EXHIBIT B

OCEAN
COUNTY COLLEGE

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

To: Board of Trustees

From: Office of the President

Date: February 23, 2011

The following Bylaw, Policy, and Curriculum Committee items are recommended to the Ocean County College Board of Trustees for approval at its meeting on **Monday, February 28, 2011**:

1. Recommend approval of the following items as accepted by the College Senate at its meeting on January 5, 2011:

    a. New Courses:

        1) CSIT 165, Programming I **(Exhibit B-1)**
        2) CSIT 166, Programming II **(Exhibit B-2)**
        3) CSIT 167, Computer Organization and Architecture **(Exhibit B-3)**
        4) CSIT 265, Data Structures and Analysis **(Exhibit B-4)**

    b. Revised Certificate Programs:

        1) Certificate of Completion in Information Technology **(Exhibit B-5)**
        2) Certificate of Proficiency in Information Technology **(Exhibit B-6)**

    c. Revised Degree Programs:

        1) A.A.S. Degree in Computer Science – Information Technology **(Exhibit B-7)**
        2) A.A.S. Degree in Computer Science – Game Development and Design **(Exhibit B-8)**
        3) A.S. Degree in Computer Science – Information Systems **(Exhibit B-9)**
        4) A.S. Degree in Computer Science – Information Technology **(Exhibit B-10)**
        5) A.S. Degree in Computer Science **(Exhibit B-11)**

    d. Revised Policy:

        1) Policy #5122, Students, Admission, General Requirements **(Exhibit B-12)**

2. Revised Policies and Procedures:

   a. Policy #3115, Personnel, Academic, Full-Time Faculty Tenure **(Exhibit B-13)**
   b. Policy #3116, Personnel, Academic, Nontenured Faculty Expectations, Conferences, Semi-Annual Conferences, and Performance Criteria **(Exhibit B-14)**
   c. Policy #3118, Personnel, Academic, Promotion **(Exhibit B-15)**

EXHIBIT B-1

OCEAN COUNTY COLLEGE
OFFICIAL COURSE DESCRIPTION
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT 165: Programming I

2. SEMESTER HOURS: 4   CONTACT HOURS: (4 + 0)
                                            Lecture   Lab

3. CATALOG DESCRIPTION:

This course introduces the student to the fundamental techniques used in the development of software applications. The course teaches object-oriented programming concepts and principles using Java™ employing an interactive visual system interface. Students will learn good object-oriented practices through the development of graphic programs and simulations using sound object-oriented practices in an integrated and interactive software development environment. The topics covered include classes, objects, object interaction, algorithms, data types, control structures, one-dimensional arrays, attributes, methods, and messages. Working knowledge of windows required. Open lab time required.

4. PREREQUISITES: None   COREQUISITES: None

5. MAXIMUM CLASS SIZE: 22   COURSE FEE CODE: 2
DIFFERENTIAL FUNDING CATEGORY: B

COURSE TYPE FOR PERKINS REPORTING: _X_ vocational ____ non-vocational

6. JUSTIFICATION

a. Describe the need for this course.

This is a required course in all Computer Science degree programs.
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   ____ 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

c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of an obsolete course which may be reactivated.]

i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comments
Brookdale	Programming I	CISM154	3	Require 3 credit COMP-126 Computer Logic and Design
Middlesex	Introduction to Computer Science Using Java	CSC161	4	

ii. If "None" was inserted, please explain.
iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rutgers – New Brunswick	01:198:111 Introduction to Computer Science 4 credits	Major		
Georgian Court University	CS123 Computer Programming I 4 credits	Major/Minor		

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Monmouth University	CS175 Introduction to Computer Science 4 credits	Major		
Richard Stockton College	CSIS2101 Programming and Problem Solving I 4 credits	Major		
Kean University	CPS1231 Fundamentals of Computer Prog. Science 4 Credits	Major		
Rowan University	CS 04.113 Intro to Object Oriented Prog. 4 credits	Major		

    iv. 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).

    v. If not transferable to any institution, explain.

d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

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

    i. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)

    ii. Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)

    iii. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)

    iv. Seeking to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)

    v. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)

e. Mark with an "x" the General Education goal(s) addressed by this course:

x 1. Communication – Written and Oral   _ 6. Humanistic Perspective
_ 2. Quantitative Knowledge and Skills   _ 7. Historical Perspective
_ 3. Scientific Knowledge and Reasoning   _ 8. Global and Cultural Awareness
x 4. Technological Competency/Info Literacy   _ 9. Ethical Reasoning and Action
_ 5. Society and Human Behavior   x 10. Independent/Critical Thinking

3

7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

    a. Identify the steps required in problem solving.
    b. Discuss object-oriented principles.
    c. Identify the properties of an algorithm.
    d. Differentiate between an algorithm and a computer program.
    e. Identify the basic data types available in Java.
    f. Design, code, test and debug simple programs written in an object-oriented language.
    g. Write programs in Java utilizing the concepts of classes and objects.
    h. Write simple programs that make use of the "is-a" relationship among objects using a class hierarchy.
    i. Explain and write simple programs that use inheritance and polymorphism.
    j. Write programs that use conditional control structures and methods.
    k. Write programs in Java utilizing repetition structures and methods.
    l. Apply the technique of decomposition in program construction.
    m. Differentiate between a void method and one that returns a value.
    n. Write Java programs using one-dimensional arrays.
    o. Design, code and test simple event-driven programs.
    p. Write simple Graphical User Interface (GUI) applications in Java.

8. METHODS OF INSTRUCTION: Class lecture, discussion, demonstrations, lab assignments, programs and online presentations.

9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

10. TENTATIVE TOPICAL OUTLINE
PHASE I – Using a visual tool to learn problem solving with a computer
A) Introduction to a mini-language
    1) Running Simple Programs
    2) The object-oriented paradigm
        a) Objects in the world
        b) State of an object – attributes
        c) The behavior of an object
        d) Sending messages, Signatures
        e) The difference between an object and a class

      f) Return Types

      g) Parameters

   3) Control Structures

   4) Object Interaction

   5) Encapsulation, Inheritance and Polymorphism

B) Problem Solving and Algorithms Using a Mini-language

   1) Problem Solving Techniques

   2) Algorithms

   3) Decomposition

C) Programming by Example

   1) Classes and Objects

   2) The program hierarchy

   3) Simple graphical objects

   4) Common idioms

PHASE II – Learning Java

D) Introduction to Computers and Programming

   1) History of Computers

   2) History of Programming Languages

   3) How to set up the Java Programming Environment

   4) Using an Integrated Development Environment (IDE)

E) Introduction to Java Programming

   1) Command line program

   2) GUI program

   3) The Java Package

   4) Understanding the Java CLASSPATH

F) Data Representation

   1) Data Types

   2) Identifiers

   3) Arithmetic Operations

   4) Variable and Declaration Statements

   5) Data Type Conversions

   6) Assignment Statements

G) Methods

   1) Creating methods

   2) Invoking methods

   3) Methods and the object-oriented paradigm

   4) Mechanics of the method-calling process with respect to object-oriented programming

    5) Passing parameters

    6) Returning Values

H) Selection Structures

    1) Selection Criteria - Relational and Logical Operators

    2) One and Two-way Selection

    3) Multi-way Selection

    4) Compound Conditions

    5) Problem Solving - Data Validation

I) Repetition Structures

    1) Pre-test Loops

    2) Post-test Loops

    3) Counter Loops

    4) Interactive Loops

    5) Nested loops

J) Using common Java Library Classes

    1) Math Class

    2) String Class

    3) Creating a random number generator

    4) Reading Javadoc

K) Step-wise refinement

    1) Top-down design

    2) Software engineering

    3) Case-study

    4) Programming idioms

    5) Patterns

    6) Algorithmic design

L) Arrays

    1) Creating arrays

    2) Examples

    3) Enhanced for loop

M) Creating GUI Applications

    1) Using a graphic library and graphic tools

        a) The coordinate system

        b) The graphics class hierarchy

        c) Learning to use graphic objects

    2) Responding to mouse events

    3) Creating compound objects

11. 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	Average	I	Incomplete
B+	Very Good	D	Below Average	W	Withdrawn
B	Good	F	Failure	R	Audit
C+	Above Average	P	Passing	NC	No Credit

12. NUMBER OF PAPERS AND EXAMINATIONS:

A minimum of 6 minor programs and 5 major programs, a minimum of 5 minor chapter quizzes, exercises or labs, a minimum of 2 exams (including final outcome assessment exam and skills assessment within assigned programs).

