

# ***EXHIBIT B***



**BOARD OF TRUSTEES**

**Bylaw, Policy, and Curriculum Committee Agenda Items**

**To:** Board of Trustees

**From:** Office of the President

**Date:** August 20, 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, August 27, 2020**:

1. Recommend approval of the following items as accepted by the College Senate at its meetings on July 16, and August 20, 2020:
  - a. Reactivated Program
    - 1) Associate in Science Degree in Homeland Security (**Exhibit B-1**)
  - b. Revised Courses
    - 1) BIOL 101, The Pine Barrens (**Exhibit B-2**)
    - 2) BIOL 261, Ecology (**Exhibit B-3**)
    - 3) BIOL 265, Marine Biology (**Exhibit B-4**)
    - 4) CHIN 102, Elementary Chinese II (**Exhibit B-5**)
    - 5) CSIT 213, Database Management (**Exhibit B-6**)
    - 6) ENGR 221, Engineering Statics (**Exhibit B-7**)
    - 7) ENGR 222, Engineering Dynamics (**Exhibit B-8**)
    - 8) ENVI 232, Environmental Policy (**Exhibit B-9**)
    - 9) FREN 291, Intermediate French I (**Exhibit B-10**)
    - 10) ITAL 200, Intermediate Italian I (**Exhibit B-11**)
    - 11) ITAL 202, Intermediate Italian II (**Exhibit B-12**)

c. Revised Courses and Course Titles

- 1) ENGR 198, Autodesk Inventor to Autodesk Inventor: 3D Design and Prototyping  
**(Exhibit B-13)**
- 2) ENGR 225, Design of Material Structures to Strength and Mechanics of Materials  
**(Exhibit B-14)**

## ***EXHIBIT B-1***

**HOMELAND SECURITY – A.S. Degree Program – Effective Catalog Year 2020-2021**  
**Program Code: AS.HLSC CIP Code: 439999**

The AS in Homeland Security provides students with a broad understanding of safety and security issues, including terrorism, natural and man-made disasters, and emergency management. The program focuses on prevention and protection, preparedness and response, information sharing and analysis, and research and technology.

<b>FIRST SEMESTER</b>		
ENGL 151	English I	3 cr.
HLSC 170	Introduction to Homeland Security	3 cr.
HLSC 171	Fundamentals of Emergency Management	3 cr.
	Any Social Science course from the list of Approved General Education Courses.	3 cr.
STSC 150	Student Success Seminar	2 cr.
		14 cr.
<b>SECOND SEMESTER</b>		
ENGL 152	English II	3 cr.
HLSC 172	Domestic & International Terrorism	3 cr.
COMM 154	Fundamentals of Public Speaking	3 cr.
CSIT 110 or INFO 110	Introduction to Computer Applications Or Library Research Skills and Information Literacy	3 cr.
	Any History course from the list of Approved General Education Courses.	3 cr.
		15 cr.
<b>THIRD SEMESTER</b>		
MATH 156	Introduction to Statistics	3 cr.
CRIM 254	Constitutional Law and Rules of Evidence	3 cr.
HLSC 174	The Intelligence Function	3 cr.
	Any Foreign Language course from the list of Approved General Education Courses (first in language sequence)	3 cr.
	Elective	3 cr.
		15 cr.
<b>FOURTH SEMESTER</b>		
HLSC 210	Risk Management & Analysis	3 cr.
POLI 263	Introduction to International Relations	3 cr.
	Any Foreign Language course from the list of Approved General Education Courses (continue language sequence).	3 cr.
	Any Lab Science course from the list of Approved General Education Courses.	4 cr.
	Elective (to meet 60 credit requirement)	3 cr.
		16 cr.
		Total Credits: 60 cr.

Board of Trustees Approval Date: August 23, 2010

NJ Presidents' Council Approval Date: February 23, 2011

Board of Trustees Approval Date: November 4, 2013

Board of Trustees Approval Date: March 28, 2019 (revised and placed on hiatus)

Board of Trustees Approval Date: August 27, 2020 (reactivate)

## ***EXHIBIT B-2***

**OCEAN COUNTY COLLEGE**  
**OFFICIAL COURSE DESCRIPTION**  
**SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS**

1. COURSE NUMBER AND TITLE: BIOL-101 The Pine Barrens
2. SEMESTER HOURS: 3                      CONTACT HOURS: ( 3 + 0 + 0 )  
Lecture   Lab   Practicum
3. CATALOG DESCRIPTION

**This course is** an investigation into the ecological aspects of the natural history of the New Jersey Pine Barrens. The course will explore the geography, plants and animals of New Jersey's most famous wilderness. Students must provide their own transportation for required monthly field trips to the Pine Barrens.

4. PREREQUISITES: NONE                      COREQUISITES: NONE
5. COURSE TYPE FOR PERKINS REPORTING:  
     \_\_\_ vocational (approved for Perkins funding)  
     x non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

There is a growing interest in and concern with the Pinelands and its increased endangerment. The special ecological, botanical, and zoological characteristics and the remarkable geography, hydrologic, and soil phenomena continue to be topics of immediate concern to our students and community. By examining these characteristics in the context of ecosystem interrelations, and providing an adequate reference to basic information on the flora, fauna, and other natural features of the Pine Barrens, students will have a better understanding of what is unique and special about the area. There are no other courses at Ocean County College on this topic.

- 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



**EXHIBIT B-2**

- 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):

\_x\_ 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 Intensive Course (WIC) List \_\_\_\_\_

- c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

i. Mission/Vision: “Ocean County College provides affordable, student-centered, high quality educational experiences that prepare and empower diverse learners to contribute to and succeed in global societies.”

ii. Academic Master Plan: “The School of STEM's mission is for STEM faculty and staff to provide and support the delivery of high quality, relevant, and emerging STEM courses, academic certificates, and associate degree programs to Ocean County learners in their pursuit of achieving their academic goals.”

## 7. RELATED COURSES AT 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:

**There is only one other college in the United States that offers this course: Stockton University, hence not offered at other community colleges.**

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
None				

## EXHIBIT B-2

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
Georgian Court University	<u><i>EC Elective Credit - Elective</i></u>	<u><i>Elective</i></u>		<u>U</u>
Kean University	<u><i>EC Elective Credit - Elective</i></u>	<u><i>Elective</i></u>		<u>U</u>
Monmouth University	<u><i>BY198 Special Topics in Biology – Major Elective</i></u>	<u><i>Elective</i></u>		<u>U</u>
Rowan University	<u><i>INTR99071 Free Elective - Elective</i></u>	<u><i>Elective</i></u>		<u>U</u>
Rutgers – New Brunswick, School of Arts & Sciences	<u><i>11216EC Ecology, Evolution, Natural Resources Elective – Major Elective</i></u>	<u><i>Elective</i></u>		<u>U</u>
Stockton University	<u><i>TRCREC - Elective</i></u>	<u><i>Elective</i></u>		

- 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):

<u><i>Georgian Court</i></u>	<u><i>Melanie Di Tommaso</i></u>
<u><i>Rutgers</i></u>	<u><i>Marcie Rosas</i></u>
<u><i>Kean</i></u>	<u><i>John Van Brunt</i></u>
<u><i>Monmouth</i></u>	<u><i>Patrick Dorsey</i></u>
<u><i>Rowan</i></u>	<u><i>Dr. Luci Nurkowski</i></u>

- ii. If not transferable to any institution, explain: \_\_\_\_\_

### 8. SPECIFIC COURSE LEARNING OUTCOMES

Students who successfully complete this course will be able to:

- Analyze Describe* the scientific principles that govern the organization and perpetuation of organisms and associations in the Pine Barrens.
- Explain Describe* the unique operation of these principles in the Pine Barrens in reference to the unique physical properties of the area.
- Examine and describe the origin, evolution, and classification of the areas’ flora and fauna.
- List and classify Describe* the unique organisms, populations, and communities of the Pine

Barrens.

## 9. TOPICAL OUTLINE (include as many themes/skills as needed):

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<b>Unit 1 - Overview of New Jersey</b> a. Size & Population b. Weather c. Physiographic Regions d. Geologic History e. Principal River Systems f. Economy	Weekly readings Download PowerPoints	Weekly quizzes Quarterly exam Course Journal	8A,B
<b>Unit 2 – Overview of the Pine Barrens</b> a. Dimensions & Boundaries b. Municipalities c. Pinelands National Reserve d. Pinelands Commission e. Pinelands CMP f. Geology g. Climate h. Hydrology & Aquifers i. Streams, Lakes, Watersheds j. Water	Weekly readings Download PowerPoints Field Trips	Weekly quizzes Quarterly exam Course Journal	8A,B
<b>Unit 3 – Vegetation Patterns &amp; Plants of the Pine Barrens</b> a. 3.1 Vegetation of the Pine Barrens b. 3.2 Fire c. 3.3 Pine Barrens Uplands d. 3.4 Fire-dominated Forests e. 3.5 Pygmy Plains f. 3.6 Oak-dominated	Weekly readings Download PowerPoints Field Trips	Weekly quizzes Quarterly exam Practical exam Final project Course Journal	8A,B,C,D

**EXHIBIT B-2**

<p>Forests</p> <p>g. 3.7 Human Influences &amp; Management of Upland Forests</p> <p>h. 3.8 Pine Barrens Wetlands</p> <p>i. 3.9 Cedar Swamp Forests</p> <p>j. 3.10 Hardwood Swamps</p> <p>k. 3.11 Pitch Pine Lowlands</p> <p>l. 3.12 Bogs</p> <p>m. 3.13 Human Influences on Wetlands</p> <p>n. 4. Fungi of the Pine Barrens</p> <p>o. 4.2 Fungi Structure</p> <p>p. 4.3 Mushrooms</p> <p>q. 4.4 Lichens</p> <p>r. 5.1 Pine Barrens Plants</p> <p>s. 5.2 The Plant Kingdom</p> <p>t. 5.3 Bryophytes</p> <p>u. 5.4 Ferns</p> <p>v. 5.5 Vascular Plants</p> <p>w. 5.6 Trees</p> <p>x. 5.7 Shrubs &amp; Sub Shrubs</p> <p>y. 5.8 Vines</p> <p>z. 5.9 Aquatic Plants</p> <p>aa. 5.10 Insectivorous Plants</p> <p>bb. 5.11 Cactus</p> <p>cc. 5.12 Grasses &amp; Sedges</p> <p>dd. 5.13 Herbs</p> <p>ee. 5.14 Composites</p>			
<b>Unit 4 – Animals &amp; Animal Communities of the Pine Barrens</b>	<p>Weekly readings</p> <p>Download PowerPoints</p>	<p>Weekly quizzes</p> <p>Quarterly exam</p> <p>Practical exam</p>	8A,C,D

**EXHIBIT B-2**

<ul style="list-style-type: none"> <li>a. 7.1 Pine Barrens Fish</li> <li>b. 7.2 Characteristic Species</li> <li>c. 7.3 Peripheral Species</li> <li>d. 7.4 Anadromous Species</li> <li>e. 7.5 Introduced Species</li> <li>f. 8.1 Pine Barrens Amphibians</li> <li>g. 8.2 Salamanders &amp; Newts</li> <li>h. 8.3 Frogs &amp; Toads</li> <li>i. 8.4 Introduced Species</li> <li>j. 9.1 Pine Barrens Reptiles</li> <li>k. 9.2 Turtles &amp; Terrapins</li> <li>l. 9.3 Lizards &amp; Skinks</li> <li>m. 9.4 Snakes</li> <li>n. 10.1 Pine Barrens Birds</li> <li>o. 10.2 Bird Families</li> <li>p. 11.1 Pine Barrens Mammals</li> <li>q. 11.2 Marsupials</li> <li>r. 11.3 Placental Mammals</li> <li>s. 11.4 Mammal Orders</li> <li>t. 12.1 Pine Barrens Mollusks</li> <li>u. 13.1 Pine Barrens Insects</li> <li>v. 13.2 Insect Orders</li> </ul>	Field Trips	Final project Course Journal Species Practical	
<b>Unit 5 – Human Exploitation of the Pine Barrens</b> <ul style="list-style-type: none"> <li>a. 15.1 Plant Products</li> <li>b. 15.2 Cranberries</li> </ul>	Weekly Readings Download PowerPoints	Weekly quizzes Quarterly exam Course Journal	8A,B

**EXHIBIT B-2**

c. 15.3 Blueberries d. 15.4 Other Crops e. 16.1 Animal Products f. 16.2 Deer g. 16.3 Small Game & Fur Bearers h. 16.4 Waterfowl i. 16.5 Reptiles & Amphibians			
<b>Unit 6 – Indians of the Pine Barrens</b> a. Paleo Indians b. Archaic Period c. Woodland Periods d. Contact Period e. Brotherton	Weekly Readings Download PowerPoints	Weekly quizzes Quarterly exam Course Journal	8A,D
<b>Unit 7 - . Ecological &amp; Environmental Trends in the Pine Barrens</b> a. 17 <sup>th</sup> Century b. 18 <sup>th</sup> Century c. 19 <sup>th</sup> Century d. 20 <sup>th</sup> Century	Weekly Readings Download PowerPoints	Weekly quizzes Quarterly exam Course Journal	8A,B

**10. METHODS OF INSTRUCTION**

In the structuring of this course, what major methods of instruction will be utilized?

Lecture/Discussion. Attendance at monthly field trips. Participation at the Annual Pinelands Short Course at Stockton University.

**11. GENERAL EDUCATION GOALS ADDRESSED BY THIS COURSE**

(this section is to fulfill state requirements):

- 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).
- For each General Education Goal checked in column 1, in column 2 you must list the related course learning outcome from section 8 of this form.
- 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.
- In column 4, list how each checked off General education goal will be assessed

**EXHIBIT B-2**

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral				
Quantitative Knowledge and Skills				
Scientific Knowledge and Reasoning	✖			
Technological Competency	✖			
Information Literacy				
Society and Human Behavior	✖			
Humanistic Perspective	✖			
Historical Perspective	x	<b>8: C,D</b>	<b>7</b>	<b>Exams</b>
Global and Cultural Awareness				
Ethical Reasoning and Action	x	<b>8:C,D</b>	<b>6</b>	<b>Exams</b>
Independent/Critical Thinking	x	<b>8:A, B, C, D</b>	<b>1 and 2</b>	<b>Exams, Final project</b>

**12. NEEDS**

- Instructional Materials (text, etc.): An appropriate text **or open educational resources** will be selected.
- Technology Needs: This course will not require any technology beyond which is currently available (computer/laptop, GPS, digital camera, binoculars, telescope, field guides).
- Human Resource Needs (Presently Employed vs. New Faculty): Presently employed faculty can teach this course.
- Facility Needs: none
- Library needs: none

**13. GRADE DETERMINANTS**

The final grade in the course will be the cumulative grade based on the following letter

**EXHIBIT B-2**

grades or their numerical equivalents for the course assignments and examinations:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

### **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 receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: April 27, 2009

Board of Trustees Approval Date: September 27, 2010

Board of Trustees Approval Date: March 26, 2012

PLT Approval of Form: May 22, 2012

Board of Trustees Approval Date: July 23, 2020



## ***EXHIBIT B-3***

**OCEAN COUNTY COLLEGE**  
**OFFICIAL COURSE DESCRIPTION**  
**SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS**

1. COURSE NUMBER AND TITLE: BIOL 261 - Ecology
2. SEMESTER HOURS: 4 CONTACT HOURS: ( 3 + 2 + 0 )  
Lecture Lab Practicum
3. CATALOG DESCRIPTION

**This course is** an introduction to ecology emphasizing the physical and biological factors affecting distribution, abundance and adaptations of organisms. Statistical analyses of population, community and ecosystem structure and function are performed. Fundamental concepts of behavioral ecology and evolutionary processes in ecology are stressed. Consideration of ecological principles is emphasized by field study in natural habitats and in the laboratory. Students will be required to travel to offsite laboratory locations.

4. PREREQUISITES: BIOL-161 COREQUISITES: NONE
5. COURSE FEE CODE: 3

COURSE TYPE FOR PERKINS REPORTING:

\_\_\_ vocational (approved for Perkins funding)  
 \_X\_ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

This course will fulfill the Lab Science general education requirement for graduation and transfer. This course is designed for bachelor-level degree programs in Biology, Environmental Science, and other science disciplines. Ecology benefits students transferring to four-year institutions since it is frequently a prerequisite for upper level courses in the ecological/environmental field of study.

