee Code/ <br> Vocational Status |
| \#2 Semester Hours/Contact Hours | \#7 Transfer Information |
| \#3 Catalog Description | \#9 Topical Outline |
| \#4 Prerequisites \& Corequisites | \#10 Methods of Instruction |
| \#6 Justification | \#12 Needs |
| \#8 Course Objectives | \#13 Grade Determinants |
| \#11 General Education Goals - Rubric |  |

Board of Trustees Approval Date: February 28, 2019
Board of Trustees Approval Date: April 23, 2020