APPROVAL PROCESS FOR A REVISED COURSE PROPOSAL (SYLLABUS)

Revision of the Following Items Must Be Sent to the Curriculum Committee	Revision of the Following Items Require No Approval
#1 Course Number & Title	#8 Methods of Instruction
#2 Semester Hours/Contact Hours	#9 Instructional Materials
#3 Catalog Description	#10 Tentative Topic Outline
#4 Prerequisites & Co- requisites	#11 Grade Determinants
#5 Maximum Class Size/Lab Fee Code/ Differential Funding Category	#12 Number of Papers and Examinations
#6 Justification	
#7 Course Objectives	

EXHIBIT B-2

OCEAN COUNTY COLLEGE
OFFICIAL COURSE DESCRIPTION
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT 166: Programming II

2. SEMESTER HOURS: 4   CONTACT HOURS: (4 + 0)
                                                    Lecture   Lab

3. CATALOG DESCRIPTION:

   This course continues the study of software development using the Java™ programming language. The course extends the development and growth of object-oriented paradigms through discussions of patterns, use of Unified Modeling Language (UML), and case studies. Students shall develop proficiency in debugging and test-driven development. Additional topics include files, arrays, collections, enumeration, recursion, sorting and searching. Open lab time required.

4. PREREQUISITES: CSIT165   COREQUISITES: None

5. MAXIMUM CLASS SIZE: 22   COURSE FEE CODE: 2
   DIFFERENTIAL FUNDING CATEGORY: B

   COURSE TYPE FOR PERKINS REPORTING: _X_ vocational ___ non-vocational

6. JUSTIFICATION

   a. Describe the need for this course.

      This is a required course in all Computer Science degree programs.
      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?   __ yes   _X_ no

             If yes, mark with an "x" the appropriate category below.
             ___ Communication ___ Social Science ___ History
             ___ Humanities   ___ Lab Science   ___ Science (Non-Lab)
             ___ Mathematics   __ Technology   ___ Diversity
      ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

     _X_   Program-specific requirement for all Computer Science degree programs.

     ___   Elective

c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of an obsolete course which may be reactivated.]

    i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comments
Brookdale	Programming II	COMP271	3	Require COMP-126 Computer Logic and Design (3 credits)
Middlesex	Object Oriented Programming Using Java	CSC161	4	

    ii. If "None" was inserted, please explain.

    iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rutgers – New Brunswick	Topics covered in First Course	Major		
Georgian Court University	CS126 Computer Programming II 4 credits	Major/Minor		
Richard Stockton College	CSIS2102 Programming and Problem Solving II 4 credits	Major		
Monmouth University	CS176 Introduction to Computer Science II 4 credits	Major		

2

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Kean University	CPS 2231 Computer Organization & Programming 4 credits	Major		
Rowan University	CS 04.114 Object Oriented Programming and Data Abstraction 4 credits	Major		

  iv. 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).

  v. If not transferable to any institution, explain.

 d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

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

  i. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)

  ii. Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)

  iii. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)

  iv. Seeking to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)

  v. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)

 e. Mark with an "x" the General Education goal(s) addressed by this course:

x 1. Communication – Written and Oral   _ 6. Humanistic Perspective
_ 2. Quantitative Knowledge and Skills   _ 7. Historical Perspective
_ 3. Scientific Knowledge and Reasoning   _ 8. Global and Cultural Awareness
x 4. Technological Competency/Info Literacy   _ 9. Ethical Reasoning and Action
_ 5. Society and Human Behavior   x 10. Independent/Critical Thinking

7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

    a. Discuss Object-Oriented concepts
    b. Demonstrate how to read and create UML diagrams
    c. Explain and use Javadoc documentation
    d. Write programs that use Exception Handling capabilities
    e. Demonstrate how to debug programs using Integrated Development Environment (IDE)
    f. Define Inheritance, Polymorphism, Virtual Classes and Interfaces
    g. Write programs that use Inheritance, Polymorphism, Virtual Classes and Interfaces
    h. Write programs that use file Input/Output (I/O) facilities
    i. Write programs that use unordered and ordered lists
    j. Write programs that use tables
    k. Write programs that use sequential and binary search algorithms
    l. Write programs that use common quadratic sorting algorithms
    m. Write programs that use Collections Classes
    n. Describe generics and enumeration types
    o. Examine programs that use recursion

8. METHODS OF INSTRUCTION: Class lecture, discussion, demonstrations, lab assignments, programs and online presentations.

9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

10. TENTATIVE TOPICAL OUTLINE
    A) Review of Fundamental Language Constructs
    B) UML
        1) Reading and creating structure diagrams - Class Diagrams, Component Diagrams and Object Diagrams
        2) Reading and creating behavior diagrams – Activity Diagrams and Use Case Diagrams
    C) Javadoc
        1) Reading and using Javadoc for new and unfamiliar classes
        2) Creating Javadoc to document programs

D) Object-Oriented Details
   1) Object Interaction
   2) Inheritance and Polymorphism
   3) Virtual classes and Interfaces
E) Debugging and Error Handling
   1) How to use the debugging facility
   2) Using the try/catch exception handling constructs
   3) Creating and catching user-created Exception classes
F) Files and Streams
   1) Creating and processing Sequential-Access Files
   2) Creating and reading objects
   3) Serialization of Objects
G) Array Processing
   1) Text Processing
   2) Tables
   3) Unordered lists
   4) Ordered lists
H) Searching and Sorting
   1) Sequential and binary search algorithms
   2) Quadratic sorting algorithms
I) Collections
   1) Overview
   2) Methods
   3) Interface
J) Recursion
   1) Concepts and Implementation
   2) Examining classic examples: factorial, Fibonacci, Towers of Hanoi

11. 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	Average	I	Incomplete
B+	Very Good	D	Below Average	W	Withdrawn
B	Good	F	Failure	R	Audit
C+	Above Average	P	Passing	NC	No Credit

12. NUMBER OF PAPERS AND EXAMINATIONS:

A minimum of 6 minor programs and 5 major programs, a minimum of 5 minor chapter quizzes, exercises or labs, a minimum of 2 exams (including final outcome assessment exam and skills assessment within assigned programs).

APPROVAL PROCESS FOR A REVISED COURSE PROPOSAL (SYLLABUS)

Revision of the Following Items Must Be Sent to the Curriculum Committee	Revision of the Following Items Require No Approval
#1 Course Number & Title	#8 Methods of Instruction
#2 Semester Hours/Contact Hours	#9 Instructional Materials
#3 Catalog Description	#10 Tentative Topic Outline
#4 Prerequisites & Co- requisites	#11 Grade Determinants
#5 Maximum Class Size/Lab Fee Code/ Differential Funding Category	#12 Number of Papers and Examinations
#6 Justification	
#7 Course Objectives	

EXHIBIT B-3

OCEAN COUNTY COLLEGE
OFFICIAL COURSE DESCRIPTION
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT 176: Computer Organization & Architecture

2. SEMESTER HOURS: 3   CONTACT HOURS: (3 + 0)
                                               Lecture Lab

3. CATALOG DESCRIPTION:

This course examines the structure and functions of the components comprising a contemporary computer system. The student will learn the fundamental elements in a computer system including the processor, memory, and interfaces to external components and systems. Additional topics include digital circuits, Boolean algebra, addressing modes, input/output and arithmetic. The course will use an assembly language to strengthen and reinforce the concepts. Open lab time required.

4. PREREQUISITES: CSIT165   COREQUISITES: None

5. MAXIMUM CLASS SIZE: 22   COURSE FEE CODE: 2
DIFFERENTIAL FUNDING CATEGORY: B

COURSE TYPE FOR PERKINS REPORTING: X_ vocational   ___ non-vocational

6. JUSTIFICATION

a. Describe the need for this course.

This is a required course in all Computer Science AS and AAS degrees.

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?   ___ yes   _x_ no

If yes, mark with an "x" the appropriate category below.
___ Communication	___ Social Science	___ History
___ Humanities	___ Lab Science	___ Science (Non-Lab)
___ Mathematics	___ Technology	___ Diversity

ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

    <u>x</u>   Program-specific requirement for the following degree program(s): AS Computer Science (including program options) and AAS Computer Science/Information Technology

    ____   Elective

c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of an obsolete course which may be reactivated.]

i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comments
Brookdale	Computer Logic and Design	COMP-126	3	
Middlesex	Computer Architecture & Assembly Language I	CSC-233	4	

ii. If "None" was inserted, please explain.
iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rutgers – New Brunswick	01:198:211 Computer Architecture 4 credits	Major		
Georgian Court University	CS225 Computer Architecture 3 credits	Major/Minor		
Richard Stockton College	CSIS3250 Computer Organization 4 credits	Major		

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rowan University	CS 06.205 Computer Organization 3 credits	Major		
Monmouth University	CS286 Computer Architecture I 3 credits	Major		
Kean University	CPS 2390 Organization & Architecture 3 credits	Major		

    iv. 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).

    v. If not transferable to any institution, explain.

d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

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

    i. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)

    ii. Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)

    iii. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)

    iv. Seeking to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)

    v. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)

e. Mark with an "x" the General Education goal(s) addressed by this course:

x 1. Communication – Written and Oral   _ 6. Humanistic Perspective
_ 2. Quantitative Knowledge and Skills   _ 7. Historical Perspective
_ 3. Scientific Knowledge and Reasoning   _ 8. Global and Cultural Awareness
x 4. Technological Competency/Info Literacy   _ 9. Ethical Reasoning and Action
_ 5. Society and Human Behavior   x 10. Independent/Critical Thinking

7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

   a. Discuss the history of the digital computer
   b. Use binary and hexadecimal number systems
   c. Demonstrate the effects of Boolean and logical operators
   d. Determine the output of digital logic circuits
   e. Design simple circuits using digital logic gates
   f. Describe the representation of numeric data
   g. Describe the concept of an instruction set architecture
   h. Write programs in Assembly Language that use various classes of machine instructions
   i. Write programs in Assembly Language that use subroutines
   j. Explain Input/Output (I/O) fundamentals: handshaking and buffering
   k. Explain the operation of interrupts
   l. Explain addressing modes

8. METHODS OF INSTRUCTION: Class lecture, discussion, demonstrations, lab assignments, programs and online presentations.