- 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	<u>X</u> Lab Science	___ Science (Non-Lab)
___ Mathematics	___ Technology	___ Diversity

**EXHIBIT B-3**

- 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 Intensive Course (WIC) List \_\_\_\_\_

- c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

- i. Providing high quality educational experiences that prepare and empower diverse learners to contribute to and succeed in global societies (Mission Statement)
- ii. Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
- iii. Focusing on student success and providing and brokering a full spectrum of learning and development programs (Strategic Plan)
- iv. Seeking to ensure that students will thrive in an increasingly diverse and complex world (Vision Statement).
- v. Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan).
- vi. Seeking to empower students through the mastery of intellectual and practical skills. (Academic Master Plan).
- vii. Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan).

**7. RELATED COURSES AT 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: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC,	Course Title	Course Number	Number of	Comments

**EXHIBIT B-3**

Mercer CC, Atlantic Cape CC, etc.)			Credits	
<u><b>Brookdale CC</b></u>	<u><b>Ecology &amp; Field Biology</b></u>	<u><b>BIOL208</b></u>	<u><b>4</b></u>	
<u><b>Mercer CCC</b></u>	<u><b>Ecology</b></u>	<u><b>BIO204</b></u>	<u><b>4</b></u>	
<u><b>Atlantic Cape CC</b></u>	<u><b>Ecology</b></u>	<u><b>ENVL205</b></u>	<u><b>4</b></u>	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
Georgian Court University	<u><b>BI340, Ecology, 4 cr.</b></u>	<u><b>Major/GE</b></u>		
Kean University	<u><b>BIO 3614, Ecology, 4 cr.</b></u>	<u><b>Major/GE</b></u>		
Monmouth University	<u><b>BY 220, Ecology, 4 cr.</b></u>	<u><b>Major/GE</b></u>		
Rowan University	<u><b>BIOLO 1073, Ecology, 4 cr.</b></u>	<u><b>Major/GE</b></u>		
Rutgers – New Brunswick, School of Arts & Sciences	<u><b>11216351, Ecology, 4 cr.</b></u>	<u><b>Major/GE</b></u>		
Stockton University	<u><b>ENVL 2200, Ecology, 4 cr.</b></u>	<u><b>Major/GE</b></u>		

- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

**8. SPECIFIC COURSE LEARNING OUTCOMES**

Students who successfully complete this course will be able to:

- Describe the scope of natural history, including habitats and resident organisms.
- Engage in experimental and field ecology and generalize from the data examined.
- Describe the organism as the fundamental unit of ecology and discuss the structure and dynamics of populations, communities, and ecosystems.
- Discuss the central position of evolutionary thinking in the study of ecology.
- Explain how the qualities of all ecological systems express the evolutionary adaptations of their component species.

**9. TOPICAL OUTLINE (include as many themes/skills as needed):**

**EXHIBIT B-3**

Major Themes/Skills		Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
Unit	Content	Assignments	Assessment	Outcome (s)
Unit 1: Organismal Ecology	1.0 Introduction to Ecology 1.1 The Study of Living Interactions 1.2 The Scale of Ecology: 1.3 Global Changes 1.4 Ecological Methods 2.0 Evolution & Genetics 2.1 Evolution Concerns 2.2 Gene and Chromosome 2.3 The Hardy-Weinberg Equation 2.4 Genetic Diversity 3.0 Natural Selection, Speciation, & Extinction 3.1 Natural selection pathways 3.2 Speciation 3.3 Evolution has accompanied geologic changes on Earth 3.4 Many patterns exist in the formation and extinction of species 3.5 Degree of endangerment varies by taxa, geographic location, and species 4.0 Behavioral Ecology 4.1 Altruism 4.2 Group advantages and disadvantages 4.3 Foraging behavior 4.4 Mating systems	<ul style="list-style-type: none"> <li>• Weekly readings</li> <li>• Download PowerPoints</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly quizzes</li> <li>• Summative assessments</li> </ul>	a, d, e
Unit 2: Physiological Ecology	5.0 Temperature 5.1 The effects of cold temperatures 5.2 Effects of hot temperatures on species 5.3 The greenhouse effect 6.0 Water 6.1 Water availability 6.2 Salt concentrations in soil and 6.3 Soil or water pH affect on organisms 7.0 Nutrients 7.1 Soil development 7.2 Plant growth 7.3 Herbivore populations limits 7.4 Light as a limiting resource	<ul style="list-style-type: none"> <li>• Weekly readings</li> <li>• Download PowerPoints</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly quizzes</li> <li>• Summative assessments</li> </ul>	a, e

**EXHIBIT B-3**

	<p>7.5 Carbon dioxide and oxygen availability limit organismal growth and distributions</p> <p>7.6 Species distributions are often limited by multiple abiotic factors</p>			
Unit 3: Population Ecology	<p>8.0 Demographics and Population Patterns</p> <p>8.1 A variety of techniques are used to quantify population size and density</p> <p>8.2 Patterns of spacing may be clumped, uniform or random</p> <p>8.3 Fragmented habitats</p> <p>8.4 Landscape ecology concerns the spatial arrangement of habitats and organisms</p> <p>8.5 Metapopulations are separate groups of individuals that mutually affect one another via dispersal.</p> <p>9.0 Life Tables &amp; Demography</p> <p>9.1 Age distributions, life tables, and survivorship curves summarize survival patterns</p> <p>9.2 Age-specific fertility data can tell us when to expect population growth to occur</p> <p>10.0 Population Growth</p> <p>10.1 Unlimited population growth leads to "J"-shaped population growth curves.</p> <p>10.2 Limited resource lead to "S"-shaped population growth curves.</p> <p>10.3 Density-dependent factors may limit population sizes.</p> <p>10.4 Life history strategies incorporate traits relating to reproduction, survival, and competitive ability.</p> <p>10.5 Human populations continue to grow.</p>	<ul style="list-style-type: none"> <li>• Weekly readings</li> <li>• Download PowerPoints</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly quizzes</li> <li>• Summative assessments</li> </ul>	b
Unit 4	<p>11.0 Competition &amp; Coexistence</p> <p>11.1 Several different types of competition occur in nature.</p> <p>11.2 The outcome of competition can vary</p>	<ul style="list-style-type: none"> <li>• Weekly readings</li> <li>• Download PowerPoints</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly quizzes</li> <li>• Summative assessments</li> </ul>	c, d, e

<p>with changes in the biotic and abiotic environments.</p> <p>11.3 Field studies show interspecific competition occurs frequently.</p> <p>11.4 The winners and losers of competitive interactions may be predicted using mathematical models.</p> <p>11.5 Species may coexist if they do not occupy identical niches.</p> <p>12.0 Facilitation</p> <p>12.1 Mutualism is an association between two species that both species benefits</p> <p>12.2 Commensal relationships are those in which one partner receives a benefit while the other is unaffected.</p> <p>12.3 Facilitation may be more common under conditions of environmental stress.</p> <p>13.0 Predation</p> <p>13.1 Antipredator adaptations</p> <p>13.2 Predator-prey interactions may be modeled by Lotka-Volterra equations</p> <p>13.3 Introduced predators show strong effects on native prey</p> <p>13.4 Native prey show large responses to manipulations of native predators</p> <p>13.5 Humans, as predators, can greatly impact animal populations.</p> <p>14.0 Herbivory</p> <p>14.1 Plants defenses against herbivores.</p> <p>14.2 Herbivores may overcome plant defenses and impact plant populations.</p> <p>14.3 How much plant material do herbivores consume?</p> <p>15. Parasitism</p> <p>15.1 Parasites exhibit a wide range of attributes and lifestyles.</p> <p>15.2 Hosts have evolved many different types of defenses</p>			
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**EXHIBIT B-3**

	<p>against parasites.</p> <p>15.3 Parasites can cause high mortality in host populations.</p> <p>15.4 Host-parasite models are different from predator-prey models.</p> <p>15.5 Parasitism increased by climate change.</p> <p>16.0 Population Regulation</p> <p>16.1 Both bottom-up and top-down effects are important in natural systems.</p> <p>16.2 Conceptual models suggest top-down and bottom-up effects vary in importance in different environments.</p> <p>16.3 Key factor analysis and indispensable mortality are two techniques used to compare the strengths of mortality factors.</p>			
Unit 5: Community Ecology	<p>17.0 Species Diversity</p> <p>17.1 The nature of communities has been debated by ecologists.</p> <p>17.2 A variety of indices have been used to estimate species biodiversity.</p> <p>17.3 Rank abundance diagrams visually describe the distribution of individuals among species in communities.</p> <p>17.4 Community similarity is a measure of how many species are common between communities.</p> <p>18.0 Species Richness Patterns</p> <p>18.1 The Species-Time Hypothesis</p> <p>18.2 The Species-Area Hypothesis suggests large areas support more species.</p> <p>18.3 The Species-Energy Hypothesis</p> <p>18.4 Intermediate Disturbance Hypothesis</p> <p>18.5 Natural enemies promote increased species richness at local levels</p> <p>18.6. Communities in climatically similar</p>	<ul style="list-style-type: none"> <li>• Weekly readings</li> <li>• Download PowerPoints</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly quizzes</li> <li>• Summative assessments</li> </ul>	a, c e



**EXHIBIT B-3**

habitats may themselves be similar in species richness. 18.7 Habitat conservation focuses on identifying countries rich in species or habitats. 19.0 Species Richness & Community Services 19.1 Four hypotheses explain how species richness affects community services. 19.2 Species-rich communities are more stable than species-poor communities. 20.0 Succession 20.1 Several mechanisms that describe succession 20.2 Species richness often increases during succession. 20.3 Restoration ecology is guided by the theory of succession.			
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**10. METHODS OF INSTRUCTION**

In the structuring of this course, what major methods of instruction will be utilized?

3 Hours Lecture/Discussion

2 Hours Laboratory Field Work

**11. GENERAL EDUCATION GOALS ADDRESSED BY THIS COURSE**

(this section is to fulfill state requirements):

- 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).
- For each General Education Goal checked in column 1, in column 2 you must list the related course learning outcome from section 8 of this form.
- 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.
- In column 4, list how each checked off General education goal will be assessed within the course (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning	3. Related Outline Component	4. Assessment of General Education
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**EXHIBIT B-3**

		Outcome		Goal (Recommended but not limited to)
Communication-Written and Oral				
Quantitative Knowledge and Skills				
Scientific Knowledge and Reasoning	<u>x</u>	<u>D,E</u>	<u>1.0-1.4; 2.3</u> <u>18.0-18.6</u>	<u>Exam</u>
Technological Competency	✖			
Information Literacy				
Society and Human Behavior	✖			
Humanistic Perspective	✖			
Historical Perspective				
Global and Cultural Awareness	✖			
Ethical Reasoning and Action	✖			
Independent/Critical Thinking	x	A,C,D,E	2.3 18.0-20.3	Exam

**12. NEEDS**

- Instructional Materials (text, etc.):

An appropriate textbook **and/or open educational resource** will be selected. Please contact the Department Office for current adoptions. Field Guides.

- Technology Needs:

Lab and Field Equipment

- Human Resource Needs:

Currently employed faculty can instruct this course

- Facility Needs:

None

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

None

**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:

**EXHIBIT B-3**

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

### **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 receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: November 3, 2008

Board of Trustees Approval Date: July 25, 2011

Board of Trustees Approval Date: March 26, 2012

PLT Approval of Form: May 22, 2012

Board of Trustees Approval Date: **July 23, 2020**

## ***EXHIBIT B-4***

**OCEAN COUNTY COLLEGE**  
**OFFICIAL COURSE DESCRIPTION**  
**SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS**

1. COURSE NUMBER AND TITLE: BIOL-265 Marine Biology
2. SEMESTER HOURS: 4 CONTACT HOURS: ( 3 + 2 + 0 )  
Lecture Lab Practicum
3. CATALOG DESCRIPTION:

**This course is** a field and laboratory approach to the understanding of the complexity of marine organisms including the study of ecological principles that act to structure marine associations. Emphasis on local coastal and estuarine communities.

4. PREREQUISITES: BIOL-161 COREQUISITES: NONE
5. COURSE FEE CODE: 5

**COURSE TYPE FOR PERKINS REPORTING:**

- ☐ vocational (approved for Perkins funding)  
☒ non-vocational (not approved for Perkins funding)

**6. JUSTIFICATION:**

- a. Describe the need for this course.

Students having completed Biology I and Biology II express an interest in 200 level courses, especially Marine Biology in the summer. Marine Biology benefits students transferring to four year institutions, since it is frequently a requirement for a marine biology major and a prerequisite for upper level courses in the marine field.

- 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 ☐ no

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

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Communication | <input type="checkbox"/> Social Science         | <input type="checkbox"/> History           |
| <input type="checkbox"/> Humanities    | <input checked="" type="checkbox"/> Lab Science | <input type="checkbox"/> Science (Non-Lab) |
| <input type="checkbox"/> Mathematics   | <input type="checkbox"/> Technology             | <input type="checkbox"/> 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 Intensive Course (WIC) List \_\_\_\_\_

- c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

◆ ~~This course will help the college to fulfill its mission of fostering excellence by offering comprehensive programs that develop intentional learners of all ages.~~

◆ ~~This course is consistent with the following goals of the college as expressed in the Academic Master Plan:~~

➤ ~~Provide a challenging, coherent, and integrated curriculum, including high quality instructional and cultural programs for a diverse population of students~~

➤ ~~Establish a shared commitment to high and meaningful educational and ethical standards.~~

➤ ~~Prepare students for successful transfer to other educational institutions.~~

➤ ~~Prepare students for a rewarding life marked by personal growth and life long learning.~~

i. Mission/Vision: "Ocean County College provides affordable, student-centered, high quality educational experiences that prepare and empower diverse learners to contribute to and succeed in global societies."

ii. Academic Master Plan: "The School of STEM's mission is for STEM faculty and staff to provide and support the delivery of high quality, relevant, and emerging STEM courses, academic certificates, and associate degree programs to Ocean County learners in their pursuit of achieving their academic goals."

## 7. RELATED COURSES AT 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: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
Brookdale CC	<u><b>Marine Biology</b></u>	<u><b>BIOL 207</b></u>	<u><b>4</b></u>	
Middlesex CC	<u><b>Introduction to Marine Biology</b></u>	<u><b>BIO 210</b></u>	<u><b>4</b></u>	
Gloucester CC	<u><b>Introduction to Marine Biology</b></u>	<u><b>BIO 112</b></u>	<u><b>4</b></u>	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
Georgian Court University	<u><b>BIOEC G6</b></u>	<u><b>Biology Elective</b></u>		
Kean University	<u><b>BIO 3000</b></u>	<u><b>Marine Biology</b></u>		
Monmouth University	<u><b>BY 441</b></u>	<u><b>Gen Ed</b></u>		
Rowan University	<u><b>BIOL 01073</b></u>	<u><b>Gen Ed</b></u>		
Rutgers – New Brunswick, School of Arts & Sciences	<u><b>01119 EC</b></u>	<u><b>Biology</b></u>		
Stockton University	<u><b>MARS 2201</b></u>	<u><b>Science</b></u>		

- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

## 8. SPECIFIC COURSE LEARNING OUTCOMES

Students who successfully complete this course will be able to:

- a. Discuss the scientific principles that govern the organization and perpetuation of organisms and associations.
- b. Describe how the above principles operate somewhat differently in the ocean than on land because of the physical properties of water.

**EXHIBIT B-4**

- c. Explain the origin, evolution, and classification of marine life, with special emphasis on the process of how natural selection has resulted in the great diversity of marine plants and animals.
- d. Describe the organism as the fundamental unit of ecology and explain the structure and dynamics of marine populations, communities, and ecosystems.
- e. Discuss the importance of the world's oceans as sources of food, as reservoirs of minerals, as major suppliers of oxygen and regulators of climate, and as the ultimate dumping ground for human waste materials.

