

EXHIBIT B



BOARD OF TRUSTEES

Bylaw, Policy, and Curriculum Committee Agenda Items

To: Board of Trustees
From: Office of the President
Date: September 15, 2022

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, September 22, 2022**:

1. Recommend approval of the following items as accepted by the College Senate at its meetings on September 8, and 15, 2022:
 - a. New Program Options
 - 1) Associate in Science Degree in Advanced and Continuous Studies – Option in Business Analytics and Data Science (**Exhibit B-1**)
 - 2) Associate in Science Degree in Advanced and Continuous Studies – Option in Supply Chain, Logistics, and Maritime Port Management (**Exhibit B-2**)
 - 3) Associate in Science Degree in Hospitality, Recreation, and Tourism Management – Option in Culinary Arts (**Exhibit B-3**)
 - b. Revised Program
 - 1) Associate in Science Degree in Computer Science (**Exhibit B-4**)
 - c. Terminated Program
 - 1) Associate in Science Degree in Psychosocial Rehabilitation (**Exhibit B-5**)
 - d. New Courses
 - 1) BUSN 320, Procurement and Supplier Relationship Management (**Exhibit B-6**)
 - 2) BUSN 321, Decision Intelligence in Supply Chains (**Exhibit B-7**)
 - 3) BUSN 390, Fundamentals of Data Visualization for Business Analytics and Data Science (**Exhibit B-8**)
 - 4) BUSN 391, Basics of Data Collection, Data Warehousing, and Data Cleansing (**Exhibit B-9**)
 - 5) HRTM 230, Principles of Food and Beverage Management (**Exhibit B-10**)

- 6) HRTM 231, Culinary Fundamentals (**Exhibit B-11**)
- 7) HRTM 232, Advanced Culinary Concepts(**Exhibit B-12**)

a. Revised Course

- 8) MATH 281, Differential Equations (**Exhibit B-13**)

EXHIBIT B-1

Program Change Request

EXHIBIT B - 1

New Program Proposal

Date Submitted: 08/05/22 12:40 pm

Viewing: **AS.ACS.DATA : Advanced and Continuous Studies - Option in Business Analytics and Data Science**

Last edit: 08/05/22 12:40 pm

Changes proposed by: Katherine Toy (ktoy)

Program Type Option

Program Title

Advanced and Continuous Studies - Option in Business Analytics and Data Science

Option Title

Business Analytics and Data Science

Academic School Business and Social Sciences

Base Program Advanced and Continuous Studies

Effective Catalog
Year 2022-2023

Program Code AS.ACS.DATA

CIP Code N/A - N/A

Objectives

Program Description

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. Academic Administrator for Programs

Approval Path

1. 08/05/22 1:33 pm
Susan O'Connor (soconnor):
Approved for BS Academic Administrator
2. 08/05/22 1:33 pm
Susan O'Connor (soconnor):
Approved for BS Dean
3. 08/05/22 1:33 pm
Susan O'Connor

9/15/22, 3:58 PM

AS.ACS.DATA: Advanced and Continuous Studies - Option in Business Analytics and Data Science

(soconnor):

Approved for

Director of

Curriculum

4. 08/11/22 4:54 pm

Heather Sciarappa

(hsciarappa):

Approved for

Curriculum

Committee Chair

5. 09/08/22 6:05 pm

Robert Marchie

(rmarchie):

Approved for

Senate Chair

6. 09/09/22 1:04 pm

Joseph Konopka

(jkonopka):

Approved for Vice

President of

Academic Affairs

Students in this business analytics and data science option of the “3+1” program graduate with an associate degree from OCC in Business Administration - Data Analytics option, and then matriculate into the Advanced and Continuous Studies degree program - Business Analytics and Data Science option (AS.ACS.DATA), allowing for financial aid to continue and for the full 90 credits to transfer to the aligned four-year university. The 300-level courses included in this option have been developed by OCC in conjunction with our four-year partner, New Jersey City University (NJCU). Upon successful completion, no course shall be repeated at NJCU.

Program Learning

Outcomes

Students who successfully complete this program will be able to:

- | | |
|------|--|
| PLO1 | Apply written, oral, and visual communication skills and conventions of academic discourse to the challenges of a specific discipline. |
| PLO2 | Interpret and employ a method of inquiry to draw conclusions based on variable evidence. |

Students who successfully complete this program will be able to:

PLO3 Exhibit competency in the application of technology appropriate to the discipline and academic level.

Learning Outcomes Display (show only)

Course Code



PLO 1

PLO 2


PLO 3

Junior

First Semester

BUSN 249 BUSN 275 CSIT 200 

Second Semester

BUSN 291 CSIT 275 

FirstSemester

SecondSemester

Required Qualifications

Plan of Study Grid

Junior

First Semester

Credit Hours

BUSN 249 Operations Management

3

BUSN 275 Principles of Finance

3

BUSN 390

3

CSIT 200 Information Security Fundamentals

3

Elective

3

Credit Hours

15

Second Semester

BUSN 291 International Business: A Cultural Perspective

3

BUSN 391

3

CSIT 275 Data Management Analytics

3

Elective

3

Elective

3

Credit Hours

15

Total Credit Hours

30

Degree Requirements Breakdown

GCOM	Course Code & Title	Credits
	N/A	N/A
GHUM	Course Code & Title	Credits
	N/A	N/A
GSOC	Course Code & Title	Credits
	N/A	N/A
GSOC/ GHUM	Course Code & Title	Credits
	N/A	N/A
GMAT/ GSCI/ GTEC	Course Code & Title	Credits
	N/A	N/A
General Education	Course Code & Title	Credits
	N/A	N/A
Concentration Courses	Course Code & Title	Credits
	BUSN 249 (NJCU equivalent: MGMT 251 Operations + PMT Fundamentals)	3
	BUSN 275 (NJCU equivalent: FINC 371 Managerial Finance)	3
	BUSN 291 (NJCU equivalent: MGMT 241 Global Business)	3
	BUSN 390 (NJCU equivalent: FINC 403 Fundamentals of Data Visualization for Business Analytics and Data Science)	3
	BUSN 391 (NJCU equivalent: FINC 415 Basics of Data Collection, Data Warehousing, and Data Cleansing)	3

9/15/22, 3:58 PM

AS.ACS.DATA: Advanced and Continuous Studies - Option In Business Analytics and Data Science

EXHIBIT 3 - 1

Course Code & Title	Credits
CSIT 200 (NJCU equivalent: Elective)	3
CSIT 275 (NJCU equivalent: FINC 306 Statistical and Mathematical Foundations for Business Analytics and Data Science)	3
Electives	9

Elective Courses

Course Code & Title	Credits
N/A	N/A

Reviewer
Comments

Key: 98

EXHIBIT B-2

Program Change Request

New Program Proposal

Date Submitted: 08/05/22 12:42 pm

Viewing: **AS.ACS.SPLC : Advanced and Continuous Studies - Option in Supply Chain, Logistics, and Maritime Port Mgmt.**

Last edit: 08/05/22 1:34 pm

Changes proposed by: Katherine Toy (ktoy)

Program Type Option

Program Title

Advanced and Continuous Studies - Option in Supply Chain, Logistics, and Maritime Port Mgmt.

Option Title

Supply Chain, Logistics, and Maritime Port Mgmt.

Academic School Business and Social Sciences

Base Program Advanced and Continuous Studies

Effective Catalog 2022-2023
Year

Program Code AS.ACS.SPLC

CIP Code N/A - N/A

Objectives

Program Description

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. Academic Administrator for Programs

Approval Path

1. 08/05/22 1:33 pm
Susan O'Connor (soconnor):
Approved for BS Academic Administrator
2. 08/05/22 1:33 pm
Susan O'Connor (soconnor):
Approved for BS Dean
3. 08/05/22 1:34 pm
Susan O'Connor

9/15/22, 3:59 PM

AS.ACS.SPLC: Advanced and Continuous Studies - Option in Supply Chain, Logistics, and Maritime Port Mgmt.

(soconnor):
 Approved for
 Director of
 Curriculum
 4. 08/11/22 4:54 pm
 Heather Sciarappa
 (hscarappa):
 Approved for
 Curriculum
 Committee Chair
 5. 09/08/22 6:05 pm
 Robert Marchie
 (rmarchie):
 Approved for
 Senate Chair
 6. 09/09/22 1:04 pm
 Joseph Konopka
 (jkonopka):
 Approved for Vice
 President of
 Academic Affairs

Students in this supply chain, logistics, and maritime port management option of the "3+1" program graduate with an associate degree from OCC in Business Administration - Supply Chain Management option, and then matriculate into the Advanced and Continuous Studies degree program - Supply Chain, Logistics, and Maritime Port Management option (AS.ACS.SPLC), allowing for financial aid to continue and for the full 90 credits to transfer to the aligned four-year university. The 300-level courses included in this option have been developed by OCC in conjunction with our four-year partner, New Jersey City University (NJCU). Upon successful completion, no course shall be repeated at NJCU.

Program Learning

Outcomes

Students who successfully complete this program will be able to:

- | | |
|------|--|
| PLO1 | Apply written, oral, and visual communication skills and conventions of academic discourse to the challenges of a specific discipline. |
| PLO2 | Interpret and employ a method of inquiry to draw conclusions based on variable evidence. |

9/15/22, 3:59 PM

AS.ACS.SPLC: Advanced and Continuous Studies - Option in Supply Chain, Logistics, and Maritime Port Mgmt.

Students who successfully complete this program will be able to:

PLO3 Exhibit competency in the application of technology appropriate to the discipline and academic level.

Learning Outcomes Display (show only)

Course Code	PLO 1	PLO 2	PLO 3
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	Junior		
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	First Semester		
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<u>ACCT 162</u>			
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<u>BUSN 275</u>			
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	Second Semester		
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<u>BUSN 291</u>			
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	FirstSemester		
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	SecondSemester		
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Required Qualifications

Plan of Study Grid

Junior

First Semester

Credit Hours

ACCT 162 Principles of Accounting II ¹

3

BUSN 275 Principles of Finance ¹

3

BUSN 320

3

Elective ²

3

Elective

3

Credit Hours

15

Second Semester

BUSN 291 International Business: A Cultural Perspective 3

BUSN 321

3

Elective

3

Elective

3

Elective

3

Credit Hours

15

Total Credit Hours

30

1

9/15/22, 3:59 PM

AS.ACS.SPLC: Advanced and Continuous Studies - Option in Supply Chain, Logistics, and Maritime Port Mgmt.

If ACCT 162 and/or BUSN 275 were completed during associate's degree, students may choose an elective instead.

2

BUSN 271, Principles of Management, should be completed during associate degree coursework, as it is a prerequisite for BUSN 320.