9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

10. TENTATIVE TOPICAL OUTLINE:

   A) History of Computer Architectures
      1) Languages and Virtual machines
      2) Evolution of computers
   B) Data Representation
      1) Data types
      2) Number systems
      3) Mathematical and logical operations
   C) Digital Logic
      1) Logic gates
      2) Boolean algebra
      3) Logic circuits
      4) Digital logic simulators

4

D) Computer Systems
  1) Processors
  2) Memory
  3) Storage
  4) Input/Output
  5) Interrupts
E) Assembly Language
  1) Overview of architecture of different machines
  2) Data type representation on different machines
  3) Instruction Formats
  4) Integral operations
  5) Addressing modes
  6) The use of carry, borrow and overflow flags
  7) Creating assembly language programs
F) Assembly Language – Advanced Concepts
  1) Subroutines
  2) Parameter passing
  3) Recursion

11. 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	Average	I	Incomplete
B+	Very Good	D	Below Average	W	Withdrawn
B	Good	F	Failure	R	Audit
C+	Above Average	P	Passing	NC	No Credit

12. NUMBER OF PAPERS AND EXAMINATIONS:

A minimum of 5 major programs, a minimum of 6 chapter exercises, quizzes or labs, and a minimum of 2 exams and/or a final outcomes assessment project.

APPROVAL PROCESS FOR A REVISED COURSE PROPOSAL (SYLLABUS)

Revision of the Following Items Must Be Sent to the Curriculum Committee	Revision of the Following Items Require No Approval
#1 Course Number & Title	#8 Methods of Instruction
#2 Semester Hours/Contact Hours	#9 Instructional Materials
#3 Catalog Description	#10 Tentative Topic Outline
#4 Prerequisites & Co- requisites	#11 Grade Determinants
#5 Maximum Class Size/Lab Fee Code/ Differential Funding Category	#12 Number of Papers and Examinations
#6 Justification	
#7 Course Objectives	

EXHIBIT B-4

OCEAN COUNTY COLLEGE
OFFICIAL COURSE DESCRIPTION
SCHOOL OF MATH, SCIENCE AND TECHNOLOGY

1. COURSE NUMBER AND TITLE: CSIT 265: Data Structures and Analysis

2. SEMESTER HOURS: 4   CONTACT HOURS: (4 + 0)
                                              Lecture   Lab

3. CATALOG DESCRIPTION:

This course examines the representation, implementation and application of data structures and their use in programs developed using the object-oriented paradigm. The data structures include lists, stacks, queues, dequeues, vectors, trees and graphs. Additional topics include array and linked list implementation, recursion, binary search tree, sequences and dictionaries. Algorithms are developed to operate upon these structures. All assignments will be programmed in a modern object oriented programming language (Java™). Open lab time required.

4. PREREQUISITES: CSIT166   COREQUISITES: None

5. MAXIMUM CLASS SIZE: 22   COURSE FEE CODE: 2
   DIFFERENTIAL FUNDING CATEGORY: B

   COURSE TYPE FOR PERKINS REPORTING: X vocational ____ non-vocational

6. JUSTIFICATION

   a. Describe the need for this course.

      This is a required course in all Computer Science AS degrees and an elective in the Computer Science/Information Technology AAS degree.

   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?   ____ yes   X no

         If yes, mark with an "x" the appropriate category below.
         ____ Communication ____ Social Science ____ History
         ____ Humanities   ____ Lab Science   ____ Science (Non-Lab)
         ____ Mathematics   ____ Technology   ____ Diversity

ii. If the course does not satisfy a general education requirement, which of the following does it satisfy:

    _X_   Program-specific requirement for the AS Computer Science (including program options) and an elective
             AAS Computer Science/Information Technology
    __   Elective

c. Related courses in other institutions:

[NOTE: The two charts below need to be completed when submitting a new course proposal. They do not need to be completed for most course revisions, unless an Official Course Description is so old that the course's transferability needs to be reconsidered, as in the case of an obsolete course which may be reactivated.]

i. List any comparable course(s) by completing the table below. Insert "None" if there are no comparable courses.

Comparable Courses at NJ Community Colleges				
Institution	Course Title	Course Number	Number of Credits	Comments
Brookdale	Data Structures	COMP-228	3	
Middlesex	Data Structures in Java	CSC-236	4	

ii. If "None" was inserted, please explain.
iii. Complete the table below. The institutions listed comprise the top six institutions queried on NJTransfer by OCC students.

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rutgers – New Brunswick	01:198:112 Data Structure 4 credits	Major		
Georgian Court University	CS227 Data Structures 3 credits	Minor		
Richard Stockton College	CSIS3103 Data Structures 4 credits	Major		
Monmouth University	CS305 Data Structures and Algorithms 4.0 credits	Major		
Kean University	CPS 2232 Data Structures & Algorithm Analysis 4 credits	Major		

Transferability of Proposed Course				
Institution	Course Code, Title, and Credits	Transfer Category (Major, General Ed., or Elective)	Will NOT Transfer (Place an "x" in box)	Unable to Determine Status (Place "U" in box)
Rowan University	CS 04.222 Data Structures and Algorithms 4 credits	Major		

  iv. 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).
  v. If not transferable to any institution, explain.

d. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College

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

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

e. Mark with an "x" the General Education goal(s) addressed by this course:

x 1. Communication – Written and Oral
_ 2. Quantitative Knowledge and Skills
_ 3. Scientific Knowledge and Reasoning
x 4. Technological Competency/Info Literacy
_ 5. Society and Human Behavior

_ 6. Humanistic Perspective
_ 7. Historical Perspective
_ 8. Global and Cultural Awareness
_ 9. Ethical Reasoning and Action
x 10. Independent/Critical Thinking

7. SPECIFIC COURSE LEARNING OBJECTIVES:

Students who successfully complete this course will be able to:

  a. Define and use the Big-O notation in the analysis of algorithms
  b. Describe the core elements that encompass the collections framework
  c. Construct and implement the linked list class
  d. Construct and implement circular and doubly linked classes
  e. Construct and implement the stack class
  f. Construct and implement the queue and priority queue classes

    g. Define and evaluate recursive algorithms

    h. Construct and implement search and hash algorithms

    i. Construct and implement both internal and external sorting algorithms

    j. Analyze the various sorting algorithms

    k. Construct and implement trees and generic trees

    l. Construct and implement a binary search tree

    m. Construct and implement the Adelson, Veiskii and Landis (AVL) tree class

    n. Construct and implement the graph class

8. METHODS OF INSTRUCTION: Class lecture, discussion, demonstrations, lab assignments, programs and online presentations.

9. INSTRUCTIONAL MATERIALS / TECHNOLOGY NEEDS / HUMAN RESOURCE NEEDS (PRESENTLY EMPLOYED VS. NEW FACULTY)

Appropriate textbooks will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials, College Portal and/or College Distance Learning Platform and/or Textbook or Instructor Website.

10. TENTATIVE TOPICAL OUTLINE:

  A) Analysis

    1) Algorithms

    2) Big-O Notation

        a) Constant Function

        b) Logarithmic Function

        c) Linear Function

        d) Log Function

        e) Quadratic Function

        f) Cubic Function

        g) Exponential Functions

    3) Best-Case and Worst-Case Running Times

  B) The base data structures, abstraction and ADTs

    1) Definition

    2) Array Implementation

    3) Multidimensional Arrays

    4) Collection Framework

    5) Application

  C) Linked Lists

    1) ADT

    2) Dynamic

    3) Singly and Doubly Linked Lists

       4) Circular Linked Lists

       5) Multiple Linked Lists

       6) Application

   D) Stacks

       1) ADT

       2) Implementing a Stack using an Array

       3) Implementing a Stack using a generic linked list

       4) Application

   E) Queues

       1) ADT

       2) Circular Queues

       3) Priority Queues

       4) Application

   F) Recursion

       1) Implementation

       2) Evaluation

       3) Backtracking Algorithms

       4) Parsing Algorithms

   G) Trees

       1) General Trees

       2) Tree Traversal Algorithms

       3) Binary Trees

       4) Application

   H) Maps and Dictionaries

       1) Definition and implementation

       2) Hash tables

       3) Dictionary ADT

   I) Search Trees

       1) Definition and Implementation

       2) Binary Search Trees

       3) Infix, Prefix and Postfix

       4) AVL Trees

       5) Splay Trees

   J) Sorting and Sets

       1) Merge-Sort

       2) Quick-Sort

       3) Bucket-Sort and Radix-Sort

       4) Comparing Sorting Algorithms

K) Graphs
1) Definition
2) Data Structures for Graphics
3) Graph Traversal
4) Directed Graphs
5) Weighted Graphs
6) Algorithms involving graphs
   a) Shortest Path
   b) Minimum Spanning Tree
7) Applications

11. 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	Average	I	Incomplete
B+	Very Good	D	Below Average	W	Withdrawn
B	Good	F	Failure	R	Audit
C+	Above Average	P	Passing	NC	No Credit

12. NUMBER OF PAPERS AND EXAMINATIONS:

A minimum of 5 major programs, a minimum of 6 chapter exercises, quizzes or labs, and a minimum of 2 exams and/or a third party assessment exam.