## 9. TOPICAL OUTLINE (include as many themes/skills as needed):

Major Themes/Skills		Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
Unit 1: Principles of Marine Science	<b>THE SCIENCE OF MARINE BIOLOGY</b> 1.1 The Science of Marine Biology 1.2 The Scientific Method  <b>THE SEA FLOOR</b> 2.1 The Water Planet 2.2 The Origin and Structure of the Ocean Basins 2.3 Geological Provinces of the Ocean 2.4 The Mid-Ocean Ridge and Hydrothermal Vents  <b>CHEMICAL AND PHYSICAL FEATURES OF SEAWATER AND THE WORLD OCEAN</b> 3.1 The Waters of the Ocean 3.2 Ocean Circulation 3.3 Waves and Tides  <b>FUNDAMENTALS OF BIOLOGY</b> 4.1 The Ingredients of Life 4.2 Living Machinery 4.3 Challenges of Life in the Sea 4.4 Perpetuating Life	<ul style="list-style-type: none"> <li>• download PPT'S</li> <li>• weekly readings</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly quizzes</li> <li>• Summative assessments</li> </ul>	A,B,C



# EXHIBIT B-4

	4.5 The Diversity of Life in the Sea			
Unit 2: The Organisms of the Sea	<p><b>THE MICROBIAL WORLD</b></p> <p>5.1 Viruses</p> <p>5.2 Prokaryotes</p> <p>5.3 Unicellular Algae</p> <p>5.4 Protozoans: The Animal-like Protists</p> <p>5.5 Fungi</p> <p><b>MULTICELLULAR PRIMARY PRODUCERS: SEaweEDS AND PLANTS</b></p> <p>6.1 Multicellular Algae: The Seaweeds</p> <p>6.2 Flowering Plants</p> <p><b>MARINE ANIMALS WITHOUT A BACKBONE</b></p> <p>7.1 Sponges</p> <p>7.2 Cnidarians: Radial Symmetry</p> <p>7.3 Comb Jellies: Radial Symmetry</p> <p>7.4 Bilaterally Symmetrical Worms</p> <p>7.5 Mollusks: The Successful Soft Body</p> <p>7.6 Arthropods: The Armored Achievers</p> <p>7.7 Echinoderms: Five-Way Symmetry</p> <p>7.8 Hemichordates: A "Missing Link"?</p> <p>7.9 Chordates Without a Backbone</p> <p><b>MARINE FISHES</b></p> <p>8.1 Vertebrates: An Introduction</p> <p>8.2 Types of Fishes</p> <p>8.3 Biology of Fishes</p> <p><b>MARINE REPTILES, BIRDS, AND MAMMALS</b></p> <p>9.1 Marine Reptiles</p> <p>9.2 Seabirds</p> <p>9.3 Marine Mammals</p>	<ul style="list-style-type: none"> <li>• download PPT'S</li> <li>• weekly readings</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly quizzes</li> <li>• Summative assessments</li> </ul>	C,D
Unit 3: Structure and Function of Marine Ecosystems	<p><b>AN INTRODUCTION TO MARINE ECOLOGY</b></p> <p>10.1 The Organization of Communities</p> <p>10.2 Marine Lifestyles and Environments</p> <p>10.3 The Flow of Energy and Materials</p> <p><b>BETWEEN THE TIDES</b></p> <p>11.1 Rocky Shore Intertidal Communities</p>	<ul style="list-style-type: none"> <li>• download PPT'S</li> <li>• weekly readings</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly quizzes</li> <li>• Summative assessments</li> </ul>	A,C,D

**EXHIBIT B-4**

	<p>11.2 Soft-Bottom Intertidal Communities</p> <p><b>ESTUARIES: WHERE RIVERS MEET THE SEA</b></p> <p>12.1 Origin and Types of Estuaries</p> <p>12.2 Physical Characteristics of Estuaries</p> <p>12.3 Estuaries as Ecosystems</p> <p>12.4 Human Impact on Estuarine Communities</p> <p><b>LIFE ON THE CONTINENTAL SHELF</b></p> <p>13.1 Physical Characteristics of the Subtidal Environment</p> <p>13.2 Continental Shelf Bottom Communities</p> <p><b>CORAL REEFS</b></p> <p>14.1 The Organisms that Build Reefs</p> <p>14.2 The Ecology of Coral Reefs</p> <p><b>LIFE NEAR THE SURFACE</b></p> <p>15.1 The Organisms of the Epipelagic</p> <p>15.2 Living in the Epipelagic</p> <p>15.3 Epipelagic Food Webs</p> <p><b>THE OCEAN DEPTHS</b></p> <p>16.1 The Twilight World</p> <p>16.2 The World of Perpetual Darkness</p> <p>16.3 The Deep-Ocean Floor</p>			
Unit 4: Humans and the Sea	<p><b>RESOURCES FROM THE SEA</b></p> <p>17.1 The Living Resources of the Sea</p> <p>17.2 Non-Living Resources from the Sea Floor</p> <p>17.3 Non-Living Resources from Seawater</p> <p><b>THE IMPACT OF HUMANS ON THE MARINE ENVIRONMENT</b></p> <p>18.1 Modification and Destruction of Habitats</p> <p>18.2 Pollution</p> <p>18.3 Threatened and Endangered Species</p> <p>18.4 Conserving and Enhancing the Environment</p> <p><b>THE OCEAN AND HUMAN AFFAIRS</b></p> <p>19.1 Oceans as Barriers and Avenues</p> <p>19.2 Oceans and Cultures</p>	<ul style="list-style-type: none"> <li>• download PPT'S</li> <li>• weekly readings</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly quizzes</li> <li>• Summative assessments</li> </ul>	C,E

**EXHIBIT B-4**

	19.3 Prospects for the Future			
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**10. METHODS OF INSTRUCTION**

In the structuring of this course, what major methods of instruction will be utilized?

Lecture/discussion; field work/laboratory work.

**11. GENERAL EDUCATION GOALS ADDRESSED BY THIS COURSE**

(this section is to fulfill state requirements):

- 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).
- For each General Education Goal checked in column 1, in column 2 you must list the related course learning outcome from section 8 of this form.
- 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.
- In column 4, list how each checked off General education goal will be assessed within the course (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral				
Quantitative Knowledge and Skills				
Scientific Knowledge and Reasoning	X	<u>8 a, d</u>	<u>16.3, 11.1, 11.2</u>	<u>exams</u>
Technological Competency	<del>X</del>			
Information Literacy				
Society and Human Behavior	<del>X</del>			
Humanistic Perspective	<del>X</del>			
Historical Perspective	<del>X</del>			
Global and Cultural Awareness	<del>X</del>			
Ethical Reasoning and Action	X	<u>8 e</u>	<u>18.1, 18.2, 18.3</u>	<u>exams</u>

**EXHIBIT B-4**

Independent/Critical Thinking	X	<u>8 a,d</u>	<u>16.3,11.1,11.2</u>	<u>exams</u>
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**12. NEEDS**

- Instructional Materials (text, etc.):

An appropriate textbook *and/or open educational resources* will be selected. Please contact the department for current adoptions.

Technology Needs:

- Refractometers,
- Dissolved Oxygen/ Salinity Meters
- pH Meters
- Binoculars
- Telescope
- Field Guides

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

Currently employed full time faculty can instruct this course.

- 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:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

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#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: July 28, 2008

Board of Trustees Approval Date: July 25, 2011

Board of Trustees Approval Date: March 26, 2012

PLT Approval of Form: May 22, 2012

Board of trustees Approval Date: **July 23, 2020**

## ***EXHIBIT B-5***

**OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF ARTS AND HUMANITIES**

1. COURSE NUMBER AND TITLE: CHIN 102 Elementary Chinese II
2. SEMESTER HOURS: 3 CONTACT HOURS: ( 3 + 0 + 0 )  
Lecture Lab Practicum
3. CATALOG DESCRIPTION

This course, a continuation of Elementary Chinese I, is designed for students who have successfully completed Elementary Chinese I, CHIN 100. The course introduces students to spoken Mandarin Chinese with the aid of the Pinyin system and the elementary level of reading and writing Chinese characters (simplified).

4. PREREQUISITES: CHIN 100 COREQUISITES: NONE
5. COURSE FEE CODE: NONE

**COURSE TYPE FOR PERKINS REPORTING:**

- ☐ vocational (approved for Perkins funding)  
☒ non-vocational (not approved for Perkins funding)

**6. JUSTIFICATION**

- a. Describe the need for this course.

Being one of the world's oldest civilizations, and having the world's largest market, China offers unique opportunities to our students with its rich cultural heritage and fast growing economy. Learning Chinese enables us to explore the endless treasure of its ancient past as well as provide us ample opportunity to a huge job market in all of the countries and regions where mandarin Chinese is the language of commerce.

- 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 ☐ no

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

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Communication         | <input type="checkbox"/> Social Science | <input type="checkbox"/> History           |
| <input checked="" type="checkbox"/> Humanities | <input type="checkbox"/> Lab Science    | <input type="checkbox"/> Science (Non-Lab) |
| <input type="checkbox"/> Mathematics           | <input type="checkbox"/> Technology     | <input type="checkbox"/> 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 Intensive Course (WIC) List \_\_\_\_\_

- c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

- ~~This course will help the college to fulfill its mission of fostering excellence by offering comprehensive programs that develop intentional learners of all ages.~~
- ~~This course is consistent with the following goals of the college as expressed in the Academic Master Plan:~~

- ~~Provide a challenging, coherent, and integrated curriculum, including high quality instructional and cultural programs for a diverse population of students.~~
- ~~Establish a shared commitment to high and meaningful educational and ethical standards.~~
- ~~Prepare students for successful transfer to other educational institutions.~~
- ~~Prepare students for a rewarding life marked by personal growth and life-long learning.~~

i. Provide affordable, student-centered, high quality educational experiences that prepare and empower diverse learners to contribute to and succeed in global societies. (Mission Statement);

ii. Be the boldest, most creative, most innovative student-centered college in America (Vision Statement)

iii. Deliver Innovative Curricula Programs and Assess Current Programs. (Academic Master Plan).

iv. Expand the process of infusing global perspectives across Arts and Humanities curricula in order to better prepare students as engaged and global citizens. (School of Arts and Humanities Goal)

## 7. RELATED COURSES AT 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



**EXHIBIT B-5**

explain here: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
Bergen CC	Chinese [Mandarin] II	LAN 276	3	
Brookdale CC	Elementary Chinese II	CHNS 102	4	
Mercer CC	Beginning Chinese II	CHI 102	3	
Morris CC	Elementary Chinese II	CHI 112	3	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
Georgian Court University	GENED “57 (General Education), 3 cr.	Bridge Modern Language, Culture, Global Studies, General Education – World Language		
Kean University	FLX1120 “K1,K3” (Elem Chinese- Cantonese II), 3 cr.	Elective		
Monmouth University	FO001, 100 Level Foreign Language Elective, <u>3 cr.</u>	Elective		
Stockton University	LANGEC (Foreign Language Elective), 3 cr.	General Education		
Rowan University	CHIN 07102 (Elem Chinese II), 3 cr.	General Education		
Rutgers – New Brunswick, School of Arts & Sciences				Not Yet Evaluated

- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

## 8. SPECIFIC COURSE LEARNING OUTCOMES

Students who successfully complete this course will be able to:

- a. Differentiate and use the four tones in spoken Chinese.
- b. ~~Master~~ **Demonstrate mastery of** the Romanized Pinyin system.
- c. ~~Conduct~~ **Apply and utilize language skills to conduct** simple conversation in standard spoken Chinese.
- d. ~~Write~~ **Demonstrate writing** Chinese characters in the correct order of strokes.
- e. ~~Read~~ **Interpret** short essays with the aid of Pinyin.
- f. ~~Write~~ **Compose** short passages in simplified Chinese characters.
- g. ~~Recognize~~ **Identify** aspects of cultural diversity related to learning the language.

## 9. TOPICAL OUTLINE (include as many themes/skills as needed):

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<b>1. Speaking skills</b>	<b><i>Practice of the four tones in group, pairs or individually</i></b>	<b><i>Oral presentation in class.</i></b>	<b>8: a, b, c</b>
<b>2. Listening comprehension</b>	<b><i>Question and answer exercises in Chinese</i></b>	<b><i>Oral presentation in class.</i></b>	<b>8: a, b, c</b>
<b>3. Reading</b>	<b><i>Reading the Chinese texts either in pairs or individually</i></b>	<b><i>Answering questions based on the reading materials</i></b>	<b>8: d, e, f, g</b>
<b>4. Writing</b>	<b><i>Written assignments in simplified Chinese characters.</i></b>	<b><i>Each assignment will be checked and corrected.</i></b>	<b>8: d, e, f, g</b>
<b>5. Understanding Chinese culture and cultural diversity</b>	<b><i>Comparison between English and Chinese languages.</i></b>	<b><i>Reading and writing in Chinese.</i></b>	<b>8: a, b, c, d, e, f, g</b>

**EXHIBIT B-5**

	<i>Each student will be assigned a Chinese name.</i>		
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**10. METHODS OF INSTRUCTION**

In the structuring of this course, what major methods of instruction will be utilized?

- Lecture/class discussion
- Quiz/in-class examination
- Video and audio tapes

**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 outcome from section 8 of this form.
- 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 (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral				
Quantitative Knowledge and Skills				
Scientific Knowledge and Reasoning				
Technological Competency				
Information Literacy				
Society and Human Behavior				
Humanistic Perspective	X	8: a, b, c, d, e, f, g	9: All	Oral presentation Quizzes Written assignments

**EXHIBIT B-5**

				<i>Compose texts in Chinese font</i>
Historical Perspective				
Global and Cultural Awareness	X	8: g	9: 5	<i>Oral presentation, Quizzes Written assignments</i>
Ethical Reasoning and Action				
Independent/Critical Thinking				

**12. NEEDS**

- Instructional Materials (text etc.): An appropriate textbook *or open educational resources* will be selected. Please contact the department office for current adoptions.
- Technology Needs: Internet accessibility
- Human Resource Needs (Presently Employed vs. New Faculty):  
\_\_\_\_\_
- Facility Needs:  
\_\_\_\_\_
- 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:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

## EXHIBIT B-5

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 receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: February 5, 2002

Board of Trustees Approval Date: July 28, 2008

Board of Trustees Approval Date: November 03, 2016

Board of Trustees Approval Date: **July 23, 2020**

## ***EXHIBIT B-6***

OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
**SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS**

1. COURSE NUMBER AND TITLE: CSIT 213: Database Management
2. SEMESTER HOURS: 3 CONTACT HOURS: ( 3 + 0 + 0 )  
Lecture Lab Practicum
3. CATALOG DESCRIPTION:  
**A course emphasizing This course emphasizes** the concepts and structure necessary to design and implement database management systems. Hierarchical, network and relational models will be evaluated. The student will design and implement a project using a modern relational database package, report generator and SQL. Open lab time required.
4. PREREQUISITES: CSIT165 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 required course in Computer Science AS degree Information Technology, Information Systems and Game Development and Design options and 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	<u>X</u> 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 following degree program(s):  
**AS in computer Science (including program options) and AAS in Computer Science/Information Technology**

Computer Science AS degree Information Technology,  
Information Systems and Game Development and Design options  
and Computer Science/Information Technology AAS degree

Elective

- iii. If the course is a program specific requirement, please list the program objective that this course fulfills:

13. Demonstrate independent thinking through mathematical, scientific and philosophical reasoning.

15. Solve problems by collecting, organizing and evaluating information.

16. Understand technology and its impact on society and the environment.

- iv. This course is recommended for the following:

The Limited Load List \_\_\_\_\_

The Writing Intensive Course (WIC) List \_\_\_\_\_

13. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

- ~~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)~~

- i. Offer comprehensive educational programs that develop intentional learners of all ages and ensure the full assessment of student learning in these programs. (Mission Statement)
- ii. Foster educational innovation through effective teaching-learning strategies, designed to develop and nurture intentional learners who are informed and empowered. (Vision Statement)
- iii. Employ technology and learning outcomes assessment to ensure student success in an increasingly diverse and complex world. (Vision Statement)
- iv. Prepare students for entrance into the workforce and/or for successful transfer to other educational institutions. (Academic Master Plan)
- v. Seek to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)
- vi. Challenge 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



**EXHIBIT B-6**

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: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
<u>Atlantic Cape Community College</u>	<u>Database Design Using Oracle</u>	<u>CISM170</u>	<u>3</u>	
<u>Brookdale Community College</u>	<u>Database Concepts</u>	<u>COMP269</u>	<u>3</u>	
<u>Rowan College at Burlington County</u>	<u>Database Systems</u>	<u>CSE213</u>	<u>3</u>	
<u>Camden County College</u>	<u>Relational Database Concepts</u>	<u>CIS237</u>	<u>3</u>	
<u>Mercer County Community College</u>	<u>NONE</u>			<u>CIS173 limited in scope</u>