Degree Requirements Breakdown

GCOM	Course Code & Title	Credits
	N/A	N/A
GHUM	Course Code & Title	Credits
	N/A	N/A
GSOC	Course Code & Title	Credits
	N/A	N/A
GSOC/ GHUM	Course Code & Title	Credits
	N/A	N/A
GMAT/ GSCI/ GTEC	Course Code & Title	Credits
	N/A	N/A
General Education	Course Code & Title	Credits
	N/A	N/A
Concentration Courses	Course Code & Title	Credits
	ACCT 162 (NJCU equivalent: ACCT 252 Management Accounting)	3
	BUSN 275 (NJCU equivalent: FINC 371 Managerial Finance)	3
	BUSN 291 (NJCU equivalent: MGMT 241 Global Business)	3
	BUSN 320 (NJCU equivalent: MGMT 305 Procurement and Supplier Relationship Management)	3

9/15/22, 3:59 PM

AS.ACS.SPLC: Advanced and Continuous Studies - Option in Supply Chain, Logistics, and Maritime Port Mgmt.

Elective Courses	Course Code & Title	Credits
	BUSN 321 (NJCU equivalent: MGMT 350 Decision Intelligence in Supply Chains)	3
	Electives	15
Elective Courses	Course Code & Title	Credits
	N/A	N/A

Reviewer

Comments

Key: 99

EXHIBIT B-3

9/15/22, 4:00 PM

AS.HRTM.CA: Hospitality, Recreation, and Tourism Management, Associate in Science Option in Culinary Arts

Program Change Request

Date Submitted: 07/18/22 12:55 pm

Viewing: **AS.HRTM.CA : Hospitality, Recreation,
and Tourism Management, Associate in
Science Option in Culinary Arts**

Last approved: 02/18/22 3:15 pm

Last edit: 08/24/22 10:44 am

Changes proposed by: Sean Bips (sbips)

Program Type	Associate of Science (AS)
Program Title	Hospitality, Recreation, and Tourism Management, Associate in Science Option in Culinary Arts
Academic School	Business and Social Sciences
Effective Catalog Year	2022-2023
Program Code	AS.HRTM.CA
CIP Code	520901 - Hospitality Administration/Management, General.

Program Description

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. Academic Administrator for Programs

Approval Path

1. 07/19/22 9:40 am
Johanna Riemen (jriemen): Approved for BS Academic Administrator
2. 07/28/22 2:06 pm
Rosann Bar (rbar): Approved for BS Dean
3. 08/05/22 10:58 am
Susan O'Connor (soconnor): Approved for

9/15/22, 4:00 PM

AS.HRTM.CA: Hospitality, Recreation, and Tourism Management, Associate in Science Option in Culinary Arts

Director of
Curriculum

4. 08/24/22 10:45 am

Susan O'Connor
(soconnor):Approved for
Curriculum

Committee Chair

5. 09/08/22 6:05 pm

Robert Marchie
(rmarchie):Approved for
Senate Chair

6. 09/09/22 1:04 pm

Joseph Konopka
(jkonopka):Approved for Vice
President of
Academic Affairs

History

1. Feb 18, 2022 by
Susan O'Connor
(soconnor)

The Associate in Science degree program in Hospitality, Recreation, ~~Recreation~~ and Tourism Management (HRTM) is designed to prepare students to begin a career in the creative, people-oriented hospitality, recreation, and tourism ~~Hospitality, Recreation & Tourism~~ industries, or to continue with their education toward a Bachelor's degree. The program provides a business planning and management foundation that examines industry trends, consumer behavior, guest services, ~~services~~ and other factors that influence hospitality recreation, ~~Hospitality Recreation & Tourism~~ development and tourism development and promotion. Students will receive exposure to critical thinking skills as well as a broad education and awareness of values, skills, and attitudes that will prepare them for responsible citizenship roles across the scope of the hospitality, recreation, ~~recreation~~ and tourism industry and society.

The purpose of the culinary option program is to build culinary knowledge, recipe execution competencies, and kitchen skills to prepare students for a career in the food and beverage/culinary segment of the hospitality industry. The content of this program addresses cooking fundamentals and provides a broad introduction to managerial principles in food and beverage operations.

Program Objectives

N/A

Program Goals

Program goals

- | | |
|-----|--|
| PG1 | <u>Provide the foundations of management in the hospitality industry. NA</u> |
| PG2 | <u>Demonstrate specialized skills in the culinary arts.</u> |
| PG3 | <u>Prepare students for either transfer or career opportunities.</u> |

Program Learning

Outcomes

Students who successfully complete this program will be able to:

- | | |
|-------------|---|
| PLO1 | Recognize the management processes required to become managers and practitioners in professions that provide positive leisure experiences in areas that enrich the lives of others. |
| PLO2 | Describe the management and supervisory side of business operations within the hospitality, recreation, and tourism fields. |
| PLO3 | Discuss career opportunities in the hospitality, recreation, and tourism industry and the qualifications needed for entry-level positions. |
| PLO4 | Identify the theories and skills needed for responsible employee management and customer/guest services, and the requirements for running a successful operation. |
| PLO5 | Distinguish the special characteristics that separate hospitality, recreation, and tourism employees from other service and manufacturing businesses. |
| <u>PLO6</u> | <u>Manage sanitation levels in the kitchen and apply all required cooking times as well as demonstrate effectively planned and balanced menus.</u> |
| <u>PLO7</u> | <u>Plan facility design and manage equipment in the kitchen, ranging from food preparation methods to plating techniques.</u> |
| <u>PLO8</u> | <u>Demonstrate knowledge cost breakdown of food and beverage items and apply inventory cost control measures to create profitable menus.</u> |

9/15/22, 4:00 PM

AS.HRTM.CA: Hospitality, Recreation, and Tourism Management, Associate in Science Option in Culinary Arts

Students who successfully complete this program will be able to:

- PLO9 Identify appropriate seasoning methods and knowledge of food and beverage products to create flavorful, nutritious, and attractive menu items.
- PLO10 Prove technical competency in professional kitchen management/knife skills and demonstrate successful recipe execution.
- PLO11 Demonstrate plating techniques and food presentation skills.

Learning Outcomes Display (show only)

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11
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FirstSemester

ENGL151HRTM110COMM154STSC150

SecondSemester





ENGL152BUSN271ECON151

ThirdSemester

HRTM212

9/15/22, 4:00 PM

AS.HRTM.CA: Hospitality, Recreation, and Tourism Management, Associate in Science Option in Culinary Arts

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11
<u>HRTM 214</u> 											
<u>CSIT 123</u> 											
Fourth Semester											
<u>APPR 151</u> 											
<u>HRTM 220</u> 											

Required Qualifications

Program Requirements

Plan of Study Grid

First Semester		Credit Hours
<u>ENGL 151</u>	English I	3
<u>MATH 156</u> or Higher		3
<u>HRTM 110</u>	Introduction to Hospitality, Recreation And Tourism Management	3
<u>COMM 154</u>	Fundamentals of Public Speaking	3
<u>STSC 150</u>	Student Success Seminar	2
Credit Hours		14
Second Semester		
<u>ENGL 152</u>	English II	3
<u>BUSN 271</u>	Principles of Management	3
<u>ECON 151</u>	Macroeconomic Principles	3
or <u>ECON 152</u>	or Microeconomics Principles	
<u>HRTM 120</u>	Marketing for Hospitality and Tourism	3
<u>HRTM 230</u>		3
<u>Any Course from the Gen. Ed. Course List</u>		3
Credit Hours		15
Third Semester		
<u>HRTM 212</u>	Conferences, Conventions, and Special Events Management	3
<u>HRTM 214</u>	Supervision and Human Resource Management	3
<u>Hospitality, Recreation, and Tourism Mgmt. Program Elective</u> ⁴		3

9/15/22, 4:00 PM

AS.HRTM.CA: Hospitality, Recreation, and Tourism Management, Associate In Science Option in Culinary Arts

<u>HRTM 231</u>		<u>3</u>
<u>CSIT 123</u>	Integrated Office Software	<u>3</u>
<u>Any Foreign Language Course from the Gen. Ed. Course list</u> ¹		<u>3</u>
Credit Hours		15
Fourth Semester		
<u>APPR 151</u>	<u>Degree Apprenticeship (HRTM section only)</u>	<u>3</u>
<u>HRTM 232</u>		<u>3</u>
<u>HRTM 220</u>	Managerial Accounting for Hospitality Industry	<u>3</u>
<u>Any Foreign Language Course from the Gen. Ed. Course list</u> ¹		<u>3</u>
<u>Lab Science Gen. Ed. Requirement</u>		<u>4</u>
Elective(s) to meet 60 credits		<u>6</u>
Credit Hours		16
Total Credit Hours		60

²Two semesters of the same foreign language are strongly recommended (For example: SPAN 151 and SPAN 152)

¹Two semesters of the same foreign language are strongly recommended (For example: SPAN 151 and SPAN 152)

Degree Requirements Breakdown

GCOM	Course Code & Title	Credits
	<u>ENGL 151 English I</u> NA	<u>3.0</u> N/A
	<u>ENGL 152 English II</u> N/A	<u>3.0</u> N/A
GHUM	Course Code & Title	Credits
	<u>Any Foreign Language gen ed course</u> NA	<u>3.0</u> N/A
GSOC	Course Code & Title	Credits
	<u>ECON 151 Macroeconomic Principles or</u> <u>ECON 152 Microeconomic Principles</u> NA	<u>3.0</u> N/A
GSOC/ GHUM	Course Code & Title	Credits
	<u>Any Foreign Language gen ed course</u> NA	<u>3.0</u> N/A
GMAT/ GSCI/ GTEC	Course Code & Title	Credits
	<u>MATH 156 or higher</u> NA	<u>3.0</u> N/A
	<u>Lab Science gen ed</u> N/A	<u>4.0</u> N/A
	<u>CSIT 123 Integrated Office Software</u> N/A	<u>3.0</u> N/A

9/15/22, 4:00 PM

AS.HRTM.CA: Hospitality, Recreation, and Tourism Management, Associate in Science Option In Culinary Arts

General Education

Course Code & Title	Credits
<u>COMM 154 Fundamentals of Public Speaking</u>	<u>3.0</u> N/A
NA	
<u>Any course from gen ed list</u>	<u>3.0</u> N/A

Concentration
Courses

Course Code & Title	Credits
<u>HRTM 110 Introduction to Hospitality Recreation and Tourism Management</u>	<u>3.0</u> N/A
NA	
<u>HRTM 230 Principles of Food and Beverage Management</u>	<u>3.0</u> N/A
N/A	
<u>HRTM 231 Culinary Fundamentals</u>	<u>3.0</u> N/A
N/A	
<u>HRTM 232 Advanced Culinary Concepts</u>	<u>3.0</u> N/A
N/A	
<u>APPR 151 Degree Apprenticeship</u>	<u>3.0</u> N/A
N/A	

Elective Courses

Course Code & Title	Credits
<u>BUSN 271 Principles of Management</u>	<u>3.0</u> N/A
NA	
<u>HRTM 212 Conferences, Conventions, and Special Events Management</u>	<u>3.0</u> N/A
N/A	
<u>HRTM 214 Supervision and Human Resource Management</u>	<u>3.0</u> N/A
N/A	
<u>HRTM 220 Managerial Accounting for Hospitality Industry</u>	<u>3.0</u> N/A
N/A	

Board Approval

History of Board
approval dates

TBD

Reviewer
Comments

Key: 97

EXHIBIT B-4

Program Change Request

Date Submitted: 07/08/22 1:46 pm

Viewing: **AS.CS : Computer Science, Associate in Science**

Last approved: 06/15/22 11:58 am

Last edit: 09/08/22 4:10 pm

Changes proposed by: Helga Paggi (hpaggi)

Catalog Pages Using
this Program

Computer Science, Associate in Science

4

Program Type	Associate of Science (AS)
Program Title	Computer Science, Associate in Science
Academic School	Science, Technology, Engineering, Mathematics
Effective Catalog Year	2023-2024
Program Code	AS.CS
CIP Code	110101 - Computer and Information Sciences, General.