APPROVAL PROCESS FOR A REVISED COURSE PROPOSAL (SYLLABUS)

Revision of the Following Items Must Be Sent to the Curriculum Committee	Revision of the Following Items Require No Approval
#1 Course Number & Title	#8 Methods of Instruction
#2 Semester Hours/Contact Hours	#9 Instructional Materials
#3 Catalog Description	#10 Tentative Topic Outline
#4 Prerequisites & Co- requisites	#11 Grade Determinants
#5 Maximum Class Size/Lab Fee Code/ Differential Funding Category	#12 Number of Papers and Examinations
#6 Justification	
#7 Course Objectives	

EXHIBIT B-5

INFORMATION TECHNOLOGY – Certificate of Completion – *Effective Catalog Year 2011-2012*

This Computer Science/Information Technology certificate program provides a basic core of hardware and software courses with 6 additional CSIT electives to enable students with a specific retraining need to meet that goal within a limited time period. A certificate will be awarded to students completing the courses with a cumulative average of 2.0 or higher.

~~CSIT 160 or~~	~~Introduction to Visual Basic or~~	~~3 s.h.~~
~~CSIT 171~~	~~Computer Programming I (C++)~~	
~~CSIT 140~~	~~Introduction to Computer Organization~~	~~3 s.h.~~
~~CSIT 161 or~~	~~Advanced Visual Basic or~~	~~3 s.h.~~
~~CSIT 172~~	~~Computer Programming II (C++)~~	
CSIT 165	*Programming I*	*4 cr.*
CSIT 166	*Programming II*	*4 cr.*
CSIT 213	Database Management	3 ~~s.h.~~ *cr.*
CSIT 115 or higher	Computer Science Electives	6 ~~s.h.~~ *cr.*
		~~18 s.h.~~ *17 cr.*

TOTAL CREDITS ~~18~~ *17*

EXHIBIT B-6

INFORMATION TECHNOLOGY - Certificate of Proficiency – *Effective Catalog Year 2011-2012*

This Computer Science/Information Technology certificate program is designed primarily for the student in the work environment seeking to become computer literate through a non-degree course of study. A certificate will be awarded to students completing the courses with a cumulative average of 2.0 or higher. This curriculum provides a basic core of hardware and software courses with ~~15~~ *12* additional CSIT elective courses designed to address needs in preparing the student for advancement in the work environment or to the next level of computer science study.

~~CSIT 160 or~~	~~Introduction to Visual Basic or~~	~~3 s.h.~~
~~CSIT 171~~	~~Computer Programming I (C++)~~	
~~CSIT 140~~	~~Introduction to Computer Organization~~	~~3 s.h.~~
CSIT 165	*Programming I*	*4 cr.*
CSIT 166	*Programming II*	*4 cr.*
CSIT 176	*Computer Organization & Architecture*	*3 cr.*
MATH 151 or	A Survey of Mathematics or	3 ~~s.h.~~*cr*
MATH 171 or	Finite Mathematics or	
MATH 181 or higher *than*	Introduction to Probability	
MATH 181		
~~CSIT 161 or~~	~~Advanced Visual Basic or~~	~~3 s.h.~~
~~CSIT 172~~	~~Computer Programming II~~	
CSIT 213	Database Management	3 ~~s.h.~~ *cr.*
ENGL 151	English I	3 ~~s.h.~~ *cr.*
	200 Level Computer Science Elective	3 ~~s.h.~~ *cr.*
CSIT 115 or higher	Computer Science Electives	~~12 s.h.~~ *9 cr.*

~~33 s.h.~~ *32 cr.*

TOTAL CREDITS ~~33~~ *32*

EXHIBIT B-7

COMPUTER SCIENCE/INFORMATION TECHNOLOGY - A.A.S. Degree Program –
Effective Catalog Year 2011-2012

This career program prepares students for entry-level positions in a multitude of computer-related jobs. Both computer scientists and information technologists need a balance of software and hardware applications with specific courses emphasizing effective problem solving. The software development process, (composing and coordinating component of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to prepare the student to meet the future needs of integration, design, deployment, and management of computing, resources and services. A graduate of the program will have a firm understanding of modern programming practices and related skills in computer information technology. The department recommends the following minimal criteria for prospective students in the Computer Science/Information Technology program:

1. High school diploma or equivalent
2. Cumulative high school grade point average of C or above
3. Ranked in top half of high school graduating class
4. No developmental studies requirement

FIRST SEMESTER

~~CSIT 160 or~~	~~Introduction to Visual Basic or~~	~~3 cr.~~
~~CSIT 171~~	~~Computer Programming I (C++)~~	
~~CSIT 140~~	~~Introduction to Computer Organization~~	~~3 cr.~~
CSIT 165	*Programming I*	*4 cr.*
ENGL 151	English I	3 cr.
MATH 151 or	A Survey of Mathematics or	3 cr.
MATH 171 or	Finite Mathematics or	
MATH 181 or higher	Introduction to Probability	
	Humanities Gen Ed Requirement	*3 cr.*
	Social Science Gen Ed Requirement	<u>3 cr.</u>
		~~15~~ *16 cr.*

SECOND SEMESTER

~~CSIT 161 or~~	~~Advanced Visual Basic or~~	~~3 cr.~~
~~CSIT 172~~	~~Computer Programming II (C++)~~	
CSIT 166	*Programming II*	*4 cr.*
CSIT 176	*Computer Organization & Architecture*	*3 cr.*
ENGL 152	English II	3 cr.
	~~Lab Science Gen Ed Requirement~~	~~4 cr.~~
	Computer Science Electives*	<u>6 cr.</u>
		16 cr.

THIRD SEMESTER

	Computer Science Electives*	6 cr.
	Lab Science Gen Ed Requirement	*4 cr.*
COMM 154	Fundamentals of Public Speaking	3 cr.
	Social Science or Humanities Gen Ed Requirement ~~(to meet required 64 cr.)~~	~~6 cr.~~ *3 cr.*
		~~15 cr.~~ *16 cr.*

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FOURTH SEMESTER

CSIT 213	Database Management	3 cr.
_____	Computer Science Electives*	6 cr.
_____	Business Studies Elective	3 cr.
_____	OCC Requirement: Any course from the List of Approved General Education Courses or ACAD 155 or any HEHP Course	3 cr.
_____	*Elective (to meet required 64 cr.)*	*1 cr.*
~~INTR 290??~~	~~Internship I**~~	~~3 cr.~~
		~~18 cr.~~ *16 cr.*

TOTAL CREDITS ~~64 65~~ *64*

Note: cr. (credit) = semester credit hour
Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.

*Any CSIT course (CSIT 115 or higher) including those recommended in the areas of interest below. Students are not required to select a specific area of interest to complete this degree.
**Or Department Approved Course

SUGGESTED COMPUTER SCIENCE ELECTIVES

CSIT 115	Introduction to Computer Game Development	3 cr.
CSIT 123	Integrated Office Software	3 cr.
CSIT 126	Intermediate Spreadsheets and Database	3 cr.
CSIT 130	Web Site Design	3 cr.
CSIT 131	Multimedia for the Web	3 cr.
CSIT 133	Web Development Fundamentals	3 cr.
CSIT 144	UNIX	3 cr.
CSIT 160	*Introduction to Visual Basic*	*3 cr.*
CSIT 161	*Advanced Visual Basic*	*3 cr.*
CSIT 173	Game Programming with OpenGL	3 cr.
CSIT 174	Computer Systems	3 cr.
CSIT 184	Networking Essentials	3 cr.
CSIT 212	Systems Analysis	3 cr.
CSIT 231	Dynamic Flash and Scripting Programming Elements for Web Pages	3 cr.
CSIT 232	Server Programming for the Web	3 cr.
CSIT 260	Application Programming in C++	3 cr.
CSIT 265	*Data Structures Analysis*	*4 cr.*
~~CSIT 270~~	~~Programming in Java~~	~~3 cr.~~
~~CSIT 271~~	~~Data Structures and Algorithm Analysis~~	~~3 cr.~~
CSIT 281	Network Management	3 cr.

SUGGESTED BUSINESS STUDIES ELECTIVES

ACCT 161	Principles of Accounting	3 cr.
BUSN 131	Introduction to Business Administration	3 cr.
BUSN 134	Principles of Marketing	3 cr.