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
<u>Georgian Court University</u>	<u>CS231 Introduction to Database Systems 3 credits</u>	<u>Elective</u>		
<u>Kean University</u>	<u>CPS XX103, Systems 3 credits</u>	<u>Elective</u> <u>A minimum grade</u> <u>of 'D' is required</u> <u>to transfer for non-</u> <u>major and 'Free</u> <u>Elective' courses.</u> <u>A minimum grade</u> <u>of 'C' is required</u> <u>for major course</u>		
<u>Monmouth University</u>	<u>CS002 (3)</u>	<u>200 Level</u> <u>Computer Science</u> <u>Elective</u>		
<u>Rowan University</u>	<u>Computer Science</u> <u>Elective</u>	<u>GenED</u>		
<u>Rutgers – New Brunswick, School of Arts &amp; Sciences</u>			<u>X</u>	

<u>Stockton University</u>	<u>CSIS EC , Computer Science Elective, 3 credits</u>	<u>Major</u>		
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- 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): NJTranfer indicates that at Monmouth University this is level 200 Computer Science for transfer credit. It is unknown if credit would be given to MIS02.338 Database Systems at Rowan University
- 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 OUTCOMES

Students who successfully complete this course will be able to:

- ~~a. Describe the characteristics of business databases and the features of database management systems.~~
- ~~b. Understand the importance of nonprocedural access for software productivity.~~
- ~~c. Appreciate the advances in database technology and the contribution of database technology to modern society.~~
- ~~d. Perceive career opportunities related to database application development and database administration.~~
- ~~e. Recognize relational database terminology.~~
- ~~f. Understand the meaning of the integrity rules for relational databases.~~
- ~~g. Understand the impact of referenced rows on maintaining relational databases.~~
- ~~h. Understand the meaning of each relational algebra operator.~~
- ~~i. List tables that must be combined to obtain desired results for simple retrieval requests.~~
- ~~j. Develop SQL queries to retrieve information from relational databases.~~
- ~~k. Write SQL SELECT statements for queries involving restriction, projection, join, and summarization operators.~~
- ~~l. Understand the meaning of grouping queries using the conceptual evaluation process.~~
- ~~m. Write English descriptions to document SQL statements.~~
- ~~n. Write INSERT, UPDATE, and DELETE statements to change the contents of a database.~~
- ~~o. List goals of database development.~~
- ~~p. Describe the roles of databases in an information system.~~
- ~~q. List functions typically provided by CASE tools for database development.~~
- ~~r. Know the symbols and vocabulary of the Crow's Foot notation for entity relationship diagrams.~~
- ~~s. Use the cardinality symbols to represent 1-1, 1-M, and M-N relationships.~~
- ~~t. Use generalization hierarchies to represent similar entity types.~~
- ~~u. Detect notational errors in an entity relationship diagram.~~
- ~~v. Convert an ERD to a table design using conversion rules.~~
- ~~w. Identify modification anomalies in tables with excessive redundancies.~~
- ~~x. Define functional dependencies among columns of a table.~~
- ~~y. Apply normalization techniques to entities and tables.~~

## EXHIBIT B-6

~~z. Understand the need for normalization and determine the correct form based on application requirements.~~

~~aa. Appreciate the usefulness and limitations of normalization.~~

*a) Describe the characteristics of business databases and the features of database management systems including the importance of nonprocedural access for software productivity.*

*b) Explain relational database terminology, the meaning of the integrity rules for relational databases, referenced rows, relational algebra operations, and determine the tables that must be combined to obtain desired results for simple retrieval requests.*

*c) Construct SQL statements to retrieve information, change the contents of a database, and document their operation.*

*d) Use CASE tools and various ERD diagrams to design tables and recognize cardinality as a first step in database design.*

*e) Employ techniques for normalization based upon identifying functional dependencies; and recognize their usefulness and limitations.*

9. Topical Outline (include as many themes/skills as needed):

1. Major Themes/Skills	2. Assignments/Activities (Recommended but not limited to)	3. Assessment (Recommended but not limited to)	4. Related Course Learning Outcome(s)
A) Database Characteristics 1) Features of Database Management systems 2) Development of Data base Technology and Market Structure 3) Architectures of Database Management systems 4) Organizational Impacts of Database Technology	<u><i>Hands-on; In-class exercises; Lab exercises</i></u>	<u><i>Exam</i></u>	<u><i>8:a</i></u>
B) The Relational Data Model 1) Basic Elements a) Tables b) Connections among Tables c) Alternative Terminology 2) Integrity Rules a) Definition of Integrity Rules b) Applying integrity Rules c) Graphical Representation of Referential Integrity 3) Delete and Update Actions impact on integrity	<u><i>Hands-on; In-class exercises; Lab exercises</i></u>	<u><i>Exam</i></u>	<u><i>8:b</i></u>

**EXHIBIT B-6**

4) Relational Algebra <ul style="list-style-type: none"> <li>a) Restrict and Project</li> <li>b) Extended cross product</li> <li>c) Join operator</li> <li>d) Outer join Operator</li> <li>e) Union, Intersection, and Difference Operators</li> <li>f) Divide Operator</li> </ul>			
C) SQL <ul style="list-style-type: none"> <li>1) History and scope of SQL</li> <li>2) Select <ul style="list-style-type: none"> <li>a) Single table problems</li> <li>b) Joining tables</li> <li>c) Summarizing with GROUP BY and HAVING</li> <li>d) Improving the appearance of results</li> </ul> </li> <li>3) Evaluation of the Select</li> <li>4) Refining query formulations <ul style="list-style-type: none"> <li>a) Joining multiple tables cross product style</li> <li>b) Joining multiple tables join operator style</li> <li>c) Self-joins and multiple joins</li> <li>d) Combining joins and groupings</li> <li>e) Traditional set operators in QLS</li> </ul> </li> <li>5) SQL Modification Statements</li> </ul>	<u><b>Hands-on; In-class exercises; Lab exercises</b></u>	<u><b>Programming Exercises; Exam</b></u>	<u><b>8:c</b></u>
D) Goals of Database Development <ul style="list-style-type: none"> <li>1) Information Systems <ul style="list-style-type: none"> <li>a) Components</li> <li>b) Development process</li> </ul> </li> <li>2) Goals of Database Development <ul style="list-style-type: none"> <li>a) Common vocabulary</li> <li>b) The meaning of Data</li> <li>c) Data Quality</li> <li>d) Efficient Implementation</li> </ul> </li> <li>3) Database Development Process <ul style="list-style-type: none"> <li>a) Phases of Development</li> <li>b) Skills in Database Development</li> </ul> </li> <li>4) Tools of Database Development <ul style="list-style-type: none"> <li>a) Diagramming</li> <li>b) Documentation</li> <li>c) Analysis</li> <li>d) Prototyping tools</li> <li>e) CASE Tools</li> </ul> </li> <li>5) Entity Relationship diagrams <ul style="list-style-type: none"> <li>a) Introduction to ER Diagrams</li> </ul> </li> </ul>	<u><b>Hands-on; In-class exercises; Lab exercises</b></u>	<u><b>Programming Exercises; Exam</b></u>	<u><b>8:d</b></u>

**EXHIBIT B-6**

<ul style="list-style-type: none"> <li>b) Basic Symbols</li> <li>c) Relationship Cardinality</li> <li>6) Relationships <ul style="list-style-type: none"> <li>a) Identification</li> <li>Dependency(Weak Entities)</li> <li>b) Relationship patterns</li> <li>c) Equivalence between 1-M and M-N Relationships</li> </ul> </li> <li>7) Classification of the ER Model <ul style="list-style-type: none"> <li>a) Generalization Hierarchies</li> <li>b) Disjointness and Completeness Constraints</li> <li>c) Multiple Levels of Generalization</li> </ul> </li> </ul>			
<p>E) Normalization</p> <ul style="list-style-type: none"> <li>1) Overview of Relational Database Design <ul style="list-style-type: none"> <li>a) Avoidance of Modification Anomalies</li> <li>b) Functional Dependencies</li> </ul> </li> <li>2) Normal Forms <ul style="list-style-type: none"> <li>a) First normal form</li> <li>b) Second and third normal form</li> <li>c) Boyce-Codd Normal Form</li> </ul> </li> <li>3) M-Way Relationships <ul style="list-style-type: none"> <li>a) Relationship independence</li> <li>b) Multi-valued Dependencies and Fourth normal form</li> </ul> </li> <li>4) Higher Level Normal Forms <ul style="list-style-type: none"> <li>a) Fifth normal form</li> <li>b) Domain key normal form</li> </ul> </li> <li>5) Role of Normalization in the development process.</li> </ul>	<p><b><u>Hands-on; In-class exercises; Lab exercises</u></b></p>	<p><b><u>Programming Exercises; Exam</u></b></p>	<p><b><u>8:e</u></b></p>
<p>F) Application Development with Views</p> <ul style="list-style-type: none"> <li>1) Background <ul style="list-style-type: none"> <li>a) Motivation</li> <li>b) View definition</li> </ul> </li> <li>2) Using views for retrieval <ul style="list-style-type: none"> <li>a) Using views in SELECT Statements</li> <li>b) Processing queries with view references</li> </ul> </li> <li>3) Updating using views <ul style="list-style-type: none"> <li>a) Single table updatable views</li> <li>b) Multiple table updatable views.</li> </ul> </li> </ul>	<p><b><u>Hands-on; In-class exercises; Lab exercises</u></b></p>	<p><b><u>Programming Exercises; Exam</u></b></p>	<p><b><u>8:all</u></b></p>

**EXHIBIT B-6**

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 outcome from section 8 of this form.
- c. In column 3, you will 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 Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral	<b>X</b>			
Quantitative Knowledge and Skills				
Scientific Knowledge and Reasoning				
Technological Competency	X	<u><b>8:ALL</b></u>	<u><b>9:ALL</b></u>	<u><b>Programming Exercises; Exam</b></u>
Information Literacy				
Society and Human Behavior				
Humanistic Perspective				
Historical Perspective				
Global and Cultural Awareness				
Ethical Reasoning and Action				
Independent/Critical Thinking	<b>X</b>			

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:

---

- 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 Java. 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):

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### 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:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154

### 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 receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Maximum Class Size/Lab Fee Code/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

**EXHIBIT B-6**

#8 Course Outcome(s)	#13 Grade Determinants
#11 General Education Goals - Rubric	

Revised: December 1990; February 27, 1996; April 30, 1996; December 1998; May 4, 2004; Feb. 28, 2006; March 8, 2006

Board of Trustees Approval Date: December 11, 2006

Board of Trustees Approval Date: March 26, 2012

Board of Trustees Approval Date: February 25, 2013

Approval of Form: September 2017

Board of Trustees Approval Date: July 23, 2020



## ***EXHIBIT B-7***

**OCEAN COUNTY COLLEGE**  
**COURSE PROPOSAL FORM #7100-1 / OFFICIAL COURSE DESCRIPTION**  
**SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS**

1. COURSE NUMBER AND TITLE: ENGR-221: Engineering Statics
2. SEMESTER HOURS: 3 s.h. CONTACT HOURS: ( 3 + 0 + 0 )  
Lecture Lab Practicum
3. CATALOG DESCRIPTION

***This course is a*** quantitative study of ~~forces that act on engineering structures~~ **engineering mechanics including static equilibrium of particles and rigid bodies in two and three dimensions, centroids, centers of mass, moments of inertia, dry friction, internal forces & moments, virtual work and potential energy.** ~~Force system classification, resultant forces and conditions for equilibrium of rigid bodies in two and three dimensions are covered. Mathematical principles of vectors and calculus are applied to trusses, frames and simple machines. Centroids (center of mass) are developed and used in the analysis of stresses on beams. Special engineering topics discussed will include dry friction with an introduction to virtual work. The concept of moment of inertia included in discussion will establish the link between statics and solid mechanics.~~

4. PREREQUISITES: MATH 266, PHYS 281 COREQUISITES: None
5. COURSE FEE CODE: 0

COURSE TYPE FOR PERKINS REPORTING:

- ☒ vocational (approved for Perkins funding)  
☐ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

All **Many** engineering programs require a course in engineering statics. This course satisfies that requirement.

- 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 ☒ no

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

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Communication | <input type="checkbox"/> Social Science | <input type="checkbox"/> History           |
| <input type="checkbox"/> Humanities    | <input type="checkbox"/> Lab Science    | <input type="checkbox"/> Science (Non-Lab) |
| <input type="checkbox"/> Mathematics   | <input type="checkbox"/> Technology     | <input type="checkbox"/> 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):

X   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 Intensive Course (WIC) List \_\_\_\_\_

- 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~~

- ~~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)~~

**i. Cultivating a technologically progressive and entrepreneurial spirit (Mission Statement)**

**ii. Deliver Innovative Curricula Programs and Assess Current Programs - Develop both transfer and vocational programs (Academic Master Plan)**

## 7. RELATED COURSES AT 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: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
<b><u>Brookdale CC</u></b>	<b><u>Engineering Mechanics I</u></b>	<b><u>ENGI101</u></b>	<b><u>3</u></b>	

**EXHIBIT B-7**

<u>Atlantic-Cape</u>	<u>Statics</u>	<u>ENGR201</u>	<u>3</u>	
<u>Mercer</u>	<u>Mechanics</u>	<u>CIV 106</u>	<u>3</u>	
<u>Burlington</u>	<u>Engineering</u> <u>Statics</u>	<u>EGR 201</u>	<u>3</u>	
<u>Camden</u>	<u>Statics</u>	<u>EGR-201</u>	<u>3</u>	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
<u>Georgian Court University</u>		<u>Elective (B.A. in Applied Arts + Science only)</u>		
<u>Kean University</u>	<u>TECHX1003"K1,K3"</u> <u>(TECHNOLOGY FREE ELECTIVE)</u>	<u>Technical Elective</u>		
<u>Monmouth University</u>	<u>PH001 (100 LEVEL PHYSICS ELECT)</u>	<u>Elective</u>		
<u>Rowan University</u>	<u>ENGR01271</u> <u>(STATICS</u> <u>(2cr)</u>	<u>Major</u>		
<u>Rutgers-School of Engineering</u>	<u>14440221 "R43"</u> <u>(ENGINEERING MECHANICS: STATICS)</u> <u>(3cr)</u>	<u>Major</u>		
<u>Stockton University</u>	<u>PHYS2300</u> <u>(STATICS)</u> <u>(3cr)</u>	<u>Elective</u>		

- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

**8. SPECIFIC COURSE LEARNING OUTCOMES**

Students who successfully complete this course will be able to:

Solve problems in Engineering Statics in 2 & 3 dimensions pertaining to the following:

- ~~System of units, conversions, numerical accuracy.~~
- ~~Plane particle forces resultant of two forces, 2D vector addition.~~
- ~~Resultant of concurrent forces. resultant of forces.~~
- ~~Unit vectors, 3D components, equilibrium of 3D particles. Free body diagrams.~~

## EXHIBIT B-7

- ~~3D rectangular components, line of action, concurrent forces.~~
- ~~Rigid bodies, equivalent systems of forces vector operators.~~
- ~~Moments of forces in 2 & 3 dimensions, moment of forces about an axis, equivalent systems of force~~
- ~~Equilibrium of rigid bodies, reactions in 2 dimensions, statically indeterminate reactions, partial constraints.~~
- ~~Equilibrium in 3D, reactions at supports.~~
- ~~Centroids & centers of gravity.~~
- ~~Center of gravity in 3 dimensional bodies.~~
- ~~Analysis of structures, trusses in 2 dimensional.~~
- ~~Frames machines, multiforce members, forces in beams & cables.~~
- ~~Dry factory, moments of inertia, composite areas, principal axes.~~

- a. Understand and apply the basic theory and foundational analytical tools for engineering mechanics for particles and rigid bodies in equilibrium.
- b. Solve 2D & 3D force systems and moments acting on particles and rigid bodies in equilibrium
- c. Model and analyze mechanical structures: trusses, frames & machines
- d. Solve problems involving centroids, centers of mass, moments of inertia and distributed loads.
- e. Translate theory to applications and analysis mechanical structures that involve dry friction, internal forces & moments, and virtual work & potential energy.
- f. Use engineering mechanics theory and analytical methods in support of individual and group engineering design projects.