Program Description

In Workflow

1. STEM Academic Administrator
2. STEM Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. Academic Administrator for Programs

Approval Path

1. 06/22/22 5:10 pm
Cynthia Fallon (cfallon): Approved for STEM Academic Administrator
2. 06/22/22 6:19 pm
Sylvia Riviello (sriviello): Approved for STEM Dean
3. 06/30/22 3:35 pm
Susan O'Connor (soconnor): Rollback to STEM Dean for

Director of
Curriculum

4. 07/04/22 4:51 pm
Sylvia Riviello
(sriviello): Rollback
to STEM Academic
Administrator for
STEM Dean

5. 07/08/22 1:06 pm
Cynthia Fallon
(cfallon): Rollback to
Initiator

6. 07/08/22 2:24 pm
Cynthia Fallon
(cfallon): Approved
for STEM Academic
Administrator

7. 07/08/22 3:34 pm
Sylvia Riviello
(sriviello): Approved
for STEM Dean

8. 08/05/22 10:58 am
Susan O'Connor
(soconnor):
Approved for
Director of
Curriculum

9. 08/18/22 2:07 pm
Heather Sciarappa
(hsciarappa):
Rollback to Director
of Curriculum for
Curriculum
Committee Chair

10. 08/18/22 2:08 pm
Susan O'Connor
(soconnor): Rollback
to STEM Dean for
Director of
Curriculum

11. 08/18/22 2:16 pm
Sylvia Riviello
(sriviello): Approved
for STEM Dean
12. 08/31/22 12:58 pm
Susan O'Connor
(soconnor):
Approved for
Director of
Curriculum
13. 09/08/22 4:15 pm
Heather Sciarappa
(hscarappa):
Approved for
Curriculum
Committee Chair

History

1. Jun 15, 2022 by
Susan O'Connor
(soconnor)

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of Science degree in Computer Science and provide a solid base of knowledge for a career in the Computer Science field. The curriculum follows closely program requirements of prominent four-year higher education institutions in New Jersey and is designed to address the preparation of our students for a future in Computer Science. computer science.

The curriculum follows the model provided by the Association of Computing Machinery and the Institute of Electrical and Electronic Engineers Computer Society in order to assure maximum transferability. This curriculum has been designed to address these needs in preparing the student for a future in computer science.

Program Objectives

Program Goals

Program goals

Program goals

PG1

NA


Program Learning

Outcomes

Students who successfully complete this program will be able to:












- PLO1 State the basic concepts of a modern computer architecture including the main functions of an operating system and ancillary software and how the major computer data, instruction and addressing formats influence computer performance.
- PLO2 Describe the software development life cycle(SDLC) and how it applies to recognizing solutions to the problems involved in program portability and data design by collecting, organizing and evaluating information
- PLO3 Illustrate the benefits of Object-Oriented software development and the rational of derived classes (including private, protected and public data members and methods).
- PLO4 Analyze (big O) algorithms for sequential and binary searches, hashing, and common selection, exchange and insertion sorting algorithms
- PLO5 Differentiate between the concepts, data structure and benefits involved in logically representing common data structures, such as tables, ordered lists, stacks, queues and trees.
- PLO6 Demonstrate independent thinking through mathematical, scientific, and philosophical reasoning.
- PLO7 Explain how technology has had an impact on society and the environment.
- PLO8 Demonstrate knowledge and skills in the areas of Computer Science to solve technical and computational problems.

Learning Outcomes Display (show only)

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8
FirstSemester								
<u>ENGL</u>								
<u>151</u>								
								

9/15/22, 3:56 PM

AS.CS: Computer Science, Associate in Science

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8
<u>MATH</u>								
<u>265</u>								
								
<u>CSIT</u>								
<u>165</u>								
								
<u>STSC</u>								
<u>150</u>								
								
Second Semester								
<u>ENGL</u>								
<u>152</u>								
								
<u>MATH</u>								
<u>266</u>								
								
<u>CSIT</u>								
<u>166</u>								
								
<u>CSIT</u>								
<u>176</u>								
								
Third Semester								
<u>CSIT</u>								
<u>265</u>								
								
<u>MATH</u>								
<u>267</u>								
								
<u>BIOL</u>								
<u>161</u>								
								
Fourth Semester								
<u>BIOL</u>								
<u>162</u>								
								

Required Qualifications

Plan of Study Grid

First Semester		Credit Hours
<u>ENGL 151</u>	English I	3
<u>MATH 265</u>	Calculus I	4
<u>CSIT 165</u>	Programming I	4
<u>Humanities Gen. Ed. Requirement</u>		3
<u>STSC 150</u>	Student Success Seminar	2
Credit Hours		16
Second Semester		
<u>ENGL 152</u>	English II	3
<u>MATH 266</u>	Calculus II	4
<u>CSIT 166</u>	Programming II	4
<u>CSIT 176</u>	Computer Organization & Architecture	3
<u>Humanities or Social Science Gen. Ed. Requirement</u>		3
Credit Hours		17
Third Semester		
<u>CSIT 265</u>	Data Structures and Analysis	4
Select one of the following to fulfil the Lab Science Gen. Ed. Requirement		4
PHYS 281	General Physics I	
CHEM 181	General Chemistry I	
<u>MATH 267</u>	Calculus III	3
or <u>MATH 270</u>	or Discrete Mathematics	
or <u>MATH 275</u>	or Linear Algebra	
MATH 270	Discrete Mathematics	
<u>BIOL 161</u>	General Biology I	4
or <u>CHEM 181</u>	or General Chemistry I	
or <u>PHYS 281</u>	or General Physics I	
<u>Social Sciences Gen. Ed. Requirement</u>		3
Math Elective; choose one of the following:		3
MATH 275	Linear Algebra	
Credit Hours		14
Fourth Semester		
Select from the following to complete your Science Sequence		4
PHYS 283	General Physics III	
<u>BIOL 162</u>	General Biology II	4
or <u>CHEM 182</u>	or General Chemistry II	
or <u>PHYS 282</u>	or General Physics II	
CHEM 182	General Chemistry II	
CSIT Elective ¹		6
<u>MATH or CSIT Elective</u> ²		3
Credit Hours		13

Total Credit Hours

60

1 CSIT Electives can be chosen from all CSIT courses with the exception of CSIT 110, CSIT 123, CSIT 126, CSIT 131, CSIT 133, and CSIT 160

2 Choose either a MATH or CSIT elective depending on your transfer pathway. MATH electives can be chosen from MATH 270, MATH 275, or MATH 267. CSIT electives can be chosen from all CSIT courses with the exception of CSIT 110, CSIT 123, CSIT 126, CSIT 131, CSIT 133 and CSIT 160.

Degree Requirements Breakdown

GCOM	Course Code & Title	Credits
	<u>ENGL 151</u> NA	<u>3</u> NA
	<u>ENGL 152</u>	<u>3</u>
GHUM	Course Code & Title	Credits
	<u>GEN ED HUMN</u> NA	<u>3</u> NA
GSOC	Course Code & Title	Credits
	<u>GEN ED SOCIAL SCIENCE</u> NA	<u>3</u> NA
GSOC/ GHUM	Course Code & Title	Credits
	<u>GEN ED HUMN OR SOCIAL SCIENCE</u> NA	<u>3</u> NA
GMAT/ GSCI/ GTEC	Course Code & Title	Credits
	<u>CSIT 165</u> NA	<u>4</u> NA
	<u>CSIT 166</u>	<u>4</u>
	<u>MATH 265</u>	<u>4</u>
	<u>MATH 266</u>	<u>4</u>
General Education	Course Code & Title	Credits
	<u>BIOL 161 OR CHEM 181 OR PHYS 281</u> NA	<u>4</u> NA
	<u>BIOL 162 OR CHEM 182 OR PHYS 282</u>	<u>4</u>
	<u>STSC 150</u>	<u>2</u>

Concentration Courses	Course Code & Title	Credits
	NA	NA
	<u>CSIT 176</u>	<u>3</u>
	<u>CSIT 185 OR CSIT 265 OR CSIT 213</u>	<u>3</u>
	<u>CSIT ELECTIVES</u>	<u>6</u>
	<u>CSIT 265</u>	<u>4</u>
Elective Courses	Course Code & Title	Credits
	<u>CSIT or MATH ELECTIVE NA</u>	<u>3</u> NA

Board Approval

History of Board
approval dates

Board of Trustees Approval Date: September 24, 2007

Board of Trustees Approval Date: December 1, 2008

Board of Trustees Approval Date: February 28, 2011

Board of Trustees Approval Date: February 25, 2013

Board of Trustees Approval Date: May 28, 2013

Board of Trustees Approval Date: December 08, 2016

Board of Trustees Approval Date: March 29, 2018

Board of Trustees Approval Date: January 24, 2018

Reviewer

Comments

Susan O'Connor (soconnor) (06/30/22 3:35 pm): Rollback: Hi: Is there a reason we are adding this new program outcome? Wouldn't this outcome be achieved by way of completing the other outcomes in the program?

Sylvia Riviello (sriviello) (07/04/22 4:51 pm): Rollback: Please review Susan's question from the email I forwarded to you

Cynthia Fallon (cfallon) (07/08/22 1:06 pm): Rollback: Additional Edits

Heather Sciarappa (hsciarappa) (08/18/22 2:07 pm): Rollback: Hi all -- I believe you wanted to look at this more. Please resubmit to workflow once you've made any necessary changes.

Susan O'Connor (soconnor) (08/18/22 2:08 pm): Rollback: Rollback for approval to bring to curriculum again - based on Deans request

Key: 13

EXHIBIT B-5



BOARD OF TRUSTEES

RESOLUTION

WHEREAS, Ocean County College desires to terminate its A.S. Degree in Psychosocial Rehabilitation; and

WHEREAS, the A.S. Degree in Psychosocial Rehabilitation was a joint program with Rutgers University School of Health-Related Professions, with the degree awarded simultaneously by Ocean County College and Rutgers University; and

WHEREAS, Rutgers University has decided to suspend its Psychosocial Rehabilitation Program for the foreseeable future and has ceased admitting new students; and

WHEREAS, there are no Ocean County College students enrolled in this program at this time; and

WHEREAS, Ocean County College will continue its articulation agreements with Rutgers University on other joint offerings, which are currently unaffected;

NOW, THEREFORE, BE IT RESOLVED that the Ocean County College Board of Trustees, at its meeting on September 22, 2022, terminates its A.S. Degree in Psychosocial Rehabilitation.