~~SUGGESTED FINE ARTS ELECTIVE~~

~~ARTS 159~~	~~Visual Literacy~~	~~3 cr.~~

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Board of Trustees Approval Date: May 29, 2007
Board of Trustees Approval Date: November 5, 2007
Board of Trustees Approval Date: March 7, 2008
Board of Trustees Approval Date: December 1, 2008
Board of Trustees Approval Date: December 6, 2010

EXHIBIT B-8

COMPUTER SCIENCE - A.S. Degree Program – Game Development and Design Option -
Effective Catalog Year 2011-12

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of Arts degree in computer game design. The curriculum follows the model provided by the Association of Computing Machinery and the Institute of Electrical and Electronics Engineers ,Inc. Computer Society to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. Effective problem solving is central to good game design and development. The software development process (composing and coordinating components of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to prepare the student to work as a team and solve complex computer programming problems. The department recommends the following minimal criteria for prospective students in the Computer Game Development and Design option:

1. High school diploma or equivalent
2. Cumulative high school grade point average of C or above
3. Ranked in top half of high school graduating class
4. No developmental studies requirement

FIRST SEMESTER

~~CSIT 171~~	~~Computer Programming I~~	~~3 cr.~~
~~CSIT 140~~	~~Introduction to Computer Organization~~	~~3 cr.~~
CSIT 165	*Programming I*	*4 cr.*
ENGL 151	English I	3 cr.
_____	*Humanities Gen Ed Requirement*	*3 cr.*
_____	Social Science Gen Ed Requirement	3 cr.
CSIT 115	Introduction To Computer Game Development	3 cr.
		~~15 cr.~~ *16 cr.*

SECOND SEMESTER

~~CSIT 172~~	~~Computer Programming II~~	~~3 cr.~~
CSIT 166	*Programming II*	*4 cr.*
CSIT 176	*Computer Organization & Architecture*	*3 cr.*
ENGL 152	English II	3 cr.
~~ARTS 159~~	~~Visual Literacy~~	~~3 cr.~~
~~BUSN 134 or~~	~~Principles of Marketing or~~	
~~BUSN 271~~	~~Principles of Management~~	~~3 cr.~~
_____	*Humanities Gen Ed Requirement*	*3 cr.*
_____	Social Science Gen Ed Requirement	3 cr.
		~~15 cr.~~ *16 cr.*

THIRD SEMESTER

~~CSIT 271~~	~~Data Structures and Algorithm Analysis~~	~~3 cr.~~
CSIT 265	*Data Structures and Analysis*	*4 cr.*
MATH 265	Calculus I	4 cr.
~~_____~~	~~Social Science or Humanities~~	
	~~Gen Ed Requirement (to meet required 64 cr.)~~	~~3-4 cr.~~
BIOL 161, or CHEM 181 or PHYS 281	Lab Science Gen Ed Requirement	4 cr.
~~_____~~	~~OCC Requirement: Any course from the~~	~~3 cr.~~
~~_____~~	~~List of Approved General Education~~	
~~_____~~	~~Courses or ACAD 155 or any HEHP~~	
~~_____~~	~~Course~~	
BUSN 134 or	*Principles of Marketing or*	
BUSN 271	*Principles of Management*	*3 cr.*
		~~17-18 cr.~~ *15 cr.*

FOURTH SEMESTER

CSIT 213	Database Management	3 cr.
CSIT 173	Game Programming with Open GL	3 cr.
_____	*OCC Requirement: Any course from the List of Approved General Education Courses or ACAD 155 or any HEHP Course*	*3 cr.*
BIOL 162, or	Lab Science Gen Ed Requirement	
CHEM 182 or	(continue original science sequence)	4 cr.
PHYS 282		
_____	~~Humanities Gen Ed Requirement~~	~~3 cr.~~
MATH 266	Calculus II	4 cr.
		17 cr.

TOTAL CREDITS 64

Note: cr. (credit) = semester credit hour
Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.

Board of Trustees Approval Date: August 28, 2006
Board of Trustees Approval Date: September 24, 2007
Board of Trustees Approval Date: December 1, 2008

EXHIBIT B-9

COMPUTER SCIENCE - A.S. Degree Program - Information Systems Option – *Effective Catalog Year 2011-12*

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of Arts degree in computer information systems. The curriculum follows the model provided by the Association of Computing Machinery, Computing Machinery, the Institute of Electrical and Electronics Engineers, Inc. Computer Society and the Association for Information Systems professional society in order to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. Effective problem solving is central to good development of applications of computer and communications technology; this curriculum provides the necessary foundation. The software development process (composing and coordinating components of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to address these needs in preparing the student for a future in computer applications oriented fields that combine computing, developing applications and understanding how people, organizations, and society use them. The department recommends the following minimal criteria for prospective students in the Information Systems option:

1. High school diploma or equivalent,
2. Cumulative high school grade point average of C or above,
3. Ranked in top half of high school graduating class,
4. No developmental studies requirement

FIRST SEMESTER

~~CSIT 171~~	~~Computer Programming I~~	~~3 cr.~~
~~CSIT 140~~	~~Introduction to Computer Organization~~	~~3 cr.~~
CSIT 165	*Programming I*	*4 cr.*
MATH 265	Calculus I	4 cr.
ENGL 151	English I	3 cr.
_____	Social Science Gen Ed Requirement	3 cr.
_____	*Humanities Gen Ed Requirement*	*3 cr.*
		~~16 cr.~~ *17 cr.*

SECOND SEMESTER

~~CSIT 172~~	~~Computer Programming II~~	~~3 cr.~~
~~CSIT 115 or higher~~	~~Computer Science Elective~~	~~3 cr.~~
CSIT 166	*Programming II*	*4 cr.*
CSIT 176	*Computer Organization & Architecture*	*3 cr.*
MATH 266	Calculus II	4 cr.
ENGL 152	English II	3 cr.
_____	Social Science Gen Ed Requirement	3 cr.
		~~16 cr.~~ *17 cr.*

THIRD SEMESTER

~~CSIT 271~~	~~Data Structures and Algorithm Analysis~~	~~3 cr.~~
CSIT 265	*Data Structures and Analysis*	*4 cr.*
MATH 267	Calculus III	4 cr.
BIOL 161, or CHEM 181 or PHYS 281	Lab Science Gen Ed Requirement	4 cr.
_____	Humanities Gen Ed Requirement	3 cr.
_____	~~Elective~~	~~3 cr.~~
		~~17 cr.~~ *15 cr.*

FOURTH SEMESTER

CSIT 213	Database Management	3 cr.
MATH 270	Discrete Mathematics	3 cr.

BIOL 162 or
  CHEM 182 or
  PHYS 282
	Lab Science Gen Ed Requirement
	  (continue original science sequence)
		4 cr.

_____	OCC Requirement: Any course from the List of Approved General Education Courses or ACAD 155 or any HEHP	3 cr.
_____	*Elective*	*2 cr.*
_____	~~Humanities Gen Ed Requirement~~	~~3 cr.~~
		~~16~~ *15* cr.

TOTAL CREDITS ~~65~~ *64*

Kean Ocean students need COMM154 as a general elective

Note: cr. (credit) = semester credit hour
Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.

Board of Trustees Approval Date: May 4, 2004
Board of Trustees Approval Date: September 24, 2007
Board of Trustees Approval Date: December 1, 2008

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EXHIBIT B-10

COMPUTER SCIENCE - A.S. Degree Program – Information Technology Option –*Effective Catalog Year 2011-2012*

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of Arts degree in computer information systems. The curriculum follows the model provided by the Association of Computing Machinery and the Institute of Electrical and Electronics Engineers, Inc. Computer Society in order to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. The field of information technology is interdisciplinary, with applications to all aspects of the economy. Information technologists need a balance of software and hardware applications with concentration in specific courses. Effective problem solving is central to this degree; this curriculum provides the necessary foundation. The software development process (composing and coordinating components of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to prepare the student to meet the future needs of integration, design, deployment and management of computing, resources and services. The department recommends the following minimal criteria for prospective students in the Information Technology option:

1. High school diploma or equivalent,
2. Cumulative high school grade point average of C or above,
3. Ranked in top half of high school graduating class,
4. No developmental studies requirement

FIRST SEMESTER

~~CSIT 171~~	~~Computer Programming I~~	~~3 cr.~~
~~CSIT 140~~	~~Introduction to Computer Organization~~	~~3 cr.~~
CSIT 165	*Programming I*	*4 cr.*
~~MATH 265~~	~~Calculus I~~	~~4 cr.~~
ENGL 151	English I	3 cr.
_____	Social Science Gen Ed Requirement	3 cr.
_____	*OCC Requirement: Any course from the List of Approved General Education Courses or ACAD 155 or any HEHP Course*	*3 cr.*
_____	*Humanities Gen Ed Requirement*	*3 cr.*
		16 cr.