9. TOPICAL OUTLINE (include as many themes/skills as needed):

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<u>Unit 1 – Introduction &amp; Force Systems</u> <ul style="list-style-type: none"> <li>• <u>Engineering &amp; Mechanics</u></li> <li>• <u>Newtonian Gravitation</u></li> <li>• <u>Scalars and Vectors</u></li> <li>• <u>Components in Two Dimensions</u></li> <li>• <u>Components in Three Dimensions</u></li> <li>• <u>Dot Products</u></li> <li>• <u>Cross Products</u></li> <li>• <u>Forces, Equilibrium, and Free-Body Diagrams</u></li> <li>• <u>Two-dimensional Force Systems</u></li> <li>• <u>Three-Dimensional Force Systems</u></li> </ul>	<u>Reading, discussion, projects</u>	<u>Quiz, exam, individual and group project</u>	<u>8: a</u>

**EXHIBIT B-7**

<b><u>Unit 2 – Systems of Forces &amp; Moments</u></b> <ul style="list-style-type: none"> <li>• <b><u>Two-Dimensional Description of the Moment</u></b></li> <li>• <b><u>The Moment Vector</u></b></li> <li>• <b><u>Moment of Force About a Line</u></b></li> <li>• <b><u>Couples</u></b></li> <li>• <b><u>Equivalent Systems</u></b></li> <li>• <b><u>Two-Dimensional Applications</u></b></li> <li>• <b><u>Statically Indeterminate Objects</u></b></li> <li>• <b><u>Three-Dimensional Applications</u></b></li> </ul>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8: a, b</u></b>
<b><u>Unit 3 – Structures</u></b> <ul style="list-style-type: none"> <li>• <b><u>Two-Force and Three-Force Members</u></b></li> <li>• <b><u>Trusses</u></b></li> <li>• <b><u>The Method of Joints</u></b></li> <li>• <b><u>The Method of Sections</u></b></li> <li>• <b><u>Frames and Machines</u></b></li> </ul>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8: a, b, c</u></b>
<b><u>Unit 4 - Centroids, Centers of Mass, Moments of Inertia</u></b> <ul style="list-style-type: none"> <li>• <b><u>Centroids of Areas</u></b></li> <li>• <b><u>Composite Areas</u></b></li> <li>• <b><u>Distributed Loads</u></b></li> <li>• <b><u>Centroids of Volumes and Lines</u></b></li> <li>• <b><u>Composite Volumes and Lines</u></b></li> <li>• <b><u>The Pappus-Guldinus Theorems</u></b></li> <li>• <b><u>Center of Mass of Objects</u></b></li> <li>• <b><u>Centers of Mass of Composite Objects</u></b></li> <li>• <b><u>Definitions (Area moments of Inertia)</u></b></li> <li>• <b><u>Parallel-Axis Theorem</u></b></li> <li>• <b><u>Simple Objects (Mass Moments of Inertia)</u></b></li> </ul>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8: a, b ,d</u></b>
<b><u>Unit 5 Additional Applications of Engineering Mechanics</u></b> <ul style="list-style-type: none"> <li>• <b><u>Theory of Dry Friction</u></b></li> <li>• <b><u>Wedges</u></b></li> <li>• <b><u>Threads</u></b></li> <li>• <b><u>Journal Bearings</u></b></li> <li>• <b><u>Thrust Bearings</u></b></li> </ul>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8: a-e</u></b>

**EXHIBIT B-7**

<ul style="list-style-type: none"> <li>• <u>Belt Friction (add other examples)</u></li> <li>• <u>Axial Force, Shear Force, and Bending Moment (Beams)</u></li> <li>• <u>Shear Force and Bending Moment Diagrams (Beams)</u></li> <li>• <u>Relations Between Distributed Load, Shear Force, and Bending Moment (Beams)</u></li> <li>• <u>Loads Distributed Uniformly Along Straight Lines (Cables)</u></li> <li>• <u>Loads Distributed Uniformly Along Cables</u></li> <li>• <u>Discrete Loads (Cables)</u></li> <li>• <u>Virtual Work</u></li> <li>• <u>Potential Energy</u></li> </ul>			
<u>Use of Engineering Analysis within the Engineering Design Process</u>	<u>Reading, discussion, projects</u>	<u>Quiz, exam, individual and group project</u>	<u>8: all</u>

**10. METHODS OF INSTRUCTION**

In the structuring of this course, what major methods of instruction will be utilized?

~~Three hours of formal lecture and class discussion per week~~

Lecture, problem solving activities, and discussion.

**11. GENERAL EDUCATION GOALS ADDRESSED BY THIS COURSE**

(this section is to fulfill state requirements):

- 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).
- For each General Education Goal checked in column 1, in column 2 you must list the related course learning outcome from section 8 of this form.
- 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.
- In column 4, list how each checked off General education goal will be assessed within the course (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
------------------------	-----------------------------	------------------------------------	------------------------------	--

**EXHIBIT B-7**

Communication-Written and Oral				
Quantitative Knowledge and Skills	<u>X</u>	<u>8: all</u>	<u>9: all</u>	<u>Quiz, exam, individual and group project</u>
Scientific Knowledge and Reasoning				
Technological Competency	✕			
Information Literacy	✕			
Society and Human Behavior				
Humanistic Perspective				
Historical Perspective				
Global and Cultural Awareness				
Ethical Reasoning and Action				
Independent/Critical Thinking	X	<u>8: all</u>	<u>9: all</u>	<u>Quiz, exam, individual and group project</u>

**12. NEEDS**

- Instructional Materials (text, etc.): Text: An appropriate text and/or open educational resources will be selected. Contact the department for current adoptions.
- Technology Needs: None
- Human Resource Needs (Presently Employed vs. New Faculty):  
Presently employed faculty can teach this course.
- Facility Needs: None
- Library needs (list specific needs and must be initialed by library director): None

**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:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average



**EXHIBIT B-7**

D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

### **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 receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: July 28, 2008

Board of Trustees Approval Date: July 23, 2020

## ***EXHIBIT B-8***

**OCEAN COUNTY COLLEGE**  
**COURSE PROPOSAL FORM #7100-1 / OFFICIAL COURSE DESCRIPTION**  
**SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS**

1. COURSE NUMBER AND TITLE: ENGR-222: Engineering Dynamics

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

3. CATALOG DESCRIPTION

~~A study of the motion of bodies without reference to the forces which cause the motion and the action of forces on acting the bodies to their resulting motions. Rectilinear and curvilinear motion in two and three dimensions using rectangular, normal/tangential and polar coordinate system are investigated in kinematics. Kinetics includes discussions on work, potential and kinetic energy. Pulse and momentum are analyzed from a special treatment of Newton's second law along with the concept of conservation of energy and momentum~~

**This course is a quantitative study of motion and the forces causing motion for particles and rigid-bodies. Analysis methods include utilization of Newton's Second Law, and energy and momentum methods. Additional topics include kinematics and kinetics of rigid bodies in three dimensions, and mechanical vibration.**

4. PREREQUISITES: MATH 266, ENGR 221 and PHYS 281 COREQUISITES: None

5. COURSE FEE CODE: 0

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.

All **Many** engineering programs require a course in engineering dynamics. This course satisfies that requirement.

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.

<input type="checkbox"/> Communication	<input type="checkbox"/> Social Science	<input type="checkbox"/> History
<input type="checkbox"/> Humanities	<input type="checkbox"/> Lab Science	<input type="checkbox"/> Science (Non-Lab)
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Technology	<input type="checkbox"/> 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 following degree program(s):

X   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 Intensive Course (WIC) List \_\_\_\_\_

- c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

~~◆ This course will help the college to fulfill its mission of fostering excellence by offering comprehensive programs that develop intentional learners of all ages.~~

~~◆ This course is consistent with the following goals of the college as expressed in the Academic Master Plan:~~

- ~~➤ Provide a challenging, coherent, and integrated curriculum, including high quality instructional and cultural programs for a diverse population of students~~
- ~~➤ Establish a shared commitment to high and meaningful educational and ethical standards.~~
- ~~➤ Prepare students for successful transfer to other educational institutions.~~
- ~~➤ Prepare students for a rewarding life marked by personal growth and life long learning.~~

i. *Cultivating a technologically progressive and entrepreneurial spirit (Mission Statement)*

ii. *Deliver Innovative Curricula Programs and Assess Current Programs - Develop both transfer and vocational programs (Academic Master Plan)*

## 7. RELATED COURSES AT 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: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments

**EXHIBIT B-8**

<u>Brookdale CC</u>	<u>Engineering Mechanics II</u>	<u>ENGI102</u>	<u>3</u>	
<u>Atlantic-Cape</u>	<u>Dynamics</u>	<u>ENGR204</u>	<u>3</u>	
<u>Mercer</u>				<u>No equivalent course</u>
<u>Burlington</u>	<u>Engineering Dynamics</u>	<u>EGR 202</u>	<u>3</u>	
<u>Camden</u>	<u>Dynamics</u>	<u>EGR-202</u>	<u>3</u>	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
<u>Georgian Court University</u>		<u>Elective</u>		
<u>Kean University</u>		<u>Technical Free Elective</u>		
<u>Monmouth University</u>	<u>PH001 (100 LEVEL PHYSICS ELECT) (3cr)</u>	<u>Elective</u>		
<u>Rowan University</u>	<u>ENGR01291 (DYNAMICS) (2 cr)</u>	<u>Elective</u>		
<u>Rutgers –School of Engineering</u>	<u>14440222 "R43" (ENGINEERING MECHANICS: DYNAMICS) (3 cr)</u>	<u>Major</u>		
<u>Stockton University</u>	<u>PHYS3220 (MECHANICS) (3 cr)</u>	<u>Elective</u>		

- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

**8. SPECIFIC COURSE LEARNING OUTCOMES**

Students who successfully complete this course will be able to:

~~Solve problems in Engineering Dynamics in 2 & 3 dimensions as presented in the course outline.~~

- Mathematically model and analyze motion of particles and rigid bodies in 2D & 3D
- Apply multiple methods for solving particle & rigid-body based dynamics problems in 2D & 3D
- Perform analytics of vibrations with one degree of freedom

**EXHIBIT B-8**

- d. Use engineering kinematic and kinetics theory and analytical methods in support of individual and group engineering design projects.**

9. TOPICAL OUTLINE (include as many themes/skills as needed):

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<b><u>Unit 1: Particle-based Kinematics</u></b>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8: a</u></b>
<b><u>Unit 2: Particle-Based Kinetics</u></b> <ul style="list-style-type: none"> <li><b><u>Applications of Newton's Second Law</u></b></li> <li><b><u>Energy Methods</u></b></li> <li><b><u>Momentum Methods</u></b></li> </ul>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8: a,b</u></b>
<b><u>Unit 3: Rigid-Body-based Kinematics</u></b>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8: a</u></b>
<b><u>Unit 4: Rigid-Body-Based Kinetics</u></b> <ul style="list-style-type: none"> <li><b><u>Planar Dynamics</u></b></li> <li><b><u>Energy &amp; Momentum in Rigid-Body Dynamics</u></b></li> </ul>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8:a,b</u></b>
<b><u>Unit 5: Vibrations</u></b>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8: c</u></b>
<b><u>Unit 6: Overview of 3D applications of Kinematics and Kinetics of Rigid Bodies</u></b>	<b><u>Reading, discussion, projects</u></b>	<b><u>Quiz, exam, individual and group project</u></b>	<b><u>8:a,b</u></b>
<b><u>Use of Engineering Analysis within the Engineering Design Process</u></b>		<b><u>Individual and group project</u></b>	<b><u>8: d</u></b>

10. METHODS OF INSTRUCTION

In the structuring of this course, what major methods of instruction will be utilized?

Three hours of lecture per week

**Lecture, programming activities, and discussion.**

11. GENERAL EDUCATION GOALS ADDRESSED BY THIS COURSE

(this section is to fulfill state requirements):

- 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).
- For each General Education Goal checked in column 1, in column 2 you must list the related course learning outcome from section 8 of this form.
- 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

**EXHIBIT B-8**

outline in section 9.

- d. In column 4, list how each checked off General education goal will be assessed within the course (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral				
Quantitative Knowledge and Skills	<u>X</u>	<u>8: all</u>	<u>9: all</u>	<u>Quiz, exam, individual and group project</u>
Scientific Knowledge and Reasoning				
Technological Competency	<del>X</del>			
Information Literacy	<del>X</del>			
Society and Human Behavior	<del>X</del>			
Humanistic Perspective				
Historical Perspective				
Global and Cultural Awareness				
Ethical Reasoning and Action				
Independent/Critical Thinking	X	<u>8: all</u>	<u>9: all</u>	<u>Quiz, exam, individual and group project</u>

**12. NEEDS**

- Instructional Materials (text, etc.): Text: An appropriate text and/or open educational resources will be selected. Contact the department for current adoptions.
- Technology Needs: None
- Human Resource Needs (Presently Employed vs. New Faculty):  
Presently employed faculty can teach this course.
- Facility Needs: None
- Library needs (list specific needs and must be initialed by library director): None

**13. GRADE DETERMINANTS**

The final grade in the course will be the cumulative grade based on the following letter

**EXHIBIT B-8**

grades or their numerical equivalents for the course assignments and examinations:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

### **APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

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Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: July 28, 2008

Board of Trustees Approval Date: July 23, 2020



## ***EXHIBIT B-9***

**OCEAN COUNTY COLLEGE**  
**OFFICIAL COURSE DESCRIPTION**  
**SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS**

1. COURSE NUMBER AND TITLE: ENVI 232 Environmental Policy
2. SEMESTER HOURS: 3 CONTACT HOURS: ( 3 + 0 + 0 )  
Lecture Lab Practicum
3. CATALOG DESCRIPTION

This course focuses on the development of United States environmental policies and how these policies are initiated, implemented, and improved. Students will explore how environmental issues arrive on the public agenda; the role of political institutions in making environmental policy; the economic, political, and institutional forces that shape policymaking; competing approaches to environmental policy analysis; and the goals and strategies of the environmental movement.

4. PREREQUISITES: ENVI 152 COREQUISITES: NONE
5. COURSE FEE CODE: 0

COURSE TYPE FOR PERKINS REPORTING:

- ☐ vocational (approved for Perkins funding)  
☒ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

This course, ~~in addition to being~~ is timely and pertinent to challenges in our changing global environment ~~the residents of New Jersey~~, will be a required course in the OCC Environmental Studies AS degree program.

- 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 ☒ no

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

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Communication | <input type="checkbox"/> Social Science | <input type="checkbox"/> History           |
| <input type="checkbox"/> Humanities    | <input type="checkbox"/> Lab Science    | <input type="checkbox"/> Science (Non-Lab) |
| <input type="checkbox"/> Mathematics   | <input type="checkbox"/> Technology     | <input type="checkbox"/> Diversity         |

## EXHIBIT B-9

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

X Program-specific requirement for the following degree program(s):  
**Environmental Studies AS degree program**

X 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 Intensive Course (WIC) List \_\_\_\_\_

- c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

~~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)~~

i. Providing student-centered, high quality educational experiences that prepare and empower diverse learners (Mission Statement)

ii. Cultivating a technologically progressive spirit (Mission Statement)

ii. Providing and supporting the delivery of high quality, relevant, and emerging STEM courses (Academic Master Plan)

## 7. RELATED COURSES AT 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: \_\_\_\_\_

**EXHIBIT B-9**

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
Brookdale CC	Environmental Politics and Policy	POLI228	3	
Bergen CC	Environmental Policy Compliance and Regulation	ENV 109	3	
Burlington	Environmental and Sustainability Policy and Governance	SST 251	3	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
Georgian Court University		Elective credit		
Kean University	SUST2200 Introduction to Laws & Sustainability - Major	Major		
Monmouth University	PS 330 Environmental Policy 3 crd	Major		
Richard Stockton College	POLS 2201: Politics of the Environment 3 crd	Gen Ed: Social and Behavioral Science		
Rowan University	POSC 07075: General Ed Political Science Elective 3 crd	Gen Ed: Political Science Elective		
Rutgers – New				U

Brunswick				
-----------	--	--	--	--

- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

## 8. SPECIFIC COURSE LEARNING OUTCOMES

Students who successfully complete this course will be able to:

- Describe values that underpin “good” environmental policy.
- Assess policy decisions critically. ~~both through experiential exercises and through classroom work (e.g. policy paper, classroom discussion and final exam).~~
- Apply analytical techniques to case studies.
- Apply fundamental theories and concepts to practical environmental problems, while engaging those issues on a scholarly and practical level.
- Explain the components of systems processes as well as the institutions involved in environmental policy making.
- Apply varying methods and research skills through engagement of political issues and problems.
- Describe the mechanism and application of environmental policy in the State of New Jersey.