Adopted: September 22, 2022

Stephan R. Leone
Secretary

Program Change Request

Date Submitted: 06/21/22 10:25 am

Viewing: **AS.PSYR : Psychosocial Rehabilitation,
Associate in Science**

Last approved: 06/21/22 10:24 am

Last edit: 06/21/22 10:25 am

Changes proposed by: Susan O'Connor (soconnor)

Program Type	Associate of Science (AS)
Program Title	Psychosocial Rehabilitation, Associate in Science
Academic School	Nursing and Health Sciences
Effective Catalog Year	2022-2023
Program Code	AS.PSYR
CIP Code	NA - NA

Program Description

In Workflow

1. NH Academic Administrator
2. NH Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. Academic Administrator for Programs

Approval Path

1. 06/21/22 1:13 pm
Mary Fennessy
(mfennessy):
Approved for NH
Academic
Administrator
2. 08/25/22 11:52 am
Susan O'Connor
(soconnor):
Approved for NH
Dean
3. 08/31/22 12:56 pm
Susan O'Connor

(soconnor):

Approved for

Director of

Curriculum

4. 09/08/22 4:15 pm

Heather Sciarappa

(hsciarappa):

Approved for

Curriculum

Committee Chair

History

1. May 17, 2022 by
Susan O'Connor
(soconnor)
2. May 17, 2022 by
Susan O'Connor
(soconnor)
3. Jun 21, 2022 by
Susan O'Connor
(soconnor)

A joint Associate in Science Degree in Psychosocial Rehabilitation is offered in cooperation with the School of Health Professions (SHP) at Rutgers University. A degree is awarded simultaneously by Ocean County College and Rutgers.

Psychiatric rehabilitation practitioners provide services and supports to people with severe mental illnesses and other disabilities, empowering them to manage their illnesses and live rewarding and productive lives in the community. Psychosocial rehabilitation practitioners assist people in obtaining the skills, support and resources they will need to achieve success and satisfaction in their social, vocational, educational and independent living environments. The overall goals of this field are promotion of recovery, community integration, and improved quality of life for people coping with psychiatric disabilities. There are ample career opportunities for PSR practitioners in a variety of rehabilitation programs and community mental health settings. The knowledge and skills of the PSR practitioner qualify him/her to provide supportive counseling, case management services, and vocational rehabilitation interventions. The practitioner is also prepared to facilitate skills training groups as well as psycho-education and support groups.

To meet the demand for qualified professionals in this area, Rutgers' School of Health Professions (SHP) now offers a full psychiatric rehabilitation career ladder-from the associate's through the Ph.D. degree. This program will provide you with the basic skills and rehabilitation techniques to begin your career. As part of the program, you will complete two semesters of fieldwork at a community service agency.

9/15/22, 3:57 PM

AS.PSYR: Psychosocial Rehabilitation, Associate in Science

Students will complete 30 pre-professional general education credits at Ocean County College, and 30 Psychosocial Rehabilitation credits through the Rutgers SHP Piscataway or Blackwood campus. This course of study can be completed on either a full or part-time basis.

Admission Requirements

To apply for admission to the Psychosocial Rehabilitation program at Rutgers, students must:

be a matriculated student at Ocean County College

be a current resident of Ocean County

show completion of all 30 general education credits required prior to the start of the professional course work.

(Note: general education credits must be completed at OCC)

hold a High School Diploma or equivalent

submit all Official College Transcripts to Rutgers

submit New Jersey College Basic Skills Test Scores and show evidence of the completion of all basic skills courses

have a minimum GPA of 2.5 for college-level courses

Take and pass the OCC computer literacy test (students who do not pass this test must complete an additional Gen Ed Technology course)

Interested students must complete a Student Information Sheet and submit it to the Ocean County College School of Nursing & Health Sciences

Program Objectives

To train paraprofessionals and professionals to competently promote recovery and community integration for those with psychiatric disabilities.

To facilitate improving the quality of life for people coping with psychiatric disabilities across a wide variety of social service and community agency settings

To open career opportunities in the field for competently trained and qualified paraprofessionals.

Program Objectives

NA

Program Goals

PG1

NA

Program goals

Program Learning

Outcomes

Students who successfully complete this program will be able to:

Students who successfully complete this program will be able to:

PLO1



NA

Learning Outcomes Display (show only)



Course Code

PLO 1

FirstSemester

ENGL 151 MATH 165 PSYC 172 



SecondSemester

ENGL 152 SOCI 181 

FirstSemester

ENGL 151 MATH 165 PSYC 172 

SecondSemester

ENGL 152 SOCI 181 

Required Qualifications

The following sequence is an example of how this degree can be completed. This sequence is based on satisfaction of all Basic Skills requirements and pre-requisites. An individual's sequence at OCC may vary. See your advisor for options and to monitor your progress. Students must satisfy specific requirements in order to be admitted to this program. This degree may take longer than two years to complete. All general education courses must be taken prior to starting clinical courses.

OCC Courses Taken as Prerequisites Prior to Admission at Rutgers (30 credits at OCC)

Plan of Study Grid

First Semester

Credit Hours

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AS.PSYR: Psychosocial Rehabilitation, Associate in Science

<u>ENGL 151</u> English I	3
<u>MATH 165</u> College Algebra (Accelerated)	5
<u>PSYC 172</u> General Psychology	3
<u>Humanities Gen. Ed. Requirement</u>	3
Credit Hours	14

Second Semester

<u>ENGL 152</u> English II	3
<u>SOCI 181</u> Introduction to Sociology	3
<u>Lab Science Gen. Ed. Requirement</u> ¹	4
<u>Course(s) from the Gen. Ed. Course List</u>	6
Credit Hours	16
Total Credit Hours	30

1

BIOL 114, BIOL 161, or BIOL 130 recommended

Career Studies Courses Taken at Rutgers (30 credits at Rutgers)

PSRT 1101	Intro. to Principles of Psychosocial Rehabilitation	3
PSRT 1102	Communication Techniques for Interviewing & Counseling	3
PSRT 1103	Intro. to Group Dynamics & Process	3
PSRT 1204	Clinical Principles in Psychosocial Rehabilitation & Treatment	3
PSRT 1019	Clinical Practicum in Psychosocial Rehabilitation I	6
PSRT 2121	Community Resource Management	3
PSRT 2019	Clinical Practicum in Psychosocial Rehabilitation II	6
PSRT 2231	Emerging Topics in Psychosocial Rehabilitation & Treatment	3
Total Credit Hours		30

60 Credits Total

Degree Requirements Breakdown

GCOM		Course Code & Title	Credits
	NA		NA
GHUM		Course Code & Title	Credits
	NA		NA
GSOC		Course Code & Title	Credits
	NA		NA

9/15/22, 3:57 PM

AS.PSYR: Psychosocial Rehabilitation, Associate in Science

GSOC/ GHUM		Course Code & Title	Credits
	NA		NA
GMAT/ GSCI/ GTEC		Course Code & Title	Credits
	NA		NA
General Education		Course Code & Title	Credits
	NA		NA
Concentration Courses		Course Code & Title	Credits
	NA		NA
Elective Courses		Course Code & Title	Credits
	NA		NA

Board Approval

History of Board

approval dates

Sent through for hiatus on 5/17/22 for 22/23. Waiting to terminate until teach out is completed.

Formally deactivated and sent through BOT for state notification on 6/21/22.

Reviewer

Comments

Key: 53

EXHIBIT B-6

Course Change Request

New Course Proposal

Date Submitted: 07/22/22 1:09 pm

Viewing: **BUSN 320 : Procurement and Supplier Relationship Management**

Last edit: 08/05/22 10:24 am

Changes proposed by: Katherine Toy (ktoy)

Programs
referencing this
course

AS.ACS.SPLC: Advanced and Continuous Studies - Option Supply Chain,
Logistics, and Maritime Port Mgmt.

Learning Outcomes
Display (show only)

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 07/25/22 9:09 am
Johanna Riemen (jriemen): Approved for BS Academic Administrator
2. 07/28/22 12:33 pm
Rosann Bar (rbar): Approved for BS Dean
3. 08/05/22 10:24 am
Susan O'Connor (soconnor): Approved for

9/15/22, 4:00 PM

BUSN 320: Procurement and Supplier Relationship Management

Director of
Curriculum

4. 08/11/22 4:54 pm
Heather Sciarappa
(hsciarappa):
Approved for
Curriculum
Committee Chair

5. 09/08/22 6:05 pm
Robert Marchie
(rmarchie):
Approved for
Senate Chair

6. 09/09/22 1:04 pm
Joseph Konopka
(jkonopka):
Approved for Vice
President of
Academic Affairs

1. Course Information

Subject	BUSN - Business
Course Number	320
School	Business and Social Sciences
Course Title	Procurement and Supplier Relationship Management

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

This course is designed to provide a foundation in procurement and supplier management. Students will be exposed to the key principles of purchasing and supplier strategies. The role of purchasing in today's supply chain is re-evaluated to include traditional functions but also competencies gained from collaborating with suppliers. Integration of suppliers' resources at product development and operational levels will also be examined.

4. Requisites

Prerequisites

BUSN 271

Corequisites

None

5. Course Type

Course Fee Code

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need

for this course

This course is a third year business course for the 3+1 A.S. program in Advanced and Continuous Studies agreement with New Jersey City University (NJCU).

NJCU Justification:

This course is created for our new Supply Chain, Logistics and Maritime Port Management Program. Today's economy is fueled by business brought by globalization, empowered customers, technology, and deregulation of industries. With global business web weaves tightly with domestic and global companies and with busy ports in New York and New Jersey to handle cargos worldwide from North America, Europe, South America, Africa, and Asia, demand for professionals in supply chain management and maritime logistics has increased dramatically. The role played by Supply Chain, Logistics, and Maritime Port Management serves the key to gain competitive advantage for companies worldwide.

In addition, with Supply Chain Management (SCM) as one of the top 20 job tracks as listed in U. S. News & World Report 2014 as well as the job outlook for supply chain professionals is at a

22% rate faster than industry average until 2020, there is a shortage in demand for professionals in this area.

To address the increasing demand of professionals in the industry and to bridge the gap of the needs of professionals in the field, this course is proposed to be one of the foundation courses for our new Supply Chain, Logistics, and Maritime Port Management Program. In this course, students will explore key decision factors related to effective purchasing strategies in supply chains including buyer development and value maximization, e-procurement, legal aspects of purchasing, as well as price/cost analysis in purchasing decisions. Furthermore, models and analysis involved in supplier selection and evaluation will also be explored to equip students with analytical capabilities in managing suppliers in sourcing and outsourcing strategies.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course, which satisfies a general education requirement?

No

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

Program-specific requirement

8. Consistency with the Vision and Mission Statements, the Academic Master Plan, and the strategic initiatives of the College

Please describe how this course is consistent with Ocean County College's current Vision Statement, Mission Statement, Academic Master Plan, and the strategic initiatives of the College:

Add item

1

This course is consistent with Ocean County College's (OCC) mission of "Ocean County College, an innovative academic leader, provides affordable, student-centered, high-quality educational experiences that empower diverse learners to succeed." This is achieved through OCC offering a 3+1 program that will provide a diverse group of students with an opportunity to receive a more affordable Bachelor's degree.