SECOND SEMESTER

~~CSIT 172~~	~~Computer Programming II~~	~~3 cr.~~
~~CSIT 115 or higher~~	~~Computer Science Elective~~	~~3 cr.~~
~~MATH 266~~	~~Calculus II~~	~~4 cr.~~
CSIT 166	*Programming II*	*4 cr.*
CSIT 176	*Computer Organization & Architecture*	*3 cr.*
MATH 265	*Calculus I*	*4 cr.*
ENGL 152	English II	3 cr.
_____	Social Science Gen Ed Requirement	3 cr.
		~~16 cr.~~ *17 cr.*

THIRD SEMESTER

~~CSIT 271~~	~~Data Structures and Algorithm Analysis~~	~~3 cr.~~
CSIT 265	*Data Structures and Algorithm Analysis*	*4 cr.*
MATH 266	*Calculus II*	*4 cr.*
~~=======~~	~~Elective *~~	~~3 cr.~~
BIOL 161, CHEM 181 or PHYS 281	Lab Science Gen Ed Requirement	4 cr.
_____	Humanities Gen Ed Requirement	3 cr.
~~_____~~	~~Elective (to meet required 64 cr.)*~~	~~3 cr.~~
		~~16 cr.~~ *15 cr.*

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FOURTH SEMESTER

CSIT 213	Database Management	3 cr.
~~_____~~	~~Elective*~~	~~3 cr.~~
_____	*Elective (to meet required 64 cr.)**	*9 cr.*
BIOL 162, CHEM 182 or PHYS 282	Lab Science Gen Ed (continue original science sequence)	4 cr.
~~_____~~	~~Humanities Gen Ed Requirement~~	~~3 cr.~~
~~_____~~	~~OCC Requirement: Any course from the~~	~~3 cr.~~
~~_____~~	~~List of Approved General Education~~	
~~_____~~	~~Courses or ACAD 155 or any HEHP~~	
~~_____~~	~~Course~~	
		16 cr.

TOTAL CREDITS 64

Kean Ocean students need COMM154 and MATH270 as general electives
* Students should select electives relevant to the Bachelor's Degree concentration
Note: cr. (credit) = semester credit hour
Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.
Note: cr. (credit) = semester credit hour
Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.

Board of Trustees Approval Date: May 4, 2004
Board of Trustees Approval Date: September 24, 2007
Board of Trustees Approval Date: December 1, 2008

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EXHIBIT B-11

COMPUTER SCIENCE - A.S. Degree Program – *Effective Catalog Year 2011-12*

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of Arts degree in computer science. The curriculum follows the model provided by the Association of Computing Machinery and the Institute of Electrical and Electronics Engineers, Inc. Computer Society in order to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. Effective problem solving is central to good programming; this curriculum provides the necessary foundation. The software development process (composing and coordinating components of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to address these needs in preparing the student for a future in computer science. The department recommends the following minimal criteria for prospective students in the Computer Science A.S. program:

1. High school diploma or equivalent
2. Cumulative high school grade point average of C or above
3. Ranked in top half of high school graduating class
4. No developmental studies requirement

FIRST SEMESTER

~~CSIT 171~~	~~Computer Programming I~~	~~3 cr.~~
~~CSIT 140~~	~~Introduction to Computer Organization~~	~~3 cr.~~
CSIT 165	*Programming I*	*4 cr.*
MATH 265	Calculus I	4 cr.
ENGL 151	English I	3 cr.
_____	Social Science Gen Ed Requirement	3 cr.
_____	*Humanities Gen Ed Requirement*	*3 cr.*
		~~16 cr.~~ *17 cr.*

SECOND SEMESTER

~~CSIT 172~~	~~Computer Programming II~~	~~3 cr.~~
~~CSIT 174~~	~~Computer Systems~~	~~3 cr.~~
CSIT 166	*Programming II*	*4 cr.*
CSIT 176	*Computer Organization & Architecture*	*3 cr.*
MATH 266	Calculus II	4 cr.
ENGL 152	English II	3 cr.
_____	Social Science Gen Ed Requirement	3 cr.
		~~16 cr.~~ *17 cr.*

THIRD SEMESTER

~~CSIT 271~~	~~Data Structures and Algorithm Analysis~~	~~3 cr.~~
CSIT 265	*Data Structures and Analysis*	*4 cr.*
MATH 267	Calculus III	4 cr.
PHYS 281	General Physics I	4 cr.
_____	Humanities Gen Ed Requirement	3 cr.
_____	~~Elective~~	~~3 cr.~~
		~~17 cr.~~ *15*

FOURTH SEMESTER

_____	Computer Science Elective (CSIT 126 or higher)	3 cr.
MATH 270	Discrete Mathematics	3 cr.
PHYS 282	General Physics II	4.cr.
_____	~~Humanities Gen Ed Requirement~~	~~3 cr.~~
_____	*Elective*	*2 cr.*
_____	OCC Requirement: Any course from the List of Approved General Education Courses or ACAD 155 or any HEHP Course	3 cr.

~~16~~ *15* cr.

TOTAL CREDITS 64 ~~65~~

Kean Ocean students need COMM154 as general electives

Note: cr. (credit) = semester credit hour
Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.

Board of Trustees Approval Date: September 24, 2007
Board of Trustees Approval Date: December 1, 2008

EXHIBIT B-12

<u>POLICY</u>

1. All applicants for admission to a degree curriculum shall be required to:

   a. File a formal application for admission.

   b. Furnish certified transcripts covering all previous high school and college records or a high school equivalency certificate.

   c. Furnish a Certificate of Residency properly validated by the designated high school, county, or college official. Proof of residence in the county may be substantiated by such documentary evidence as a driver's license, motor vehicle registration, or voter registration card bearing an Ocean County address.

   d. Be a graduate of an accredited high school or have satisfactorily completed the requirement for the High School Equivalency Certificate, or be at least 18 years of age, not possessing either of the foregoing, and have the potential to benefit from postsecondary education.

   e. All applicants for admission will comply with the requirements of policy #5165 pertaining to the College Skills Assessment Program. Additionally, applicants desiring consideration for admission to the Honors Program, the Nursing Program, or full-time Early Admissions Program are required to have the results of either the Scholastic Aptitude Test (SAT) or the American College Test (ACT) submitted for evaluation.

   f. Applicants to specific academic programs in the Nursing and Allied Health Department are required to submit a completed medical history form

2. Admission of qualified high school seniors.

   a. Full-time students: Fulfill college requirements as specified by policy #5122, paragraphs 1a, 1b, 1c, 1e and 1f; submit the written recommendations from the high school counselor and the high school principal; and have achieved above the 90th percentile within the high school class.

3. Admissions of high school junior and seniors.

   a. Part-time students: Satisfy any course prerequisite; submit the written recommendation from the high school principal and/or guidance counselor for the particular course desired; and have earned an overall average of "C" or better in high school or demonstrated a high potential to succeed in special areas related to college courses desired.

   b. The college will accept high school students in courses during the summer session if the following conditions are met:

      1. Applicants must have completed their sophomore year in high school in good standing, or receive approval of the Vice president of Academic Affairs
      2. They are recommended for the specific course by their guidance counselor and/or high school principal.

4. Admission of Gifted Students ~~age sixteen and under~~ *prior to junior year in high school:*

Admission

a. School GPA of a least a 3.75 on a 4.0 scale (or the equivalent), and

b. Absence of any C's, D's, or F's (or the numerical equivalent) on the school transcript, and

c. Written approval of the school counselor and principal testifying to the student's exceptional academic ability, achievements, and maturity, including an explanation of why the school is unable to fulfill the student's potential within the regular school curriculum, and

d. An SAT score of 1200 (or PSAT) (a minimum ~~550~~ *540* in ~~verbal~~ *critical reading* and ~~550~~ *530* in math)*, and*

e. Documented evidence of exceptional academic achievement or recognized talent or ability beyond the school GPA, and

f. *Interview and p*~~P~~ermission of the Vice President of Academic Affairs or designee, *the school dean or assistant dean* ~~the department dean,~~ and ~~the~~ instructor required*, for each semester of enrollment, and*

g. *Additional testing may be required for mathematics courses, and*

h. *For Ocean County Arts High School students who can clearly demonstrate a talent or ability by audition to achieve a high level of accomplishment in the creative or performing arts, written approval of the school dean or assistant dean is required.*

Courses

a. Limit of two courses per semester

b. Enrollment in foreign languages, ~~performing~~ *fine* arts, computer studies, natural sciences, and mathematics courses only.

5. Admission to non-credit service courses:

Students registering for non-credit service courses numbered 001-099 must meet the same admission requirements as students taking credit courses. There are no academic requirements for admission to non-credit service courses numbered 900-999. These courses are open to all interested members of the community.

6. Senior Citizens:

Senior Citizens (identified in policy #5325) will not be required to show proof of high school graduation or high school equivalency for admission.

7.   International Education:

Admission

a.   All applicants for admission to International Education programs sponsored by Ocean County College shall be required to:

    i.   File a formal application for admission to OCC and provide proof of eligibility as specified by College policy #5122 (items 1 through 6).

    ii.   File a formal application with the affiliate overseas university or college.

    iii.   Only after a student has met fully the admission requirements stipulated by Ocean County College and the affiliate overseas university or college can he/she be admitted into the overseas part-time or full-time program.

b.   To qualify as a candidate for any degree conferred by Ocean County College, students enrolled in the overseas programs must fulfill the exact requirements stipulated by College policy #5152 (items 1 through 3).