## 9. TOPICAL OUTLINE (include as many themes/skills as needed):

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<u><b>1. Introduction &amp; Core Governance Theory</b></u> <ul style="list-style-type: none"> <li><u><b>Historical framework</b></u></li> </ul>	<u><b>Reading</b></u> <u><b>Class discussion</b></u> <u><b>Group project</b></u>	<u><b>Quiz on reading</b></u> <u><b>Graded oral presentation of project</b></u> <u><b>Discussion Summary</b></u>	<u><b>8: a, e, f</b></u>
<u><b>2. Elite Vs. Popular Models of Democracy</b></u> <ul style="list-style-type: none"> <li><u><b>Participants in Environmental debate</b></u></li> <li><u><b>Political process</b></u></li> </ul>	<u><b>Reading</b></u> <u><b>Class discussion</b></u> <u><b>Group project</b></u>	<u><b>Quiz</b></u> <u><b>Case Study</b></u> <u><b>Discussion Summary</b></u>	<u><b>8: c, f</b></u>
<u><b>3. Policy in Transition</b></u>	<u><b>Reading</b></u>	<u><b>Test</b></u>	<u><b>8: b, e, f</b></u>

# EXHIBIT B-9

<ul style="list-style-type: none"> <li>• <u>History</u></li> <li>• <u>Changing Values</u></li> <li>• <u>Natural Resources Management</u></li> <li>• <u>The Lands Debate</u></li> </ul>	<u>Class discussion</u> <u>Group project</u>	<u>Discussion Summary</u>	
<u>4. Markets to the Rescue</u>	<u>Reading</u> <u>Class discussion</u> <u>Group project</u>	<u>Quiz</u> <u>Case Study</u> <u>Discussion Summary</u>	<u>8: c, d</u>
<u>5. Science to the Rescue</u>	<u>Reading</u> <u>Class discussion</u> <u>Group project</u>	<u>Test</u> <u>Case Study</u> <u>Discussion Summary</u>	<u>8: c, d</u>
<u>6. Climate Change Policy</u> <ul style="list-style-type: none"> <li>• <u>Energy and Water</u></li> <li>• <u>Toxic and Hazardous Waste</u></li> </ul>	<u>Reading</u> <u>Class discussion</u> <u>Group project</u>	<u>Quiz</u> <u>Discussion Summary</u>	<u>8: b, f</u>
<u>7. Sustainability and Social Justice</u> <ul style="list-style-type: none"> <li>• <u>Making Trade Offs</u></li> <li>• <u>Global Environmental Issues</u></li> </ul>	<u>Reading</u> <u>Class discussion</u> <u>Group project</u>	<u>Policy Paper</u> <u>Test</u>	<u>8: b, f</u>
<u>8. New Jersey Environmental Issues</u> <ul style="list-style-type: none"> <li>• <u>Environmental Problems</u></li> <li>• <u>Environmental Policy</u></li> <li>• <u>The NJ Department of Environmental Protection</u></li> </ul>	<u>Reading</u> <u>Class discussion</u> <u>Group project</u>	<u>Oral Presentation</u> <u>Case Study</u> <u>Test</u>	<u>8: g</u>

## 10. METHODS OF INSTRUCTION

In the structuring of this course, what major methods of instruction will be utilized?

Lecture  
Discussion

## 11. GENERAL EDUCATION GOALS ADDRESSED BY THIS COURSE

(this section is to fulfill state requirements):

- 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).
- For each General Education Goal checked in column 1, in column 2 you must list the related course learning outcome from section 8 of this form.
- 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.
- In column 4, list how each checked off General education goal will be assessed within the course (recommended but not limited to quiz, exam, research paper, group

**EXHIBIT B-9**

project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral	✕			
Quantitative Knowledge and Skills				
Scientific Knowledge and Reasoning	✕			
Technological Competency				
Information Literacy				
Society and Human Behavior	✕			
Humanistic Perspective				
Historical Perspective	✕			
Global and Cultural Awareness	✕			
Ethical Reasoning and Action	X	8 d	9: 4 and 5	<i>Paper</i>
Independent/Critical Thinking				

**12. NEEDS**

Instructional Materials (text, etc.):

Text: Appropriate texts will be selected. Please contact the academic school office for current adoptions.

- Text: Appropriate texts **and/or open educational resources** will be selected. Please contact the academic school office for current adoptions.
- Technology Needs: None
- Human Resource Needs (Presently Employed vs. New Faculty):  
Presently Employed Faculty
- Facility Needs: None
- Library needs (list specific needs and must be initialed by library director):  
None

**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:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

**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 receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: April 28, 2014

Board of Trustees Approval Date: **July 23, 2020**





## ***EXHIBIT B-10***

**OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF ARTS AND HUMANITIES**

1. COURSE NUMBER AND TITLE: FREN 291 Intermediate French I

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

3. CATALOG DESCRIPTION

This is an intermediate course designed to further the four basic skills of speaking, reading, writing, and listening begun in **FREN 191 and FREN 192 Elementary French I and II.** It is highly recommended that students enrolling in this course have taken four years of high school French if they cannot meet the prerequisite.

4. PREREQUISITES: FREN 192 COREQUISITES: NONE

5. COURSE FEE CODE: 0

COURSE TYPE FOR PERKINS REPORTING:

- ☐ vocational (approved for Perkins funding)  
☒ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

a. Describe the need for this course.

Students who complete Elementary French I and II frequently seek increased proficiency in French. Most liberal arts students and all Honors students must study a foreign language. Foreign language study is not only a traditional component of a liberal education, but also an excellent tool to sensitize multicultural awareness.

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 ☐ no

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

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Communication         | <input type="checkbox"/> Social Science | <input type="checkbox"/> History           |
| <input checked="" type="checkbox"/> Humanities | <input type="checkbox"/> Lab Science    | <input type="checkbox"/> Science (Non-Lab) |
| <input type="checkbox"/> Mathematics           | <input type="checkbox"/> Technology     | <input type="checkbox"/> 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 Intensive Course (WIC) List \_\_\_\_\_

- c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

~~*This course will help the college to fulfill its mission of fostering excellence by offering comprehensive programs that develop intentional learners of all ages.*~~

~~*This course is consistent with the following goals of the college as expressed in the Academic Master Plan:*~~

~~○ Provide a challenging, coherent, and integrated curriculum, \_\_\_\_\_  
\_\_\_\_\_ including high quality instructional and cultural programs for a  
diverse \_\_\_\_\_ population of students~~

~~○ Establish a shared commitment to high and meaningful educational and  
\_\_\_\_\_ ethical standards.~~

~~○ Prepare students for successful transfer to other educational institutions.~~

~~○ Prepare students for a rewarding life marked by personal growth and life long  
learning.~~

- i. *Provide affordable, student-centered, high quality educational experiences that prepare and empower diverse learners to contribute to and succeed in global societies. (Mission Statement);*
- ii. *Be the boldest, most creative, most innovative student-centered college in America (Vision Statement)*
- iii. *Deliver Innovative Curricula Programs and Assess Current Programs. (Academic Master Plan).*
- iv. *Expand the process of infusing global perspectives across Arts and Humanities curricula in order to better prepare students as engaged and global citizens. (School of Arts and Humanities Goal)*

## 7. RELATED COURSES AT 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: \_\_\_\_\_

**EXHIBIT B-10**

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
Brookdale CC	Intermediate French I	FRCH203	3	
Mercer CC	Intermediate French I	FRE 201	3	
Rowan at Burlington	Intermediate French I	FRE 201	3	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
Georgian Court University	FR 201, Intermediate French I, 3 cr.	General Ed.		
Kean University	FREN 2101 <del>Basie</del> <del>French I</del> <u>Intermediate</u> <u>French Grammar</u> , 3 cr.	General Ed.		
Monmouth University	FF 201 Intermediate French I 3 cr.	<del>General Ed.</del>		
Stockton University	LANG 2230, Intermediate French I, 3 cr.	General Ed.		
Rowan University	FREN 02.201, Intermediate French I, 3 cr.	General Ed.		
Rutgers – New Brunswick, School of Arts & Sciences	<del>21420131</del> <del>Intermediate</del> <del>French I</del> <u>01420131,</u> <u>INTERMEDIATE</u> <u>FRENCH,</u> 3 cr.	<del>General Ed.</del>		

- 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): \_\_\_\_\_

ii. If not transferable to any institution, explain: \_\_\_\_\_

## 8. SPECIFIC COURSE LEARNING OUTCOMES

Students who successfully complete this course will be able to:

- a. ~~Read and write in~~ **Demonstrate skill in reading and writing** French at the intermediate level of proficiency.
- b. ~~Express and appropriately employ~~ **Utilize** more complex language functions in speech and in writing.
- c. Describe the culture and civilization of France, as well as the Francophone world.
- d. ~~Draft~~ **Compose** advanced grammatical constructions, including subjunctive and conditional clauses that support communication at the intermediate level of proficiency.
- e. Distinguish and develop his or her capacity to actively engage in correct sociolinguistic activities as these correspond to his or her accumulative linguistic capacity in French.

## 9. TOPICAL OUTLINE (include as many themes/skills as needed):

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<del>1. Vocabulary Acquisition: All course units contain new vocabulary selections to master.</del>  <u>1. French Language</u> <ul style="list-style-type: none"> <li><u>Intermediate Vocabulary</u></li> <li><u>Intermediate Grammar</u></li> <li><u>c. Intermediate Structure</u></li> </ul>	Reading in course text Reading in course shell Conversations with peers and instructor Viewing video content	Quizzes Exams Written assignments Research papers	Objective 8: a, b, d
<del>2. Phonetics: All course units contain lessons on phonetics of the language.</del>  <u>2. Basics of pronunciation (phonology)</u> <ul style="list-style-type: none"> <li><u>a.</u></li> </ul>	Reading in course text Reading in course shell Conversations with peers and instructor Viewing video content	Quizzes Exams <u>Oral Presentations</u>	Objective 8: a, b, d

<p><u>Phonology of the French language for Intermediate level students</u></p>			
<p><del>3.</del>  <b>Grammar: All course units contain lessons on grammar and usage</b>  <u>3. Basics of language construction (morphology)</u></p> <ul style="list-style-type: none"> <li>• <u>a. Morphology of the French language for Intermediate level students</u></li> </ul>	<p>Reading in course text  Reading in course shell  Conversations with peers and instructor  Viewing video content</p>	<p>Quizzes  Exams  Written assignments  Research papers  <u>Oral Presentations</u></p>	<p>Objective 8: a, b, d.</p>
<p><del>4.</del>  <b>Reading &amp; Writing: Students begin learning reading and writing exercises at the start of the course.</b>  <u>4. Retention practices</u></p> <ul style="list-style-type: none"> <li>• <u>Conversational practice</u></li> <li>i. <u>Using the telephone and making appointments.</u></li> <li>ii. <u>Asking for directions.</u></li> </ul>	<p>Reading in course text  Reading in course shell  Conversations with peers and instructor  Viewing video content</p>	<p>Quizzes  Exams  Written assignments  Research papers  <u>Oral Presentations</u></p>	<p>Objective 8: a, b, d</p>

iii. <u>Shopping</u> • <u>b. Media consumption</u>			
5. Culture	Reading in course text Reading in course shell Conversations with peers and instructor Viewing video content	Quizzes Exams Written assignments Research papers	Objective 8: c and e

## 10. METHODS OF INSTRUCTION

In the structuring of this course, what major methods of instruction will be utilized?

- Lecture
- Video presentation
- Textbook exercises and work supplement sheets
- Language laboratory
- Testing and skills assessment

## 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 outcome from section 8 of this form.
- 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 (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral	X	8: a, b, c, d, and e	9: all	1. Quizzes 2. Exams 3. Written assignments 4. Research papers <u>5. Oral Presentations</u>



**EXHIBIT B-10**

Quantitative Knowledge and Skills				
Scientific Knowledge and Reasoning				
Technological Competency				
Information Literacy				
Society and Human Behavior				
Humanistic Perspective	X	8: c and e	9: <del>all</del> <u>5</u>	1. Quizzes 2. Exams 3. Written assignments 4. Research papers
Historical Perspective	X	8: c and e	9: <del>all</del> <u>5</u>	1. Quizzes 2. Exams 3. Written assignments 4. Research papers
Global and Cultural Awareness	X	8: c and e	9: <del>all</del> <u>5</u>	1. Quizzes 2. Exams 3. Written assignments 4. Research papers
Ethical Reasoning and Action				
Independent/Critical Thinking	X	8: c and e	9: <del>all</del> <u>5</u>	1. Quizzes 2. Exams 3. Written assignments 4. Research papers

**12. NEEDS**

- Instructional Materials (text, etc.): An appropriate text **and/or open educational resources** will be selected. Contact the department for current adoptions.
- Technology Needs: \_\_\_\_\_

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

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

### **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 receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ Vocational Status
#2 Semester Hours/Contact Hours	#7 Transfer Information
#3 Catalog Description	#9 Topical Outline

**EXHIBIT B-10**

#4 Prerequisites & Corequisites	#10 Methods of Instruction
#6 Justification	#12 Needs
#8 Course Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: August 25, 2008

Board of Trustees Approval Date: March 26, 2012

Board of Trustees Approval Date: January 26, 2017

**Board of Trustees Approval Date: July 23, 2020**

## ***EXHIBIT B-11***

**OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF ARTS AND HUMANITIES**

1. COURSE NUMBER AND TITLE: ITAL 200 Intermediate Italian I
2. SEMESTER HOURS: 3 CONTACT HOURS: ( 3 + 0 + 0 )  
Lecture Lab Practicum
3. CATALOG DESCRIPTION

This ~~*is the first course in a series of*~~ *is the start of the series of* intermediate college-level Italian language courses. ~~*that focuses*~~ *The focus is* on the development of mid to high level beginner communication skills in the Italian language. This course strives to improve spoken and written skills that will enable students to engage in daily conversations.

4. PREREQUISITES: ITAL 102 COREQUISITES: NONE
5. COURSE FEE CODE: 0

COURSE TYPE FOR PERKINS REPORTING:

- ☐ vocational (approved for Perkins funding)  
☒ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

The Italian language is a valuable choice for students who desire to broaden their cultural horizons and become more aware of the global landscape. The study of Italian contributes to the students' awareness of diversity and encourages them to adopt a global perspective.

Additionally, the study of languages at an intermediate level offers students the opportunity to move beyond basic language skills and into areas of travel and business that require a higher skillset. Students in intermediate courses can master more than basic conversation with native speakers, which allows them greater insight into the global community.

- 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 (~~pending NJCCC approval~~) ☐ no

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

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Communication         | <input type="checkbox"/> Social Science | <input type="checkbox"/> History           |
| <input checked="" type="checkbox"/> Humanities | <input type="checkbox"/> Lab Science    | <input type="checkbox"/> Science (Non-Lab) |
| <input type="checkbox"/> Mathematics           | <input type="checkbox"/> Technology     | <input type="checkbox"/> Diversity         |

## EXHIBIT B-11

- 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 Intensive Course (WIC) List \_\_\_\_\_

- c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

~~◆ This course will help the college to fulfill its mission of fostering excellence by offering comprehensive programs that develop intentional learners of all ages.~~

~~◆ This course is consistent with the following goals of the college as expressed in the Academic Master Plan:~~

~~➤ Provide a challenging, coherent, and integrated curriculum, including high quality instructional and cultural programs for a diverse population of students.~~

~~➤ Establish a shared commitment to high and meaningful educational standards.~~

~~➤ Prepare students for successful transfer to other educational institutions.~~

~~➤ Prepare students for a rewarding life marked by personal growth and life-long learning.~~

- i. Provide affordable, student-centered, high quality educational experiences that prepare and empower diverse learners to contribute to and succeed in global societies. (Mission Statement);
- ii. Be the boldest, most creative, most innovative student-centered college in America (Vision Statement)
- iii. Deliver Innovative Curricula Programs and Assess Current Programs. (Academic Master Plan).
- iv. Expand the process of infusing global perspectives across Arts and Humanities curricula in order to better prepare students as engaged and global citizens. (School of Arts and Humanities Goal)

## 7. RELATED COURSES AT 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: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
Brookdale CC	Intermediate Italian I	ITAL 203	3	
Mercer CC	Intermediate Italian I	ITA 201	3	
Bergen CC	Intermediate Italian I	LAN 221	3	
Camden CC	Intermediate Italian I	ITA 201	3	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
Georgian Court University	<del>ITA 201,</del> <b><i>Intermediate Italian I, 3 credits</i></b>	<b><i>General Education</i></b>		<u>X</u> <b><i>(Not Yet Evaluated)</i></b>
Kean University	ITAL 2101 Intermediate Italian I	General Education		
Monmouth University	<del>FI201,</del> <b><i>INTERMEDIATE ITALIAN I, 3 cr.</i></b>			
Stockton University	<del>LANG 2ECL,</del> <b><i>Foreign Language Elective Credit LANG2280, INTERMEDIATE ITALIAN I, 3</i></b>	General Education		

**EXHIBIT B-11**

	credits			
Rowan University	ITAL 04201, Intermediate Italian I, 3 credits	<b><i>General Education</i></b>		
Rutgers – New Brunswick, School of Arts & Sciences	01:560:131 Intermediate Italian	<b><i>General Education</i></b>		

- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

**8. SPECIFIC COURSE LEARNING OUTCOMES**

Students who successfully complete this course will be able to:

- a. ***Demonstrate fluency in intermediate level Italian language. Converse fluently at an intermediate level in Italian.***
- b. Develop a more expansive Italian vocabulary.
- c. Correctly utilize Italian pronouns.
- d. Relate the details of Italian and Italian-American culture and history.
- e. Compose compound sentences in Italian.