Add Item

- | | |
|---|---|
| 2 | This course corresponds to the College's Strategic Goal 2: Optimize and expand enrollment of all learners. This is achieved through OCC adding an additional year of instruction and enrollment for any students that utilizes the 3+1 model. |
| 3 | This course corresponds to the College's Strategic Goal 4: Expand relationships with external stakeholders. This is achieved through the College's partnerships with four-year institutions to create new 3+1 programs and, in many cases, partnerships with industry for apprenticeships as they relate to the new 3+1 programs. |

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution None

Course Title N/A

Course Number N/A

Number of Credits N/A

Comments

This course is a 300-level course that is not designed to equate to any community college offerings.

Transferability of Course

Georgian Court University

Course Code, Title, and Credits

Transfer Category

If non-transferable; select status

Unable to determine status

Kean University

Course Code, Title, and Credits

Transfer Category

If non-transferable; select status

Unable to determine status

Monmouth University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Rutgers - New Brunswick, Mason Gross School of the Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

If not transferable
to any institution,
explain:

This course has been created to align directly with New Jersey City University's (NJCU) course "MGMT 305: Procurement and Supplier Relationship Management ." Students in this course would be in a pipeline to transfer directly to NJCU upon completion at OCC.

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:	
CLO1	Define the domain and topics involved in today's purchasing and supplier relationship management.
CLO2	Understand key decision factors in purchasing decisions and business strategy.
CLO3	Explain the legal aspects of purchasing in supply chains.
CLO4	Apply data analysis in various procurement arrangements and models.

Students who successfully complete this course will be able to:

CLO5	Analyze different supplier strategies to optimize pricing and performance/cost ratio.
CLO6	Evaluate decision factors critical to supplier selection and partnership.
CLO7	Identify key and emerging factors influencing effective and efficient procurement and supplier relationship management.
CLO8	Compare and contrast global sourcing strategy.
CLO9	Interpret basic data analysis critical to the planning and operations of a supply chain.
CLO10	Develop a plan to address performance measurement and risk/sustainability assessment.

11. Topical Outline

(include as many themes/skills as needed)

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	Introduction to Purchasing and Supply Chain Framework	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO1-CLO3
TO2	Purchasing Decisions and Business Strategy	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO1-CLO4
TO3	Legal Aspect of Purchasing	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO1-CLO3

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BUSN 320: Procurement and Supplier Relationship Management

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO4	Materials Management	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO1-CLO4
TO5	Purchasing Procedures and E-Procurement	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO1-CLO4, CLO7
TO6	Exam I	Exam	Exam	CLO1-CLO10
TO7	Supplier Selection and Evaluation	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO1, CLO5-CLO7
TO8	Strategic Outsourcing	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO4-CLO8
TO9	Global Sourcing Strategy	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO2, CLO4, CLO5, CLO7, CLO8
TO10	Managing Supply Partnership	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO5- CLO8

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BUSN 320: Procurement and Supplier Relationship Management

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO11	Total Quality Management and Purchasing	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO4, CLO7, CLO9, CLO10
TO12	Exam II	Exam	Exam	CLO1-CLO10
TO13	Price/Cost Analysis	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO4, CLO5, CLO7, CLO9, CLO10
TO14	Project Presentation	Lecture Case study Presentation Project Guest Speaker	Assignments Project Exams Class participation	CLO1-CLO10
TO15	Final Exam	Exam	Exam	CLO1-CLO10

12. Methods of Instruction

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

Lecture
Case study
Presentation
Project
Exam
Guest Speaker

13. General Education Goals Addressed by this Course (this section is to fulfill state requirements)

Information

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

Independent/Critical Thinking

14. Needs

Instructional
Materials (text
etc.):

Required text: Benton, W. C. Jr. (2014). Purchasing and Supply Chain Management (3rd Edition).
New York: McGraw-Hill.

Supporting Bibliography: Books and articles that are currently available in or through the NJCU
library are indicated with an asterisk.

- Autry, C. W., Goldsby, T. J., & Bell, J. E. (2013). *Global Macrotrends and Their Impact on Supply Chain Management* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- *Blanchard, D. (2010). *Supply Chain Management Best Practices* (2nd Edition). Hoboken, N. J.: John Wiley & Sons.
- Bozarth, C. B. & Handfield, R. B. (2013). *Introduction to Operations and Supply Chain Management* (3rd Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Chopra, S. & Meindl, P. (2013). *Supply Chain Management: Strategy, Planning, and Operation* (5th Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Christopher, M. (2011). *Logistics and Supply Chain Management* (4th Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Frankel, R. (2014). *The Definitive Guide to Supply Chain Best Practices: Comprehensive Lessons and Cases in Effective SCM* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Gibson, B. J., Hanna, J. B., Defee, C. C., & Chen, H. (2014). *The Definitive Guide to Integrated Supply Chain Management: Optimize the Interaction between Supply Chain Processes, Tools, and Technologies* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Harland, C., Nassimbeni, G., & Schneller, E. (2013). *The SAGE Handbook of Strategic Supply Management* (1st Edition). SAGE Publications, Ltd.
- Harrison, A. & Van Hoek, R. (2011). *Logistics Management and Strategy: Competing through the Supply Chain* (4th Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Jacobs, F. R., Berry, W. L., Whybark, D. C., & Vollmann, T. E. (2011) *Manufacturing Planning and Control for Supply Chain Management* (6th Edition). New York: McGraw-Hill.
- Jacobs, F. R., & Chase, R. B. (2014) *Operations and Supply Chain Management* (14th Edition). New York: McGraw-Hill.
- Keller, S. B. & Keller, B. C. (2014). *The Definitive Guide to Warehousing: Managing the Storage and Handling of Materials and Products in the Supply Chain* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- *Kildow, B. A. (2011). *A Supply Chain Management Guide to Business Continuity*. New York: American Management Association.
- Leon, S. M. (2014). *Sustainability in Supply Chain Management: Casebook: Applications in SCM* (1st Edition).
- Munson, C. (2013). *The Supply Chain Management Casebook: Comprehensive Coverage and Best Practices in SCM* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Myerson, P. (2012) *Lean Supply Chain and Logistics Management* (1st Edition). New York: McGraw-Hill.
- Oliveira, A. & Gimeno, A. (2014) *Managing Supply Chain Networks: Building Competitive Advantage in Fluid and Complex Environments*. (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- *Panayides, P. M., & Soung D. (2012). *Maritime Logistics: A Complete Guide to Effective Shipping and Port Management*. London: Kogan Page.
- *Panayides, P. M., & Soung D. (2012). *Maritime Logistics: Contemporary Issues*. Bingley, U. K.: Emerald.

- Sanders, N. R. (2014). *Big Data Driven Supply Chain Management: A Framework for Implementing Analytics and Turning Information into Intelligence* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Schniederjans, M. J. & LeGrand, S. B. (2013). *Reinventing the Supply Chain Life Cycle – Student Workbook* (1st Edition).
- Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2008) *Designing and Managing the Supply Chain* (1st Edition). New York: McGraw-Hill.
- Waller, M. A. & Esper, T. L. (2014). *The Definitive Guide to Inventory Management: Principles and Strategies for the Efficient Flow of Inventory across the Supply Chain* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- *Waters, C. D. J. (2011). *Supply Chain Risk Management: Vulnerability and Resilience in Logistics* (2nd Edition). London: Kogan Page.
- Watson, M., Lewis, S., Cacioppi, P., & Jayaraman, J. (2013). *Supply Chain Network Design: Applying Optimization and Analytics to the Global Supply Chain* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.

Technology Needs:

Existing or grant purchased technology will be utilized.

Human Resource

Needs (Presently

Employed vs. New

Faculty):

Faculty for this course must be approved to teach 300-level business courses.

Facility Needs:

Existing or grant-provided facilities will be utilized.

Library needs:

Relevant Periodical Sources:

Harvard Business Review

Inside Supply Chain Management Magazine

International Journal of Supply Chain Management

International Journal of Supply Chain and Operations Resilience

Journal of Business Logistics

Journal of Operations Management

Journal of Operations and Supply Chain Management

Journal of Purchasing and Supply Management

Journal of Supply Chain Management

Journal of Supply Chain Management Systems

Journal of Transport and Supply Chain Management

*Journal of Transportation Law, Logistics & Policy

- *Logistics Management
- *Logistics and Transport Focus
- *Logistics and Transportation Review
- Maritime Economics and Logistics
- Maritime Policy and Management
- *Risk Analysis: An International Journal
- Supply Chain Forum: An International Journal
- Supply Chain Management: An International Journal
- *Supply Chain Management Journal
- * Supply Chain Management Review
- Transportation Research Part E: Logistics and Transportation Review
- The Wall Street Journal

Relevant Online Sources:

American Production and Inventory Control Society (APICS): <http://www.apics.org/>
APICS Supply Chain Council (APICS SCC): <https://supply-chain.org/>
American Society of Transportation and Logistics (ASTL): <http://cscmp.org/>
Council of Supply Chain Management Professionals (CSCMP): <http://cscmp.org/>
Institute for Supply Chain Management (ISM): <http://www.ism.ws/>
International Society of Six Sigma Professionals (ISSSP): <http://issp.com/>
International Warehouse Logistics Association (IWLA): <http://www.iwla.com/>
Lean Enterprise Institute (LEI): <http://www.lean.org/>
National Industrial Transportation League (NITL): <http://www.nitl.org/>
Reverse Logistics Association (RLA): <http://www.reverselogisticstrends.com/>
Warehousing, Education & Resource Council (WERC): <http://www.werc.org/>

15. Grade Determinants

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

A: Excellent
B+: Very Good
B: Good
C+: Above Average
C: Average
D: Below Average
F: Failure

9/15/22, 4:00 PM

BUSN 320: Procurement and Supplier Relationship Management

I: Incomplete

R: Audit

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

Reviewer

Comments

Key: 2270

[Preview Bridge](#)

EXHIBIT B-7

Course Change Request

New Course Proposal

Date Submitted: 07/22/22 1:10 pm

Viewing: **BUSN 321 : Decision Intelligence in Supply Chains**

Last edit: 08/05/22 10:25 am

Changes proposed by: Katherine Toy (ktoy)

Programs
referencing this
course

AS,ACS,SPLC: Advanced and Continuous Studies - Option Supply Chain,
Logistics, and Maritime Port Mgmt.

Learning Outcomes
Display (show only)

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 07/25/22 9:10 am
Johanna Riemen (jriemen): Approved for BS Academic Administrator
2. 07/28/22 12:34 pm
Rosann Bar (rbar): Approved for BS Dean
3. 08/05/22 10:25 am
Susan O'Connor (soconnor): Approved for

Director of
Curriculum
4. 08/11/22 4:54 pm
Heather Sciarappa
(hscarappa):
Approved for
Curriculum
Committee Chair
5. 09/08/22 6:04 pm
Robert Marchie
(rmarchie):
Approved for
Senate Chair
6. 09/09/22 1:05 pm
Joseph Konopka
(jkonopka):
Approved for Vice
President of
Academic Affairs

1. Course Information

Subject	BUSN - Business
Course Number	321
School	Business and Social Sciences
Course Title	Decision Intelligence in Supply Chains

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

This course is designed to equip students with data gathering and analytical skills in the field of supply chain and logistics management. Students will explore what types of data are needed for a variety of issues, what analytical tools can be used, how to use PC-based spreadsheet programs and Bloomberg terminals to track trends and relations in data, how to visualize data at hand, and how to create forecast reports to make informed decisions on issues related to effective supply chain and logistics management.