Credits

a.   The maximum number of credits earned by a student in an overseas program shall not exceed the number specified in item 3B (1) of College policy #5152.

b.   Courses and credits earned at institutions evaluated and approved by the American Association of Collegiate Registrars and Admissions Officers as shall appear on a student's Ocean County College transcript after an evaluation by Rockland Community College and Ocean County College. (For further information consult reference works on particular country appearing in World Education Series.)

c.   Courses and credits earned at institutions of higher learning other than those mentioned in the preceding item shall be subject to exact guidelines listed in the Learning Contract Handbook. These, in turn, shall be subject to revisions and amendments as dictated by OCC policy.

d.   All academic credits earned by students in overseas programs shall be subject to review and final approval by Ocean County College.

Evaluation of Courses and Programs

a. All courses and programs in the area of International Education, generated by Ocean County College for member colleges of the College Consortium for International Studies (CCIS), shall be subject to the same screening and approval procedure as on-campus courses and programs.

b. All courses generated by member colleges of CCIS and sponsored by Ocean County College shall be subject to procedure governing transfer of academic credits and courses among accredited institutions.

c. All courses and programs in the area of International Education shall be subject to the following evaluation procedure:

i. Regular and comprehensive review and evaluation of programs in International Education as dictated by College policy.

ii. Regular, on site evaluation of overseas programs by designated members of Ocean County College faculty and administration.

iii. Mandatory evaluation by students participating in overseas academic courses and programs.

iv. Debriefing of returning overseas students by the Advisory Committee on International Education, and/or any standing College Committee so designated.

8. Home-Schooled Students:

a. Fulfill college requirements as specified by policy #5122, paragraph 1, a-f

b. Home-schooled students who have received home-school diplomas will be admitted.

c. Home-schooled students who have not received diplomas but are at least eighteen years of age or have GEDs or have the approvals of their district high schools to attend OCC will be admitted.

d. Home-schooled student who are sixteen or seventeen years of age and have a parent's signature in place of that of a high-school guidance counselor will be permitted to take a maximum of two courses each semester.

e. Home-schooled students under sixteen years of age refer to policy #5122, paragraph 4.

Information Note: College policy #5152, item 3B (1) states: Members of the Armed Forces on active duty and their dependents must meet all college degree requirements with the following exceptions: 1) a minimum of 24 semester hours of the 64 required must be earned through attendance of classes at Ocean County College.

Adopted: August 26, 1968
Revised: June 26, 1972
Revised: January 22, 1973
Revised: March 26, 1973
Revised: February 25, 1974
Revised: May 27, 1975
Revised: June 26, 1978
Revised: December 18, 1978

Revised: September 17, 1979
Revised: March 23, 1981
Revised: April 26, 1982
Revised: January 24, 1983
Revised: June 27, 1988
Revised: April 22, 1996
Revised: February 28, 2000
Revised: November 20, 2000

Revised: March 25, 2002
Revised: May 4, 2004
Revised: August 25, 2008
Revised: February 28, 2011

EXHIBIT B-13

Ocean County College, Toms River, NJ

<u>POLICY</u>

Full-time faculty of Ocean County College shall be awarded tenure in accordance with N.J.S.A. 18A:60-6 through N.J.S.A. 18A:60-15, and in accordance with N.J.A.C. 9A:7-3.1 through N.J.A.C. 9A:7-3.5. In order to maintain the capability to respond to the changing educational needs of future generations of students, Ocean County College will maintain a balance between tenured and non-tenured faculty by limiting the percentage of tenured faculty to seventy-seven percent (77%) of the total number of full-time Faculty [N.J.A.C. 9A:7-3.2(a)].

Tenure may be awarded only to faculty members whose performance during their probationary period gives clear evidence of sustained and significant excellence in professional performance in each of the following criteria:

1. Teaching (or in the case of librarians and counselors, non-teaching assignments and evidence of professional effectiveness)

2. Service to students

3. Attendance at college-wide activities

4. Collegial/civil/constructive working relationships

5. Contribution to fulfillment of the College mission, including community outreach and involvement

6. Service to the college

7. Service to the ~~department~~ *academic school*

8. Professional development

9. Research, publication, or other contributions to education, the teaching profession or the instructor's discipline.

Tenure may be awarded only after presentation by the faculty member of positive evidence of sustained and significant excellence in professional performance in the criteria listed above and not because of the absence of evidence to the contrary.

The awarding or not awarding of a tenure contract is the sole prerogative of the Board of Trustees, within applicable laws and regulations. Nothing in the procedures shall be construed to limit or negate that prerogative.

ADOPTED: May 28, 1996
Revised: April 23, 2007
Revised: July 26, 2010
Revised: February 28, 2011

EXHIBIT B-14

Ocean County College, Toms River, NJ

Personnel
Academic
Non-Tenured Faculty Expectations Conferences,
Semi-Annual Evaluation Conferences, and
Performance Criteria # 3116

POLICY

Expectations Conference: An initial expectations conference will be held early in the first semester of full-time employment of non-tenured faculty. At the conference, the supervising Dean/Supervisor and the Vice President of Academic Affairs (or the area Vice President) will inform the non-tenured faculty member of the College's expectations and criteria for sustained, significant, and documented excellence in professional performance relative to contract renewal and recommendations for tenure.

Semi-Annual Evaluation Conferences: The Dean/Supervisor and the Vice President of Academic Affairs (or the area Vice President) will meet with the non-tenured faculty member twice during the academic year to review the faculty member's performance and review the College's performance expectations relative to contract renewal and recommendations for tenure.

Performance Criteria:

1. Teaching (or in the case of librarians and counselors, non-teaching assignments and evidence of professional effectiveness)
2. Service to students
3. Attendance at campus-wide activities
4. Collegial/civil/constructive working relationships with support staff, faculty and administrative colleagues, and the Board of Trustees
5. Contribution to the fulfillment of the College mission, including community outreach and involvement
6. Service to the College
7. Service to the ~~department~~ *school*
8. Professional development
9. Research, publication, or other contributions to the teaching profession or the candidate's teaching discipline.

Suggested Examples of Activities and Evidence relative to Performance Criteria:

1. Teaching (or in the case of librarians and counselors, non-teaching assignments and evidence of professional effectiveness)
   - Student Reaction forms for all courses and sections each semester
   - All Student Reaction Conference Summary forms
   - Dean and Vice President of Academic Affairs class observations
   - Professor's Syllabi
   - Classroom assessment activities
   - Innovative teaching: learning communities, collaborative learning strategies, active learning strategies, instructional technology, and other innovations
   - Design and use of measurable learning outcomes to modify and improve curriculum and student learning
   - Unsolicited letters of support from former students
   - Innovative distance learning teaching strategies

Ocean County College, Toms River, NJ

Personnel
Academic
Non-Tenured Faculty Expectations Conferences,
Semi-Annual Evaluation Conferences, and
Performance Criteria # 3116

2. <u>Service to Students:</u>

- Faculty advisor training workshops
- ~~Department~~ *Academic school* and college-wide recruitment and retention projects
- Club advising
- Honors program
- Annual Student Leadership Retreat

3. <u>Attendance at college-wide activities:</u>

- Student awards ceremonies
- Athletic events
- Plays and other performances
- Receptions
- Community events on campus
- Participation in college-wide activities

4. <u>Collegial/Civil/Constructive Working Relationships:</u>

- Working collegially, civilly, constructively and harmoniously with all college employees reflecting due respect for the duties and opinions of others, including support staff, faculty and administrative colleagues, and the Board of Trustees
- Letter from the Dean/Supervisor supporting this criteria

5. <u>Contribution to the fulfillment of the College mission, including community outreach and involvement:</u>

- Talks to the community about topics related to the teaching discipline
- Service on county or municipal committees
- Classes for children or senior citizens that relate to the teaching discipline
- Community projects
- Civic recognition
- Participation in civic or community organizations
- Work with government agencies
- Speeches to community groups on or off campus

6. <u>Service to the College:</u>

- Participation in shared governance
- Media interviews related to the teaching discipline or College programs
- Ad hoc committees
- Student recruitment activities
- Special project coordination
- Colloquia planning committees

Ocean County College, Toms River, NJ

7. <u>Service to the ~~Department~~</u> *Academic School*

- Leadership or extra duties involving student learning outcomes assessment and follow-up activities
- ~~Departmental~~ *Academic school* committees
- Course and program development
- Adjunct faculty mentoring and evaluation
- Development of study abroad courses
- Promoting ~~Departmental~~ *academic school* offerings
- Grants development and implementation
- Special project coordination

8. <u>Professional Development</u>:

- Graduate work related to the teaching discipline, instructional technology, or a second relevant teaching discipline
- Conferences and workshops related to the student activities, teaching discipline, teaching strategies, or instructional technology
- Participation in new faculty orientation workshops
- Maintaining currency in the teaching discipline