**9. TOPICAL OUTLINE (include as many themes/skills as needed):**

- Unit 1 Italian and Italian-American history and culture are added to all units as part of the discussion and use of the language. Past and Imperfect Tenses***
- Unit 2 Sapere and Conoscere in the past and imperfect***
- Unit 3 The Pronoun Ci***
- Unit 4 Double Object Pronouns***
- Unit 5 Comparatives of Equality and Inequality***
- Unit 6 Superlatives***
- Unit 7 The Past Perfect***
- Unit 8 Expressing Duration of an Action***
- Unit 9 Disjunctive Pronouns***
- Unit 10 The Informal Imperative***
- Unit 11 The Informal Imperative and Pronouns***
- Unit 12 The Present Conditional***
- Unit 13 The Past Conditional***
- Unit 14 Suffixes***
- Unit 15 Ordinal Numbers***



**EXHIBIT B-11**

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<u><b>1. Basics of the Italian Language</b></u> <ul style="list-style-type: none"> <li><u>Intermediate Vocabulary</u></li> <li><u>Intermediate Grammar</u></li> <li><u>c. Intermediate Structure</u></li> </ul>	<u>Reading</u> <u>Class Discussions</u> <u>Conversational Practice</u> <u>In class writing activities</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>	<u>8a, b, c, e</u>
<u><b>2. Basics of pronunciation (phonology)</b></u> <u>Content:</u> <ul style="list-style-type: none"> <li><u>a. Phonology of the Italian language for Intermediate level students</u></li> </ul>	<u>Reading</u> <u>Class Discussions</u> <u>Conversational Practice</u> <u>In class writing activities</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>	<u>8a, b, c, e</u>
<u><b>3. Basics of language construction (morphology)</b></u> <u>Content:</u> <ul style="list-style-type: none"> <li><u>a. Morphology of the Italian language for Intermediate level students</u></li> </ul>	<u>Reading</u> <u>Class Discussions</u> <u>Conversational Practice</u> <u>In class writing activities</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>	<u>8a, b, c, e</u>
<u><b>4.Retention practices</b></u> <u>Content:</u> <ul style="list-style-type: none"> <li><u>Conversational practice</u></li> <li><u>b. Media consumption</u></li> </ul>	<u>Reading</u> <u>Class Discussions</u> <u>Conversational Practice</u> <u>Video viewing</u> <u>In class writing activities</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>	<u>8a, b, c, e</u>
<u><b>5. Theme: Cultural Studies</b></u>	<u>Reading</u> <u>Class Discussions</u> <u>Conversational Practice</u> <u>Video viewing</u> <u>In class writing activities</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>	<u>8d</u>

**10. METHODS OF INSTRUCTION**

In the structuring of this course, what major methods of instruction will be utilized?

**EXHIBIT B-11**

- a. Video presentations provide modeling of foreign language in use.
- b. Instructor lectures teach students language skills.
- c. Text and workbook's reinforce learned foreign language skills.
- d. Online language labs teach and test pronunciation skills.
- e. Group interactions are opportunities to practice conversational skills.

**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 outcome from section 8 of this form.
- 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 (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral	x	<u>8a,b,c,e</u>	<u>9:1,2,3,4</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>
Quantitative Knowledge and Skills				
Scientific Knowledge and Reasoning				
Technological Competency				
Information Literacy				
Society and Human Behavior				
Humanistic Perspective	x	<u>8a,b,c,e</u>	<u>9:1,2,3,4</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>

**EXHIBIT B-11**

Historical Perspective	✖			
Global and Cultural Awareness	x	<u>8d</u>	<u>9:5</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>
Ethical Reasoning and Action				
Independent/Critical Thinking	x	<u>8a</u>	<u>9:1,2,3,4</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>

**12. NEEDS**

- Instructional Materials (text, etc.): An appropriate textbook **and/or open educational resources** will be selected. Please contact the department for current adoptions.
- Technology Needs:  
\_\_\_\_\_
- Human Resource Needs (Presently Employed vs. New Faculty):  
\_\_\_\_\_
- Facility Needs:  
\_\_\_\_\_
- 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:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

### 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 receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

PLT Approval Date of form: May 12, 2012

Board of Trustee Approval Date: December 7, 2015

Board of Trustees Approval Date: February 29, 2016

**Board of Trustees Approval Date: July 23, 2020**

## ***EXHIBIT B-12***

**OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF ARTS AND HUMANITIES**

1. COURSE NUMBER AND TITLE: ITAL 202 Intermediate Italian II
2. SEMESTER HOURS: 3 CONTACT HOURS: ( 3 + 0 + 0 )  
Lecture Lab Practicum
3. CATALOG DESCRIPTION

This ~~second-intermediate-Italian~~ course, is a continuation of Intermediate Italian I. ~~The course emphasizes a further~~ Further development of Italian conversational skills within the context of Italian culture will be studied in order to improve speaking and writing for daily communication.

4. PREREQUISITES: ITAL 200 COREQUISITES: NONE
5. COURSE FEE CODE: 0

COURSE TYPE FOR PERKINS REPORTING:

- ☐ vocational (approved for Perkins funding)  
☒ non-vocational (not approved for Perkins funding)

6. JUSTIFICATION

- a. Describe the need for this course.

The Italian language is a valuable choice for students who desire to broaden their cultural horizons and become more aware of the global landscape. The study of Italian contributes to the students' awareness of diversity and encourages them to adopt a global perspective.

Additionally, the study of languages at an intermediate level offers students the opportunity to move beyond basic language skills and into areas of travel and business that require a higher skillset. Students in intermediate courses can master more than basic conversation with native speakers, which allows them greater insight into the global community.

- 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 (~~pending NJCCC approval~~) ☐ no

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

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Communication         | <input type="checkbox"/> Social Science | <input type="checkbox"/> History           |
| <input checked="" type="checkbox"/> Humanities | <input type="checkbox"/> Lab Science    | <input type="checkbox"/> Science (Non-Lab) |
| <input type="checkbox"/> Mathematics           | <input type="checkbox"/> Technology     | <input type="checkbox"/> Diversity         |

## EXHIBIT B-12

- 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 Intensive Course (WIC) List \_\_\_\_\_

- c. Consistency with the vision and mission statements, the Academic Master Plan, and the strategic initiatives of the College (explain):

~~◆ This course will help the college to fulfill its mission of fostering excellence by offering comprehensive programs that develop intentional learners of all ages.~~

~~◆ This course is consistent with the following goals of the college as expressed in the Academic Master Plan:~~

~~➤ Provide a challenging, coherent, and integrated curriculum, including high quality instructional and cultural programs for a diverse population of students.~~

~~➤ Establish a shared commitment to high and meaningful educational standards.~~

~~➤ Prepare students for successful transfer to other educational institutions.~~

~~➤ Prepare students for a rewarding life marked by personal growth and life-long learning.~~

- i. Provide affordable, student-centered, high quality educational experiences that prepare and empower diverse learners to contribute to and succeed in global societies. (Mission Statement);
- ii. Be the boldest, most creative, most innovative student-centered college in America (Vision Statement)
- iii. Deliver Innovative Curricula Programs and Assess Current Programs. (Academic Master Plan).
- iv. Expand the process of infusing global perspectives across Arts and Humanities curricula in order to better prepare students as engaged and global citizens. (School of Arts and Humanities Goal)

## 7. RELATED COURSES AT OTHER INSTITUTIONS

## EXHIBIT B-12

[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: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
Brookdale CC	Intermediate Italian II	ITAL 204	3	
Mercer CC	Intermediate Italian II	ITA 202	3	
Bergen CC	Intermediate Italian II	LAN 222	3	
Camden CC	Intermediate Italian II	ITA 202	3	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
Georgian Court University	<del>ITA 202,</del> <b><i>Intermediate Italian II, 3 credits</i></b>	<b><i>General Education</i></b>		<b><i>X (Not Yet Evaluated)</i></b>
Kean University	ITAL 2102 Intermediate Italian II, <u>3 credits</u>	General Education		
Monmouth University	<u>FI202</u> <b><i>INTERMEDIATE ITALIAN II, 3 credits</i></b>			
Stockton University	LANG <del>EC 2EC2</del> , Foreign Language elective credit, 3 credits	General Education		
Rowan University	<del>ITAL 04102</del> <b><i>ITAL04211,</i></b>	<b><i>General Education</i></b>		



	<u><b>INTERMED ITALIAN II, 3 credits</b></u>			
Rutgers – New Brunswick, School of Arts & Sciences	01:560:132 Intermediate Italian II	General Education		

- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

## 8. SPECIFIC COURSE LEARNING OUTCOMES

Students who successfully complete this course will be able to:

- a. ~~Communicate~~ Demonstrate proficiency in intermediate Italian in both oral and written formats.
- b. ~~Acquire and retain~~ Remember and utilize detailed vocabulary in Italian.
- c. Compare social norms in the Italian speaking world with other cultures.
- d. Create vocabulary subsets for specialty interests like health care or business
- e. ~~Think critically about and analyze~~ Analyze and interpret the effect of the events of Italian history and culture and how those occurrences were influenced by the Italian language

## 9. TOPICAL OUTLINE (include as many themes/skills as needed):

~~Each unit below focuses on a particular language skill. The topics considered while practicing these skills are Italian and Italian American history and culture~~

- |                    |   |
|--------------------|---|
| <del>Unit 1</del>  | <del>Irregular Plural of Nouns</del>                          |
| <del>Unit 2</del>  | <del>Irregular Singular Nouns with Regular Plural Forms</del> |
| <del>Unit 3</del>  | <del>The Impersonal Construction</del>                        |
| <del>Unit 4</del>  | <del>Relative Pronouns</del>                                  |
| <del>Unit 5</del>  | <del>Adverbs and Reflexive Verbs of Reciprocity</del>         |
| <del>Unit 6</del>  | <del>Indefinite Adjectives and Pronouns</del>                 |
| <del>Unit 7</del>  | <del>Indefinites Used as Either Adjectives or Pronouns</del>  |
| <del>Unit 8</del>  | <del>The Present Subjunctive</del>                            |
| <del>Unit 9</del>  | <del>The Past Subjunctive</del>                               |
| <del>Unit 10</del> | <del>Verbs that Require the Subjunctive</del>                 |
| <del>Unit 11</del> | <del>Impersonal Expressions with the Subjunctive</del>        |
| <del>Unit 12</del> | <del>Infinitive Constructions</del>                           |
| <del>Unit 13</del> | <del>Expressing to Take Time</del>                            |
| <del>Unit 14</del> | <del>Verbs Followed by Verbs in the Infinitive</del>          |
| <del>Unit 15</del> | <del>The Formal Imperative</del>                              |

**EXHIBIT B-12**

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<u><b>1. Basics of the Italian Language:</b></u> <ul style="list-style-type: none"> <li><u><b>Upper Intermediate Vocabulary</b></u></li> <li><u><b>Upper Intermediate Grammar</b></u></li> <li><u><b>c. Upper Intermediate Structure</b></u></li> </ul>	<u><b>Reading</b></u> <u><b>Class Discussions</b></u> <u><b>Conversational Practice</b></u> <u><b>In class writing activities</b></u>	<u><b>Quiz</b></u> <u><b>Exam</b></u> <u><b>Oral Presentation</b></u> <u><b>Research Paper</b></u>	<u><b>8a, b, d</b></u>
<u><b>2. Basics of pronunciation (phonology):</b></u> <ul style="list-style-type: none"> <li><u><b>a. Phonology of the Italian language for Upper Intermediate level students</b></u></li> </ul>	<u><b>Reading</b></u> <u><b>Class Discussions</b></u> <u><b>Conversational Practice</b></u> <u><b>In class writing activities</b></u>	<u><b>Quiz</b></u> <u><b>Exam</b></u> <u><b>Oral Presentation</b></u> <u><b>Research Paper</b></u>	<u><b>8a,b,d</b></u>
<u><b>3. Basics of language construction (morphology):</b></u> <ul style="list-style-type: none"> <li><u><b>a. Morphology of the Italian language for Upper Intermediate level students</b></u></li> </ul>	<u><b>Reading</b></u> <u><b>Class Discussions</b></u> <u><b>Conversational Practice</b></u> <u><b>In class writing activities</b></u>	<u><b>Quiz</b></u> <u><b>Exam</b></u> <u><b>Oral Presentation</b></u> <u><b>Research Paper</b></u>	<u><b>8a,b,d</b></u>
<u><b>4. Retention practices:</b></u> <ul style="list-style-type: none"> <li><u><b>a. Conversational practice</b></u></li> <li><u><b>b. Media consumption</b></u></li> </ul>	<u><b>Reading</b></u> <u><b>Class Discussions</b></u> <u><b>Conversational Practice</b></u> <u><b>In class writing activities</b></u> <u><b>Video viewing</b></u>	<u><b>Quiz</b></u> <u><b>Exam</b></u> <u><b>Oral Presentation</b></u> <u><b>Research Paper</b></u>	<u><b>8a,b,d</b></u>
<u><b>5. Cultural Studies</b></u>	<u><b>Reading</b></u> <u><b>Class Discussions</b></u> <u><b>Conversational Practice</b></u> <u><b>Video viewing</b></u> <u><b>In class writing activities</b></u>	<u><b>Quiz</b></u> <u><b>Exam</b></u> <u><b>Oral Presentation</b></u> <u><b>Research Paper</b></u>	<u><b>8c, e</b></u>

## 10. METHODS OF INSTRUCTION

In the structuring of this course, what major methods of instruction will be utilized?

- Video presentations provide modeling of foreign language in use.
- Instructor lectures teach students language skills.
- Text and workbook's reinforce learned foreign language skills.
- Online language labs teach and test pronunciation skills.
- Group interactions are opportunities to practice conversational skills.

## 11. GENERAL EDUCATION GOALS ADDRESSED BY THIS COURSE

(this section is to fulfill state requirements):

- 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).
- For each General Education Goal checked in column 1, in column 2 you must list the related course learning outcome from section 8 of this form.
- 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.
- In column 4, list how each checked off General education goal will be assessed within the course (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral	x	<u>8a,b,d</u>	<u>9:1,2,3,4</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>
Quantitative Knowledge and Skills				
Scientific Knowledge and Reasoning				
Technological Competency				
Information Literacy				
Society and Human Behavior				
Humanistic Perspective	x	<u>8a,b,d</u>	<u>9:1,2,3,4</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>

**EXHIBIT B-12**

Historical Perspective	✖			
Global and Cultural Awareness	x	<u>8c, e</u>	<u>9:5</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>
Ethical Reasoning and Action				
Independent/Critical Thinking	x	<u>8a,b,c,d,e</u>	<u>9:1,2,3,4,5</u>	<u>Quiz</u> <u>Exam</u> <u>Oral Presentation</u> <u>Research Paper</u>

**12. NEEDS**

- Instructional Materials (text, etc.): An appropriate textbook **or OER materials** will be selected. Please contact the department for current adoptions.
- Technology Needs:  
\_\_\_\_\_
- Human Resource Needs (Presently Employed vs. New Faculty):  
\_\_\_\_\_
- Facility Needs:  
\_\_\_\_\_
- 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:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average
C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

**APPROVAL PROCESS FOR REVISED COURSE PROPOSALS**

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Revisions to the following items must receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

PLT Approval Date of form: May 22, 2012

Board of Trustee Approval Date: December 7, 2015

Board of Trustees Approval Date: February 29, 2016

Board of Trustees Approval Date: July 23, 2020

## ***EXHIBIT B-13***

**OCEAN COUNTY COLLEGE**  
**COURSE PROPOSAL FORM #7100-1 / OFFICIAL COURSE DESCRIPTION**  
**SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS**

1. COURSE NUMBER AND TITLE: ENGR 198 - Autodesk Inventor: **3D Design and Prototyping**
2. SEMESTER HOURS: 3 s.h. CONTACT HOURS: ( 1 + 4 + 0 )  
Lecture Lab Practicum
3. CATALOG DESCRIPTION  
 This course will introduce the aspects of Solid ~~Modeling~~ and Parametric Modeling, using AutoDesk Inventor. The student ~~starts with~~ **will** constructing basic shapes **in order** to building intelligent solid models, creating ~~multi-view~~ drawings and assembly models. **They will have an opportunity to prototype designs using manufacturing techniques such as 3D printers and CNC routers.**
4. PREREQUISITES: ~~ENGR 192 OR CVET 182~~ **ENGR 181** COREQUISITES: None
5. COURSE FEE CODE: 2

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.