4. Requisites

Prerequisites

CSIT 123 and MATH 156

Corequisites

none

5. Course Type

Course Fee Code

Course Type for non-vocational (not approved for Perkins
Perkins Reporting funding)

6. Justification

Describe the need
for this course

This course is a third year business course for the 3+1 A.S. program in Advanced and Continuous Studies agreement with New Jersey City University (NJCU).

NJCU Justification:

This course is an advanced methodological course focusing on using real time data to analyzing issues in the fields of supply chain, logistics, and maritime port management. The main objective of the course is to help students develop analytical skills and capabilities of managing big data to optimize operational excellence of supply chains.

With big data analysis in supply chains being one of the fastest growing application areas for business intelligence, it is critical to expose students to real time data and to make sense out of data. In addition, recent advances in information technologies have also contributed to the rapid increase of data-driven decision making. Through the design of this course, students will be able to use various software packages as well as Bloomberg terminals to access trends, metrics, and relationships embedded in the data. Furthermore, a variety of analytical

frameworks and tools will be introduced to enhance students' decision making skills on analyzing big data.

The primary goal of this course is to familiarize students with strategic and tactical issues in achieving supply chain, logistics, and maritime port management operational excellence. This also serves as one of the advanced courses in our new Supply Chain, Logistics, and Maritime Port Management Program and an elective for all disciplines.

Supply Chain, Logistics, and Maritime Port Management is one of the top 20 job tracks as listed in U. S. News & World Report 2014. Additionally, the job outlook for Supply Chain, Logistics, and Maritime Port Management Professionals is at a 22% rate growing faster than industry average through 2020. There is a shortage of trained professionals in this area and an opportunity for our students to meet the demand.

Demand in the Supply Chain, Logistics, and Maritime Port Management has increased dramatically due to the fact that it is a 6 billion dollar industry in New Jersey alone.

Furthermore, none of the school in New Jersey offers Maritime Port Management Program while Old Dominion University claims to be the only university offers such degree East of Mississippi River. Few schools offering any emphasis on Maritime Port Management gives New Jersey City University a unique competitive advantage.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course, which satisfies a general education requirement?

No

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

Program-specific requirement

8. Consistency with the Vision and Mission Statements, the Academic Master Plan, and the strategic initiatives of the College

Please describe how this course is consistent with Ocean County College's current Vision Statement, Mission Statement, Academic Master Plan, and the strategic initiatives of the College:

Add Item

Add item

- 1 This course is consistent with Ocean County College's (OCC) mission of "Ocean County College, an innovative academic leader, provides affordable, student-centered, high-quality educational experiences that empower diverse learners to succeed." This is achieved through OCC offering a 3+1 program that will provide a diverse group of students with an opportunity to receive a more affordable Bachelor's degree.
- 2 This course corresponds to the College's Strategic Goal 2: Optimize and expand enrollment of all learners. This is achieved through OCC adding an additional year of instruction and enrollment for any students that utilizes the 3+1 model.
- 3 This course corresponds to the College's Strategic Goal 4: Expand relationships with external stakeholders. This is achieved through the College's partnerships with four-year institutions to create new 3+1 programs and, in many cases, partnerships with industry for apprenticeships as they relate to the new 3+1 programs.

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution None

Course Title N/A

Course Number N/A

Number of Credits N/A

Comments

This course is a 300-level course that is not designed to equate to any community college offerings.

Transferability of Course

Georgian Court
University

9/15/22, 4:01 PM

BUSN 321: Decision Intelligence in Supply Chains

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status Unable to determine status
Kean University		
Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status Unable to determine status
Monmouth University		
Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status Unable to determine status
Rowan University		
Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status Unable to determine status
Rutgers - New Brunswick, Mason Gross School of the Arts		
Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status Unable to determine status
Stockton University		
Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status Unable to determine status

If not transferable
to any institution,
explain:

This course has been created to align directly with New Jersey City University's (NJCU) course "MGMT 350: Decision Intelligence in Supply Chains." Students in this course would be in a pipeline to transfer directly to NJCU upon completion at OCC.

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:

Students who successfully complete this course will be able to:

CLO1	Define the role of big data in strategic management process of supply chains.
CLO2	Identify a vision and mission for analytics actionable intelligence.
CLO3	Discuss goals of and issues related to a supply chain and assess the impact of supply chain decisions on key performance metrics.
CLO4	Examine and differentiate data for decision making to improve performance measures.
CLO5	Select data analysis modes to manage supplier relationship.
CLO6	Develop decision models to optimize internal supply chain processes.
CLO7	Generate data to analyze customer relationship strategy.
CLO8	Synthesize real time data to address issues in supply chains via Bloomberg terminals.
CLO9	Justify data analyses by utilizing various software packages to create forecasting frameworks.
CLO10	Interpret analytical results critical to the planning and operations of a supply chain.
CLO11	Develop a plan to address performance measurement and risk/sustainability assessment.

11. Topical Outline

(include as many themes/skills as needed)

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	Introduction to Analytics and Big Data and Their Application in Supply Chains	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO1 and CLO2

9/15/22, 4:01 PM

BUSN 321: Decision Intelligence in Supply Chains

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO2	Supply Chain Strategy: Goals, Issues, and Performance Metrics in Supply Chains	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO1-CLO4
TO3	Data via Bloomberg Terminals	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO2-CLO5, CLO8
TO4	Demand Forecasting	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO3-CLO6, CLO8
TO5	Exam I	Exam	Exam	CLO1-CLO11
TO6	Supplier Analytics	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO3-CLO5, CLO8-CLO10
TO7	Global Supply Chain Analytics	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO4, CLO6-CLO10

9/15/22, 4:01 PM

BUSN 321: Decision Intelligence in Supply Chains

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO8	Project Presentation on Supplier Analytics	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO4, CLO6-CLO10
TO9	Inventory Management	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO3, CLO5, CLO6, CLO9, CLO10
TO10	Customer Relationship Management	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO3, CLO4, CLO6, CLO7, CLO9, CLO10
TO11	Analysis of Performance Metrics in Supply Chains	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO3, CLO4, CLO8-CLO10
TO12	Exam II	Exam	Exam	CLO1-CLO11
TO13	Data Forecasting Frameworks	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO3, CLO4, CLO8-CLO11

9/15/22, 4:01 PM

BUSN 321: Decision Intelligence in Supply Chains

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO14	Project Presentation	Lecture Case study Bloomberg Terminal operation Presentation Project	Assignment Exams Project Class participation	CLO1-CLO11
TO15	Final Exam	Exam	Exam	CLO1-CLO11

12. Methods of Instruction

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

Lecture
Case study
Bloomberg Terminal operation
Presentation
Project
Exam

13. General Education Goals Addressed by this Course (this section is to fulfill state requirements)

Information

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

Independent/Critical Thinking

14. Needs

Instructional

Materials (text
etc.):

Required text:

Chopra, S., and Meihdl P. (2013). Supply Chain Management: Strategy, Planning, and Operation (5th Edition). Upper Saddle River, NJ: Pearson Prentice Hall.

Additional Required Readings:

Carter, K. B., Farmer, D. & Siegel, C. (2014). Actionable Intelligence: A Guide to Delivering Business Results with Big Data Fast (1st Edition). Hoboken, N. J.: John Wiley & Sons.

Supporting Bibliography: Books and articles that are currently available in or through the NJCU library are indicated with an asterisk.

Autry, C. W., Goldsby, T. J., & Bell, J. E. (2013). Global Macrotrends and Their Impact on Supply Chain Management (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.

*Blanchard, D. (2010). Supply Chain Management Best Practices (2nd Edition). Hoboken, N. J.: John Wiley & Sons.

Bozarth, C. B. & Handfield, R. B. (2013). Introduction to Operations and Supply Chain Management (3rd Edition). Upper Saddle River, NJ: Pearson Prentice Hall.

- Christopher, M. (2011). *Logistics and Supply Chain Management (4th Edition)*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Clark, R. M. (2013). *Intelligence Analysis: A Target-Centric Approach. (4th Edition)*. SAGE Publications, Ltd.
- Feigin G. (2011). *Supply Chain Planning and Analytics: The Right Product to the Right Place At the Right Time*. New York: Business Expert Press.
- Fisher M. and Raman A. (2008). *The New Science of Retailing: How Analytics are Transforming the Supply Chain and Improving Performance*. Boston, Massachusetts: Harvard Business Press.
- Frankel, R. (2014). *The Definitive Guide to Supply Chain Best Practices: Comprehensive Lessons and Cases in Effective SCM (1st Edition)*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Gibson, B. J., Hanna, J. B., Defee, C. C., & Chen, H. (2014). *The Definitive Guide to Integrated Supply Chain Management: Optimize the Interaction between Supply Chain Processes, Tools, and Technologies (1st Edition)*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Handfield R. (2006). *Supply Market Intelligence: A Managerial Handbook for Building Sourcing Strategies*. New York: Taylor and Francis Group, Auerbach Publications.
- Harland, C., Nassimbeni, G., & Schneller, E. (2013). *The SAGE Handbook of Strategic Supply Management (1st Edition)*. SAGE Publications, Ltd.
- Harrison, A. & Van Hoek, R. (2011). *Logistics Management and Strategy: Competing through the Supply Chain (4th Edition)*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Howson, C. (2007). *Successful Business Intelligence: Secrets to Making BI a Killer App (.)*. New York: McGraw-Hill.
- Jacobs, F. R., Berry, W. L., Whybark, D. C., & Vollmann, T. E. (2011) *Manufacturing Planning and Control for Supply Chain Management (6th Edition)*. New York: McGraw-Hill.
- Jacobs, F. R., & Chase, R. B. (2014) *Operations and Supply Chain Management (14th Edition)*. New York: McGraw-Hill.
- Keller, S. B. & Keller, B. C. (2014). *The Definitive Guide to Warehousing: Managing the Storage and Handling of Materials and Products in the Supply Chain (1st Edition)*. Upper Saddle River, NJ: Pearson Prentice Hall.
- *Kildow, B. A. (2011). *A Supply Chain Management Guide to Business Continuity*. New York: American Management Association.
- Leon, S. M. (2014). *Sustainability in Supply Chain Management: Casebook: Applications in SCM (1st Edition)*.
- Munson, C. (2013). *The Supply Chain Management Casebook: Comprehensive Coverage and Best Practices in SCM (1st Edition)*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Myerson, P. (2012) *Lean Supply Chain and Logistics Management (1st Edition)*. New York: McGraw-Hill.
- Naval Postgraduate School (2014). *Transforming Data and Metadata into Actionable Intelligence and Information Within the Maritime Domain (1st Edition)*.
- Oliveira, A. & Gimeno, A. (2014) *Managing Supply Chain Networks: Building Competitive Advantage in Fluid and Complex Environments. (1st Edition)*. Upper Saddle River, NJ: Pearson

Prentice Hall.

Sanders, N. R. (2014). *Big Data Driven Supply Chain Management: A Framework for Implementing Analytics and Turning Information into Intelligence* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.

Schniederjans, M. J. & LeGrand, S. B. (2013). *Reinventing the Supply Chain Life Cycle – Student Workbook* (1st Edition).