9. <u>Research, publication, or other contributions to education, the teaching profession, or the candidate's discipline</u>:

- Juried publications
- Editing of professional journals
- Fine arts performances or exhibitions
- Papers presented at professional conferences or workshops
- Colloquia presentations
- Professional recognition
- Service on state, national, or international professional boards

Adopted: April 23, 2007
Revised: February 28, 2011

EXHIBIT B-15

POLICY

A. REQUIREMENTS FOR APPLICATION

All applicants for promotion shall satisfy the following minimum requirements with regard to graduate study, professional experience, and OCC service:

1. Faculty members will not be automatically moved into the next rank when requirements for that rank are satisfied.

2. GRADUATE STUDY, PROFESSIONAL EXPERIENCE AND OCC SERVICE

Rank	Minimum Education	Minimum Years in Previous Rank[1 and 3]
Professor	Earned Doctorate	4
	or	
	Master's plus 2nd relevant additional Master's;[2]	6
	or	
	Master's plus 45 relevant credits[2]	6
Associate Professor	Master's plus 30[2]	4
Assistant Professor	Master's plus 15[2]	3
Instructor	Master's[2]	N/A

[1]Example of time served: A faculty member in his/her fourth year as Assistant Professor is eligible for promotion consideration to Associate Professor. A promotion takes effect at the beginning of the academic year following the academic year in which it is awarded.

[2]Refers to relevant graduate semester hours from a regionally accredited college or university. Relevancy of credits or 2nd Master's to instructional objectives to be determined by the Vice President of Academic Affairs. These graduate hours must be completed by January 31.

[3]**Applications for promotion may not be submitted before tenure is achieved on the first day of the sixth year of consecutive full-time employment.**

Note: Professional experience, acquired outside the classroom, related to the professor's discipline may be considered by the Vice President of Academic Affairs as a substitute for the required graduate academic training for promotion purposes in career fields according to the following formula:

    a. Upon approval by the Vice President of Academic Affairs, one year of related professional experience will be equated as five graduate credits for a total not to exceed ten credits.

b. Upon approval by the ~~Departmental~~ *Academic School* Dean and the Vice President of Academic Affairs, the equivalent of one (1) graduate credit will be earned for every three (3) continuing education units (CEU's) earned by attending relevant short courses, conferences, workshops, institutes, etc. An official CEU certificate shall be required for the granting of such equivalent credit. This provision may be used to an aggregate maximum of six (6) graduate credit hours. For a CEU to apply to a promotion application, it must be earned after the previous promotion date.

c. None of the foregoing substitutions for academic credit will serve in lieu of a required degree.

B. CRITERIA FOR PROMOTION

In addition to application requirements, faculty must present evidence of the appropriate level of performance in (a) below. A faculty member need not necessarily be strong in all other criteria to be promoted. However, as a faculty member moves up in rank, an increasingly higher level of performance* in more of the criteria is required to present a stronger case for promotion.

a. Instruction or related professional field

b. Contribution to education or in the discipline

c. Professional growth and development

d. Contributions to the ~~department~~ *academic school*

e. Service to the College

f. Service to the student

Applications will be judged on the basis of The Guidelines for Promotion to Rank, appended to this policy.

*Refers to Guidelines for Promotion to Rank

ADOPTED: January 23, 1967
Revised: September 28, 1970
Revised: October 22, 1979
Revised: December 12, 1983
Revised: May 29, 1984
Revised: January 28, 1985
Revised: March 23, 1987
Revised: June 27, 1989
Revised: March 28, 1994
Revised: April 22, 1996
Revised: February 28, 2000
Revised: November 20, 2000
Revised: December 8, 2003
Revised: March 22, 2010

Revised: February 28, 2011

ATTACHMENT TO POLICY 3118
GUIDELINES FOR PROMOTION TO RANK

1. Skill in Instruction or Related Professional Field

    Assistant Professor: Evaluation and other evidence recognize teaching competence as "very good" with promise for future growth or, in the case of non-teaching faculty, evidence of "very good" performance in one's assignment.

    Associate Professor: Evaluations and other evidence recognize teaching competence as "outstanding" with no important areas of inadequacy; individual continues to show improvement and refinement of abilities. In the case of non-teaching faculty, evaluations and other evidence recognize "outstanding" performance in one's assignment.

    Professor: The faculty member presents evidence of outstanding teaching ability or, in the case of non-teaching faculty, evidence of outstanding performance in one's assignment. The faculty member is recognized as a model for excellence and viewed as being among the best in quality of his/her efforts on behalf of the college.

2. Contribution to Education or in the Discipline

    It is difficult to state rank-related criteria for this activity. Involvement with one professional organization in a productive manner or involvement with several professional organizations in contributory or participatory manner might be expected to grow as the faculty member matures in the profession. For those in higher ranks, a greater degree of serious commitment to professional organizations, publications, and activities will be expected.

3. Professional Growth and Development

    Assistant Professor: The faculty member presents evidence of participation in professional growth experiences.

    Associate Professor: The faculty member presents evidence of an exemplary commitment to professional growth and development. The record should indicate that the faculty member planned, initiated, and pursued professional growth with vigor and commitment that clearly demonstrate professional development has occurred since last promotion.

    Professor: The faculty member presents evidence of professional growth since last promotion and demonstrated contributions to professional development. The faculty member has a long-term record of commitment to professional growth and development.

4.   Contributions to the ~~Department~~ *Academic School*

     Assistant Professor: The faculty member presents evidence demonstrating cooperation with colleagues and the ~~department~~ *academic school* in relevant projects or endeavors.

     Associate Professor: The faculty member presents evidence demonstrating meaningful contributions on behalf of ~~department~~ *academic school* projects or endeavors.

     Professor: The faculty member demonstrates that he/she has taken a leadership role in ~~department~~ *academic school* projects or endeavors and demonstrated initiation of same.

5.   Service to the College

Service to the College includes, but is not limited to, those activities which are: (a) a part of the participatory governance; and (b) community service on behalf of the College. All faculty are expected to be involved in service to the College. Those in the higher ranks will regularly be on standing or ad hoc college committees, often exercising leadership, and will be active in their service to the community. Those in the lower ranks will not as frequently be on college committees, and the extent of their community service effort will be more limited.

It is important to distinguish between those activities which are undertaken primarily as a service to the College and those which an individual might pursue primarily as a responsible citizen. For purposes of promotion, the College considers only those activities which arise primarily from the individual's college responsibilities and from community activities over which the College exercises an important measure of involvement.

6.   Service to the Student

     Assistant Professor: The faculty member is accessible and willing to work with students; he/she addresses the mission of the community college in his/her interaction with students.

     Associate Professor: The faculty member has further developed his/her interaction with students by having chosen and developed additional service activities. The individual has developed the ability to work effectively with the full range of community college students.

     Professor: In addition to the above, the faculty member has become a recognized source person for students in one or more area(s) of students' needs.

Ocean County College, Toms River, NJ   -3-   **EXHIBIT B-15**
Guidelines for Promotion to Rank
Attachment to Policy 3118

Consideration for promotion may include, but need not be limited to, the following evidence of contribution and performance given in the profession and/or in service to the college.

a. Instruction

Evidence of outstanding performance as indicated by supervisory evaluation and evidence submitted by the faculty member.

b. Discipline

Evidence of contributions as submitted by the faculty member and/or ~~Department Chair~~ *Academic School Dean/Assistant Dean*. The faculty member gives evidence of being committed to education and/or scholarship in the discipline. Contributions may include: graduate courses beyond the minimum requirement, publications, papers presented at workshops, copyrights granted, conferences attended, professional memberships and activities, etc.

c. Professional Growth and Development

Evidence of professional growth and development activities whereby the faculty member remains competent in his/her field and keeps current in the latest developments in education, the disciplines, teaching methodology, and/or assessment activities. Contributions may include: graduate courses taken, graduate fellowships, publications, papers presented at workshops, institutes attended, copyrights granted, program evaluation, course evaluation, developmental skills evaluation, assessment of the affective development of students, etc.

d. ~~Department~~ *Academic School*

Evidence of contributions to ~~department~~ *the academic school* as indicated by ~~Department~~ *Academic School* Dean and/or a colleague. Membership on ~~department~~ *Academic School* committees, curriculum development and evaluation, new course development, course evaluation and syllabus revision, and performance above the normal work load, etc.

e. College

Evidence of service and contributions to the College as submitted by the faculty member, supervisor, or other appropriate professional. Criteria may include chairing of college committees, FAOCC service, clubs, institutes, workshops, organizations, committee membership, extracurricular activity, recruitment efforts, educational lobbying activities on behalf of the college, intercollegiate activities in professional development, fundraising, community service on behalf of the college, or other efforts that contribute to the mission and goals of the college, etc.

f. Students

Evidence as submitted by the faculty member and/or the appropriate administrator which may include: high school visitations and presentations, advising to student clubs and activities, retention efforts, student recruitment, student advising efforts, student counseling, etc.

Revised: 2/28/11