Computer-aided ~~drafting~~ **engineering** skills (**drafting/design, manufacturing, and engineering analysis**) are an integral part of most **many** technical fields and some non-technical **STEAM (Science, Technology, Engineering, Art and Math)** fields. ~~Architecture, engineering, environmental studies, surveying, mapping, and advertising all use CAD graphics skills and require the production of graphic representations. CAD has become an essential drafting tool.~~

- 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.

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Communication | <input type="checkbox"/> Social Science | <input type="checkbox"/> History           |
| <input type="checkbox"/> Humanities    | <input type="checkbox"/> Lab Science    | <input type="checkbox"/> Science (Non-Lab) |
| <input type="checkbox"/> Mathematics   | <input type="checkbox"/> Technology     | <input type="checkbox"/> 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):

☒ X\_ 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 Intensive Course (WIC) List \_\_\_\_\_

- 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~~

- ~~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)~~

***i. Cultivating a technologically progressive and entrepreneurial spirit (Mission Statement)***

***ii. Deliver Innovative Curricula Programs and Assess Current Programs - Develop both transfer and vocational programs (Academic Master Plan)***

## 7. RELATED COURSES AT 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: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
<u>Brookdale CC</u>				<u>No equivalent course</u>
<u>Atlantic-Cape</u>				<u>No equivalent course</u>



**EXHIBIT B-13**

<u><b>Mercer</b></u>				<u><b>No equivalent course</b></u>
<u><b>Burlington</b></u>				<u><b>No equivalent course</b></u>
<u><b>Camden</b></u>				<u><b>No equivalent course</b></u>

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
<u><b>Georgian Court University</b></u>	<u><b>EC "56"</b></u> <u><b>(ELECTIVE CREDIT)</b></u> <u><b>(3cr)</b></u>	<u><b>Elective</b></u>		
<u><b>Kean University</b></u>	<u><b>TECHX1003"K1,K3"</b></u> <u><b>(TECHNOLOGY FREE ELECTIVE)</b></u> <u><b>(3cr)</b></u>	<u><b>Technical Elective</b></u>		
<u><b>Monmouth University</b></u>	<u><b>FE001 (100 LEVEL FREE ELECTIVE)</b></u> <u><b>(3cr)</b></u>	<u><b>Elective</b></u>		
<u><b>Rowan University</b></u>	<u><b>INTR99070 (FREE ELECTIVE)</b></u> <u><b>(3cr)</b></u>	<u><b>Elective</b></u>		
<u><b>Rutgers –School of Engineering</b></u>	<u><b>14:650:215. INTRODUCTION TO COMPUTER-AIDED DRAFTING AND MACHINING</b></u> <u><b>(1 cr)</b></u>	<u><b>Major</b></u>		
<u><b>Stockton University</b></u>	<u><b>TRCREC</b></u> <u><b>(ELECTIVE TRANS CREDIT)</b></u> <u><b>(3cr)</b></u>	<u><b>Elective</b></u>		

- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

**8. SPECIFIC COURSE LEARNING OUTCOMES**

Students who successfully complete this course will be able to:

- ~~Create simple parametric models~~
- ~~Understand the basic parametric modeling process~~
- ~~Create rough sketches~~

- d. Understand the “shape before size” approach
- e. Use the view commands
- f. Create and modify dimensions
- a. Apply the concepts of 3D solid and parametric modeling to the creation of professional level CAD drawings.
- b. Utilize parametric modeling-based analysis techniques.
- c. Implement 3D designs with both additive and subtractive manufacturing processes.
- d. Use 3D CAD tools and methods in support of individual and group engineering design projects.

9. TOPICAL OUTLINE (include as many themes/skills as needed):

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<u>Parametric Modeling Fundamentals</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Constructive Solid Geometry Concepts</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Model History Tree</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Parametric Constraints Fundamentals</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Geometric Construction Tools</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Parent/Child Relationships and the BORN Technique</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Part Drawings and Associative Functionality</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Design Analysis Techniques</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:b</u>
<u>Datum Features and Auxiliary Views</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Prototyping</u>	<u>Reading,</u>	<u>Drawing assignments,</u>	<u>8:c</u>

**EXHIBIT B-13**

	<u>presentations/discussion, projects, drawing assignments</u>	<u>presentations/discussions, individual and group project</u>	
<u>Symmetrical Features in Designs</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Advanced 3D Construction Tools</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>	<u>8:a</u>
<u>Use of visual and written technical communication and analysis within the Engineering Design Process</u>	<u>Reading, presentations/discussion, projects, drawing assignments</u>	<u>Individual and group project</u>	<u>8:a,b,d</u>

**10. METHODS OF INSTRUCTION**

In the structuring of this course, what major methods of instruction will be utilized?

~~One hour of lecture and four hours of computer laboratory per week. Concepts will be explained, and students will follow with hands-on laboratory sessions.~~

**Lecture, drawing activities, discussion, procedural documentation and videos.**

**11. GENERAL EDUCATION GOALS ADDRESSED BY THIS COURSE**

(this section is to fulfill state requirements):

- 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).
- For each General Education Goal checked in column 1, in column 2 you must list the related course learning outcome from section 8 of this form.
- 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.
- In column 4, list how each checked off General education goal will be assessed within the course (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral				
Quantitative Knowledge and Skills	<u>X</u>	<u>8: all</u>	<u>9: all</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>
Scientific Knowledge and Reasoning				

**EXHIBIT B-13**

Technological Competency	✕			
Information Literacy	✕			
Society and Human Behavior				
Humanistic Perspective				
Historical Perspective				
Global and Cultural Awareness				
Ethical Reasoning and Action				
Independent/Critical Thinking	X	<u>8: all</u>	<u>9: all</u>	<u>Drawing assignments, presentations/discussions, individual and group project</u>

**12. NEEDS**

- Instructional Materials (text, etc.): Text: An appropriate text and/or open educational resources will be selected. Contact the department for current adoptions.
- Technology Needs: Computers and AutoCAD Inventor Software (already installed, free academic license), additional hand tools, 3D printer (already purchased, supplies occasionally need restocking), CNC Router (already purchased, supplies occasionally need restocking), additional raw material and safety equipment (supplies occasionally need restocking)
- Human Resource Needs (Presently Employed vs. New Faculty): Presently employed faculty can teach this course.
- Facility Needs: None
- Library needs (list specific needs and must be initialed by library director): Yearly update of library computers to match Engineering Lab

**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:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average

**EXHIBIT B-13**

C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

### **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 receive action by the Curriculum Committee, College Senate, and Board of Trustees.	Revisions to the following items must be sent “For Information Only” to the Curriculum Committee, College Senate, and Board of Trustees.
#1 Course Number & Title	#5 Lab Fee Code/ 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 Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: September 22, 2008

Board of Trustees Approval: July 23, 2020

## ***EXHIBIT B-14***

**OCEAN COUNTY COLLEGE  
OFFICIAL COURSE DESCRIPTION  
SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS**

1. COURSE NUMBER AND TITLE: ENGR-225: Design of **Strength and Mechanics of Materials Structures**

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

3. CATALOG DESCRIPTION

~~This is a capstone course which integrates learning outcomes from the engineering statics, dynamics, and graphics, mathematics, and science courses in the AS Engineering program. The course is developed to utilize~~ key concepts of mechanics of materials in various **analysis and design applications. Students will apply the concepts of stress-strain, axial loading, torsion, bending, shear, deflection, combined loading, stress and strain transformations, structural failure theories and analysis methodologies to structures such as beams, thin-walled members and columns. They will also have an opportunity to become familiar with the basics of stress-strain testing.** Key topics include the concept of stress at a point, strain, stress-strain relations, stress transformation, and structural failure theories. Students will apply these concepts to solve engineering design problems, and student teams will work on open-ended engineering projects. Projects may involve disassembly and analysis of some manufactured products to gain an understanding of the engineering design. Technical writing and oral presentation along with project management skills are emphasized.

4. PREREQUISITES: ENGR 181 COREQUISITES: ENGR 222

5. COURSE FEE CODE: 0

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.

**Many engineering programs require a course in Mechanics of Materials, also known as Strength of Materials. This course satisfies that requirement.**

Engineering design is an essential subject in any engineering program as clearly specified by the Accreditation Board for Engineering and Technology (ABET). Most four-year universities offer courses in the fundamental of engineering design in the first two years of their engineering programs. The ABET defines engineering design as the process of devising a system, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic science and mathematics and engineering sciences are applied to convert resources optimally to meet stated objectives. Students learning fundamentals of engineering design will develop a more integrated concept of the different engineering subjects and will be prepared to deal with more advanced engineering courses. The placement of this course in the fourth semester of the AS Engineering curriculum is a result of its capstone structure as it requires a team project which serves as an instrument of evaluation. The course fosters interdisciplinary partnerships among different potential

~~engineering interests and helps cultivate industry alliances and cooperation.~~

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 following degree program(s):

  X   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 Intensive Course (WIC) List \_\_\_\_\_

- 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)~~

- i. **Cultivating a technologically progressive and entrepreneurial spirit (Mission Statement)**

- ii. **Deliver Innovative Curricula Programs and Assess Current Programs - Develop both transfer and vocational programs (Academic Master Plan)**

7. RELATED COURSES AT OTHER INSTITUTIONS



# EXHIBIT B-14

[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: \_\_\_\_\_

Comparable Courses at NJ Community Colleges				
Institution (ex., Brookdale CC, Mercer CC, Atlantic Cape CC, etc.)	Course Title	Course Number	Number of Credits	Comments
<u>Brookdale CC</u>	<u>Strength of Materials</u>	<u>ENGI205</u>	<u>3</u>	
<u>Atlantic-Cape</u>	<u>Mechanics of Materials</u>	<u>ENGR202</u>	<u>3</u>	
<u>Mercer</u>	<u>Mechanics of Materials</u>	<u>CIV 229</u>	<u>4</u>	
<u>Burlington</u>	<u>Strength of Materials</u>	<u>EGR-230</u>	<u>3</u>	
<u>Camden</u>	<u>Mechanics of Materials</u>	<u>MET-236</u>	<u>3</u>	

- 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, Title, and Credits	Transfer Category	Will NOT Transfer	Unable to Determine Status
<u>Georgian Court University</u>		<u>Elective</u>		
<u>Kean University</u>			<u>X</u>	
<u>Monmouth University</u>		<u>Elective</u>		
<u>Rowan University</u>	<u>ENGR01272 (SOLID MECHANICS) (2cr)</u>	<u>Major</u>		
<u>Rutgers –School of Engineering</u>	<u>14180243 (MECHANICS OF SOLIDS) (3cr) Or 14650291 (INTRODUCTION TO MECHANICS OF MATERIALS) (3cr)</u>	<u>Major</u>		

<u>Stockton University</u>			<u>X</u>	
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- 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): \_\_\_\_\_
- ii. If not transferable to any institution, explain: \_\_\_\_\_

## 8. SPECIFIC COURSE LEARNING OUTCOMES

Students who successfully complete this course will be able to:

- ~~a. Establish strong analytical tools for engineering design.~~
  - ~~b. Understand basic engineering design concepts and their relations to human needs and wants.~~
  - ~~c. Become familiar with empirical and analytical tools for failure prediction and assessment.~~
  - ~~d. Develop integrated concepts of the different engineering subjects via real world design applications.~~
  - ~~e. Understand the difference between creative engineering and reverse engineering methods.~~
  - ~~f. Develop skills of technical communication, writing, and presentation of design solutions.~~
  - ~~g. Develop competencies in collaborative learning strategies through team working in interdisciplinary activities.~~
- a. Apply engineering principles to problems involving key concept such as stress strain, axial loading, torsion, bending, shear, deflection, combined loading, stress and strain transformations structural failure theories and analysis methodologies.
  - b. Design structures such as beams, thin-walled members and columns
  - c. Observe live tests and analyze data resulting from basic stress-strain testing
  - d. Use strength and mechanics of materials theory and analytical methods in support of individual and group engineering design projects.

## 9. TOPICAL OUTLINE (include as many themes/skills as needed):

Major Themes/Skills	Assignments/Activities (Recommended but not limited to)	Assessment (Recommended but not limited to)	Related Course Learning Outcome (s)
<u>1) Stress and Strain – Axial Loading &amp; Mechanical Properties of Materials</u>	<u>Reading, discussion, problem sets, projects</u>	<u>Quiz, exam, individual and group project</u>	<u>8: a, b, d</u>
<u>2) Torsion, Bending, Shear &amp; Combined Loading</u>	<u>Reading, discussion, problem sets, projects</u>	<u>Quiz, exam, individual and group project</u>	<u>8: a, b, d</u>

<u>3) Stress and Strain Transformations &amp; Other Analysis Techniques</u>	<u>Reading, discussion, problem sets, projects</u>	<u>Quiz, exam, individual and group project</u>	<u>8: a, b, d</u>
<u>4) Design and Analysis of Structures – Beams, Thin-walled Members, and Columns</u>	<u>Reading, discussion, problem sets, projects</u>	<u>Quiz, exam, individual and group project</u>	<u>8: a, b, d</u>
<u>5) Tensile Testing Methods and Analysis</u>	<u>Reading, discussion, observation and data analytics</u>	<u>Quiz, exam, individual and group project</u>	<u>8: c</u>
<u>6) Use of Strength/Mechanics of Materials Design and Analysis within the Engineering Design Process</u>	<u>Discussion, projects</u>	<u>Individual and group project</u>	<u>8: a, b, d</u>

## 10. METHODS OF INSTRUCTION

In the structuring of this course, what major methods of instruction will be utilized?

- ~~Three hours of lecture per week in which different project elements are emphasized~~  
~~Team work and discussion~~

Lecture, reading, discussion, problem solving, and observation of technical testing

## 11. GENERAL EDUCATION GOALS ADDRESSED BY THIS COURSE

(this section is to fulfill state requirements):

- 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).
- For each General Education Goal checked in column 1, in column 2 you must list the related course learning outcome from section 8 of this form.
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- In column 4, list how each checked off General education goal will be assessed within the course (recommended but not limited to quiz, exam, research paper, group project, oral, presentation, group presentation, etc.).

General Education Goal	1. Applicable (mark with x)	2. Related Course Learning Outcome	3. Related Outline Component	4. Assessment of General Education Goal (Recommended but not limited to)
Communication-Written and Oral	✕			
Quantitative Knowledge and Skills	X	<u>8: all</u>	<u>9: all</u>	<u>Quiz, exam, individual and group project</u>
Scientific Knowledge and Reasoning	✕			

**EXHIBIT B-14**

Technological Competency	✕			
Information Literacy	✕			
Society and Human Behavior	✕			
Humanistic Perspective				
Historical Perspective				
Global and Cultural Awareness				
Ethical Reasoning and Action				
Independent/Critical Thinking	X	<u>8: all</u>	<u>9: all</u>	<u>Quiz, exam, individual and group project</u>

**12. NEEDS**

- Instructional Materials (text, etc.): Text: An appropriate text **or open educational resources** will be selected. Contact the department for current adoptions.
- Technology Needs: **Tensile Test system including computer (already installed), additional materials for testing and safety (occasionally need restocking)**
- Human Resource Needs (Presently Employed vs. New Faculty): **Presently employed faculty can teach this course.**
- Facility Needs: **None**
- Library needs (list specific needs and must be initialed by library director **None**

**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:

<b>Grade:</b>	<b>Performance:</b>
A	Excellent
B+	Very good
B	Good
C+	Above average

**EXHIBIT B-14**

C	Average
D	Below average
F	Failure
I	Incomplete
R	Audit

For more detailed information on the Ocean County College grading system, please see Policy #5154.

### **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.

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#6 Justification	#12 Needs
#8 Course Outcomes	#13 Grade Determinants
#11 General Education Goals - Rubric	

Board of Trustees Approval Date: July 25, 2011

Board of Trustees Approval Date: July 23, 2020