Schneier, B. (2015). *Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World* (1st Edition). New York & London: W. W. Norton & Company.

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2008) *Designing and Managing the Supply Chain* (1st Edition). New York: McGraw-Hill.

Waller, M. A. & Esper, T. L. (2014). *The Definitive Guide to Inventory Management: Principles and Strategies for the Efficient Flow of Inventory across the Supply Chain* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.

*Waters, C. D. J. (2011). *Supply Chain Risk Management: Vulnerability and Resilience in Logistics* (2nd Edition). London: Kogan Page.

Watson, M., Lewis, S., Cacioppi, P., & Jayaraman, J. (2013). *Supply Chain Network Design: Applying Optimization and Analytics to the Global Supply Chain* (1st Edition). Upper Saddle River, NJ: Pearson Prentice Hall.

Technology Needs:

Existing or grant purchased technology will be utilized.

Human Resource

Needs (Presently

Employed vs. New

Faculty):

Faculty for this course must be approved to teach 300-level business courses.

Facility Needs:

Existing or grant-provided facilities will be utilized.

Library needs:

Relevant Periodical Sources:

Harvard Business Review

Inside Supply Chain Management Magazine

International Journal of Supply Chain Management

International Journal of Supply Chain and Operations Resilience

Journal of Decision Sciences

Journal of Operations and Supply Chain Management

Journal of Purchasing and Supply Management

Journal of Supply Chain Management

Journal of Supply Chain Management Systems

Journal of Transport and Supply Chain Management

*Logistics Management

Supply Chain Forum: An International Journal

Supply Chain Management: An International Journal

*Supply Chain Management Journal

* Supply Chain Management Review

The Wall Street Journal

Relevant Online Sources:

American Production and Inventory Control Society (APICS):

<http://www.apics.org/>

APICS Supply Chain Council (APICS SCC): <https://supply-chain.org/>

American Society of Transportation and Logistics (ASTL): <http://cscmp.org/>

Bloomberg Business: www.bloomberg.com

Council of Supply Chain Management Professionals (CSCMP):

<http://cscmp.org/>

Institute for Supply Chain Management (ISM): <http://www.ism.ws/>

International Society of Six Sigma Professionals (ISSSP): <http://issp.com/>

International Warehouse Logistics Association (IWLA):

<http://www.iwla.com/>

Lean Enterprise Institute (LEI): <http://www.lean.org/>

National Industrial Transportation League (NITL): <http://www.nitl.org/>

Reverse Logistics Association (RLA):

<http://www.reverselogisticstrends.com/>

Warehousing, Education & Resource Council (WERC):

<http://www.werc.org/>

15. Grade Determinants

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

A: Excellent

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.

Reviewer

Comments

Key: 2271

[Preview Bridge](#)

EXHIBIT B-8

Course Change Request

New Course Proposal

Date Submitted: 07/22/22 1:07 pm

Viewing: **BUSN 390 : Fundamentals of Data Visualization for Business Analytics and Data Science**

Last edit: 08/05/22 10:18 am

Changes proposed by: Katherine Toy (ktoy)

Programs
referencing this
course

AS.ACS.DATA: Advanced and Continuous Studies - Option in Business Analytics and Data Science

Learning Outcomes
Display (show only)

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 07/25/22 9:08 am
Johanna Riemen (jriemen): Approved for BS Academic Administrator
2. 07/28/22 12:31 pm
Rosann Bar (rbar): Approved for BS Dean
3. 08/05/22 10:18 am
Susan O'Connor (soconnor): Approved for

Director of
Curriculum
4. 08/11/22 4:54 pm
Heather Sciarappa
(hsciarappa):
Approved for
Curriculum
Committee Chair
5. 09/08/22 6:04 pm
Robert Marchie
(rmarchie):
Approved for
Senate Chair
6. 09/09/22 1:05 pm
Joseph Konopka
(jkonopka):
Approved for Vice
President of
Academic Affairs

1. Course Information

Subject	BUSN - Business
Course Number	390
School	Business and Social Sciences
Course Title	Fundamentals of Data Visualization for Business Analytics and Data Science

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

This course will provide students with the techniques and state-of-the-art practices in data visualization and communication. The course will explore a wide range of techniques from simple charts to multidimensional analysis using dashboards. The course will help students visually present recommendations for better data driven decision making.

4. Requisites

Prerequisites

None

Corequisites

None

5. Course Type

Course Fee Code

Course Type for	non-vocational (not approved for Perkins
Perkins Reporting	funding)

6. Justification

Describe the need
for this course

This course is a third year business course for the 3+1 A.S. program in Advanced and Continuous Studies agreement with New Jersey City University (NJCU).

NJCU Justification:

Visualizing data is important in finding various patterns and relationships in the data. Data visualization is a critical step in exploratory data analysis (EDA), which is the first step in analyzing a data driven solutions to a business problem. Data visualization also helps in intuitively conveying the relationships in the data and providing visual support for the questions that need to be answered based on the data, to a non-technical audience. Thus, data visualization is a critical part of business analytics and data science. This course equips the students with the skills required to represent data visually and effectively convey information to an audience.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course, which satisfies a general education requirement?

No

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

Program-specific requirement

8. Consistency with the Vision and Mission Statements, the Academic Master Plan, and the strategic initiatives of the College

Please describe how this course is consistent with Ocean County College's current Vision Statement, Mission Statement, Academic Master Plan, and the strategic initiatives of the College:

Add Item

- | | |
|---|---|
| 1 | This course is consistent with Ocean County College's (OCC) mission of "Ocean County College, an innovative academic leader, provides affordable, student-centered, high-quality educational experiences that empower diverse learners to succeed." This is achieved through OCC offering a 3+1 program that will provide a diverse group of students with an opportunity to receive a more affordable Bachelor's degree. |
| 2 | This course corresponds to the College's Strategic Goal 2: Optimize and expand enrollment of all learners. This is achieved through OCC adding an additional year of instruction and enrollment for any students that utilizes the 3+1 model. |
| 3 | This course corresponds to the College's Strategic Goal 4: Expand relationships with external stakeholders. This is achieved through the College's partnerships with four-year institutions to create new 3+1 programs and, in many cases, partnerships with industry for apprenticeships as they relate to the new 3+1 programs. |

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	None
-------------	------

Course Title N/A

Course Number N/A

Number of Credits N/A

Comments

This course is a 300-level course that is not designed to equate to any community college offerings.

Transferability of Course

Georgian Court

University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Monmouth

University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Rutgers - New

Brunswick, Mason

Gross School of the

Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

If not transferable
to any institution,
explain:

This course has been created to align directly with New Jersey City University's (NJCU) course "FINC 403: Fundamentals of Data Visualization for Business Analytics and Data Science ." Students in this course would be in a pipeline to transfer directly to NJCU upon completion at OCC.

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:	
CLO1	Describe the key concepts in data visualization and communication, key characteristics of visualization methods and tools for creating visualizations.
CLO2	Discuss the role of data visualization in business analytics.
CLO3	Identify appropriate data visualization.
CLO4	Define parameters, colors, sizes, formats, fonts, and places.
CLO5	Calculate sensitivities for various parameters.
CLO6	Construct efficient and effective data visualizations.
CLO7	Compare strengths and weaknesses of different types of visualizations.
CLO8	Interpret visual outputs.
CLO9	Evaluate the effectiveness of visual techniques and tools.
CLO10	Recommend effective and efficient visualization methods and tools.

11. Topical Outline

(include as many themes/skills as needed)

Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)

9/15/22, 4:01 PM

BUSN 390: Fundamentals of Data Visualization for Business Analytics and Data Science

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	Introduction From graphics to visualization; Visual perception; Business analytics and visualization	Lecture Assignment Project	Assignments Project Exams Attendance	CLO1, CLO2, CLO3
TO2	Visualization tools Software tools: R/Python/Tableau; Online tools	Lecture Assignment Project	Assignments Project Exams Attendance	CLO1, CLO9, CLO10
TO3	Data and graphic representation Continuous and discrete data; Types of tables; Types of charts; Types of maps	Lecture Assignment Project	Assignments Project Exams Attendance	CLO1, CLO3- CLO7, CLO10
TO4	Visualization pipeline Preparation; Analysis; Deployment	Lecture Assignment Project	Assignments Project Exams Attendance	CLO1, CLO3, CLO4, CLO7
TO5	Scalar visualization Color mapping; Designing effective color maps; Contouring; Height plots	Lecture Assignment Project	Assignments Project Exams Attendance	CLO1-CLO7, CLO10
TO6	Vector visualization Divergence and velocity; Vector color coding; Displacement plots; Texture-based vector visualization	Lecture Assignment Project	Assignments Project Exams Attendance	CLO1-CLO7, CLO10
TO7	Midterm Exam	Exam	Exam	CLO1-CLO10

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BUSN 390: Fundamentals of Data Visualization for Business Analytics and Data Science

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO8	Tensor visualization Principal component analysis (PCA); Visualizing components; Visualizing vector/scalar PCA information;	Lecture Assignment Project	Assignments Project Exams Attendance	CLO1-CLO7, CLO10
TO9	Domain-Modeling technique Cutting; Selection; Grid construction from scattered	Lecture Assignment Project	Assignments Project Exams Attendance	CLO1-CLO5, CLO7, CLO10
TO10	Image visualization Image processing and visualization; Shape representation and analysis; Volume visualization Image order techniques; Object-order techniques; Volume rendering vs. geometric rendering	Lecture Assignment Project	Assignments Project Exams Attendance	CLO6-CLO10
TO11	Information visualization Technical comparison: Infovis vs. Scivis; Visualization of relations; Multivariate data visualization; Text visualization	Lecture Assignment Project	Assignments Project Exams Attendance	CLO6-CLO10
TO12	Designing visual interactions The process of design; Visual interaction design	Lecture Assignment Project	Assignments Project Exams Attendance	CLO6-CLO10

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO13	Creating interactive visualizations Creating codes; Creating plots; Composite plots; Interactive plots	Lecture Assignment Project	Assignments Project Exams Attendance	CLO6-CLO10
TO14	Creating animated visualizations Determining the need for animation; Designing good animations; Implementing animations using software tools;	Lecture Assignment Project	Assignments Project Exams Attendance	CLO6-CLO10
TO15	Project Presentations	Presentation	Presentation	CLO1-CLO10
TO16	Final Exam	Exam	Exam	CLO1-CLO10

12. Methods of Instruction

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

Lecture, assignment, project which requires written submissions and oral presentations by small groups of students working in teams.

13. General Education Goals Addressed by this Course (this section is to fulfill state requirements)

Information

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

Independent/Critical Thinking

14. Needs

Instructional

Materials (text

etc.):

Required text:

Murray, Scott (2017). Interactive Data Visualization for the Web, 2nd Edition, O'Reilly Media

Telia, A. (2014), Data Visualization: Principles and Practices, 2nd Edition. CRC Press

Supporting Bibliography:

* denotes publications available in the NJCU library

Abu-Mostafa, Y. S., Magdon-Ismael, M., & Lin, H. T. (2012). Learning from data. AMLBook.

Andrienko, G., Andrienko, N., Demsar, U., Dransch, D., Dykes, J., Fabrikant, S. I., Tominski, C. (2010). Space, time and visual analytics. International Journal of Geographical Information Science, 24(10), 1577–1600.

- Cannon, J. (2014). Python Programming for Beginners: An Introduction to the Python Computer Language and Computer Programming. CreateSpace Independent Publishing Platform.
- Card, S. K., Mackinlay, J. D., & Shneiderman, B. (1999). Readings in information visualization: using vision to think. Morgan Kaufmann.
- Davenport, T. (2014). Big data at work: dispelling the myths, uncovering the opportunities. Harvard Business Review Press.
- Friedman, J., Hastie, T., & Tibshirani, R. (2001). The elements of statistical learning (Vol. 1). Springer, Berlin: Springer series in statistics.
- Garreta, R., & Moncecchi, G. (2013). Learning scikit-learn: Machine Learning in Python. Packt Publishing Ltd.
- Heer, J., & Agrawala, M. (2008). Design considerations for collaborative visual analytics. *Information Visualization*, 7(1), 49–62. <http://doi.org/10.1057/palgrave.ivs.9500167>
- Lee, E. (2014). Designing Service Coverage and Measuring Accessibility and Serviceability of Rural and Small Urban Ambulance Systems. *Systems*, 2(1), 34–53. <http://doi.org/10.3390/systems2010034>
- Leskovec, J., Rajaraman, A., & Ullman, J. D. (2014). Mining of massive datasets. Cambridge University Press.
- MacKay, D. J. (2003). Information theory, inference and learning algorithms. Cambridge university press.
- *Murray, Scott (2017). Interactive Data Visualization for the Web, 2nd Edition, O'Reilly Media
- Myatt, J.G. and Johnson, P.W. (2011), Making Sense of Data II: A Practical Guide to Data Visualization, Advance Data Mining Methods, and Applications, 1st Edition, Wiley: Hoboken, NJ
- Myatt, J.G. and Johnson, P.W. (2011), Making Sense of Data III: A Practical Guide to Designing Interactive Data Visualization, 1st Edition, Wiley: Hoboken, NJ
- Nagwani, N. K. (2015). Summarizing large text collection using topic modeling and clustering based on MapReduce framework. *Journal of Big Data*, 2(1), 1–18. <http://doi.org/10.1186/s40537-015-0020-5>
- Najafabadi, M. M., Villanustre, F., Khoshgoftaar, T. M., Seliya, N., Wald, R., & Muharemagic, E. (2015). Deep learning applications and challenges in big data analytics. *Journal of Big Data*, 2(1), 1. <http://doi.org/10.1186/s40537-014-0007-7>
- O'Donovan, P., Leahy, K., Bruton, K., & O'Sullivan, D. T. J. (2015). An industrial big data pipeline for data-driven analytics maintenance applications in large-scale smart manufacturing facilities. *Journal of Big Data*, 2(1), 25. <http://doi.org/10.1186/s40537-015-0034-z>
- *Provost, F., Fawcett, T. (2013). Data Science for Business: What you need to know about data mining and data-analytic thinking. O'Reilly press.
- Russell, M. A. (2013). Mining the Social Web: Data Mining Facebook, Twitter, LinkedIn, Google+, GitHub, and More. " O'Reilly Media, Inc."
- Segaran, Toby. Programming collective intelligence: building smart web 2.0 applications. " O'Reilly Media, Inc.", 2007.
- Steiner, C., & Dixon, W. (2012). Automate this: How algorithms came to rule our world. New York: Portfolio/Penguin.

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BUSN 390: Fundamentals of Data Visualization for Business Analytics and Data Science

- *Tufte, E. R. (1990). *Envisioning Information*. Cheshire, CT: Graphics Press
- Tufte, E. R. (2001). *The Visual Display of Quantitative Information*. Cheshire, CT: Graphics Press
- *Tufte, E. R., & Weise Moeller, E. (1997). *Visual explanations: images and quantities, evidence and narrative* (Vol. 36). Cheshire, CT: Graphics Press.
- Wasserman, L. (2013). *All of statistics: a concise course in statistical inference*. Springer Science & Business Media.
- Witten, I. H., & Frank, E. (2005). *Data Mining: Practical machine learning tools and techniques*. Morgan Kaufmann.

Technology Needs:

Existing or grant purchased technology will be utilized.

Human Resource

Needs (Presently

Employed vs. New

Faculty):

Faculty for this course must be approved to teach 300-level business analytics courses.

Facility Needs:

Existing or grant-provided facilities will be utilized.

Library needs:

Relevant Periodical Sources:

Journal of Visualization, Springer

Journal of Big Data, Springer

Information Visualization, SAGE

Multi-dimensional Modeling, Analysis and Visualization, Elsevier

International Journal of Data Science and Analytics, Springer

International Journal of Data Science, Inderscience

Journal of Data Science, Columbia University, NY

The Journal of Finance and Data Science, Advancing Research Evolving Science

Bid Data Research, Elsevier

Relevant Online Materials:

IBM Watson Analytics (2015). <http://www.ibm.com/analytics/us/en/business/>

IBM (2015). <http://www.ibm.com/big-data/us/en/?lnk=fkt-bgda-usen>

Statistical Discovery (2015). http://www.jmp.com/en_us/software/jmp.html

SAS Business Analytics (2015). http://www.sas.com/en_us/software/business-analytics.html

A 5-step Guide to Data Visualization (2015). <https://www.elsevier.com/connect/a-5-step-to-data-visualization>

15. Grade Determinants

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

A: Excellent

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.

Reviewer

Comments

Key: 2268

[Preview Bridge](#)

EXHIBIT B-9

Course Change Request

New Course Proposal

Date Submitted: 07/22/22 1:08 pm

Viewing: **BUSN 391 : Basics of Data Collection,
Data Warehousing, and Data Cleansing**

Last edit: 08/05/22 10:21 am

Changes proposed by: Katherine Toy (ktoy)

Programs
referencing this
course

AS.ACS.DATA: Advanced and Continuous Studies - Option in Business
Analytics and Data Science

Learning Outcomes
Display (show only)

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 07/25/22 9:08 am
Johanna Riemen (jriemen): Approved for BS Academic Administrator
2. 07/28/22 12:33 pm
Rosann Bar (rbar): Approved for BS Dean
3. 08/05/22 10:21 am
Susan O'Connor (soconnor): Approved for

Director of
Curriculum

4. 08/11/22 4:54 pm

Heather Sciarappa
(hscarappa):

Approved for
Curriculum

Committee Chair

5. 09/08/22 6:04 pm

Robert Marchie
(rmarchie):

Approved for
Senate Chair

6. 09/09/22 1:05 pm

Joseph Konopka
(jkonopka):

Approved for Vice
President of
Academic Affairs

1. Course Information

Subject	BUSN - Business
Course Number	391
School	Business and Social Sciences
Course Title	Basics of Data Collection, Data Warehousing, and Data Cleansing

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

9/15/22, 4:02 PM

BUSN 391: Basics of Data Collection, Data Warehousing, and Data Cleansing

This course will provide students with an overview of data management process, including data format and structure, collection, storage, and cleansing. Students will be exposed to various techniques required for collecting data from different sources, storing and accessing data, and cleansing data.

4. Requisites

Prerequisites

None

Corequisites

None

5. Course Type

Course Fee Code

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need
for this course

This course is a third year business course for the 3+1 A.S. program in Advanced and Continuous Studies agreement with New Jersey City University (NJCU).

NJCU Justification:

Data management is always one of the most important tasks for enterprises. With the development of data science field, the requirements on data management have been increased. To provide a useful data analytical model, data scientists rely on obtaining useful data, efficiently storing and accessing data, and improving the quality of data by dealing with data errors. This course will provide the knowledge and techniques on data pre-processing to ensure data quality and reliability. Moreover, the course will provide an overview on big data storage and analysis. This course will provide the in-depth understanding required by employers seeking personnel with database management skills.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course, which satisfies a general education requirement?

No

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

Program-specific requirement

8. Consistency with the Vision and Mission Statements, the Academic Master Plan, and the strategic initiatives of the College

Please describe how this course is consistent with Ocean County College's current Vision Statement, Mission Statement, Academic Master Plan, and the strategic initiatives of the College:

Add Item	
1	This course is consistent with Ocean County College's (OCC) mission of "Ocean County College, an innovative academic leader, provides affordable, student-centered, high-quality educational experiences that empower diverse learners to succeed." This is achieved through OCC offering a 3+1 program that will provide a diverse group of students with an opportunity to receive a more affordable Bachelor's degree.
2	This course corresponds to the College's Strategic Goal 2: Optimize and expand enrollment of all learners. This is achieved through OCC adding an additional year of instruction and enrollment for any students that utilizes the 3+1 model.
3	This course corresponds to the College's Strategic Goal 4: Expand relationships with external stakeholders. This is achieved through the College's partnerships with four-year institutions to create new 3+1 programs and, in many cases, partnerships with industry for apprenticeships as they relate to the new 3+1 programs.

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	None
Course Title	N/A
Course Number	N/A

Number of Credits N/A

Comments

This course is a 300-level course that is not designed to equate to any community college offerings.

Transferability of Course

Georgian Court University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Monmouth University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Rutgers - New Brunswick, Mason Gross School of the Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

If not transferable
to any institution,
explain:

This course has been created to align directly with New Jersey City University's (NJCU) course "FINC 415: Basics of Data Collection, Data Warehousing, and Data Cleansing." Students in this course would be in a pipeline to transfer directly to NJCU upon completion at OCC.

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:

CLO1	Describe different data formats, different sources for obtaining data, and different tools and techniques in data collection, cleansing, integration and storage.
CLO2	Construct the basic syntax and terms use in data management and relational database.
CLO3	Discuss process of managing data from collecting to cleaning to storing and warehousing data.
CLO4	Distinguish different types of data and data storages.
CLO5	Define data collection, data cleansing, data warehousing, relational database, data transformation, data integration.
CLO6	Construct clean and normalized data, relational database.
CLO7	Identify errors and error sources in datasets.
CLO8	Apply tools for collecting, processing, manipulating and storing data.
CLO9	Compare different data collection sources and different data cleaning processes.
CLO10	Evaluate the raw data, processed data, and database design.

11. Topical Outline

(Include as many themes/skills as needed)

Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)

9/15/22, 4:02 PM

BUSN 391: Basics of Data Collection, Data Warehousing, and Data Cleansing

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	Introduction to data management Data-information-knowledge continuum; Data management process; Data formats (.csv,.txt, XML, JSON)	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO4
TO2	Data collection Data collection process; Collecting observational data	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO3, CLO5, CLO8
TO3	Data collection Collecting data from web (website, links on web); Introduction to web API (yelp, twitter, world bank)	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO3, CLO5, CLO8
TO4	Data cleansing Data types; Data quality problems and errors; Data transformation	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO5, CLO7, CLO8
TO5	Data cleansing From row data to technically correct data; From technically correct data to consistent data; Data cleansing scripts	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO10
TO6	Data cleansing Introduction to text data and text data cleansing; Parsing; Text data transformation	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO5, CLO7, CLO8
TO7	Midterm Exam	Exam	Exam	CLO1-CLO10

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BUSN 391: Basics of Data Collection, Data Warehousing, and Data Cleansing

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO8	Data storage Introduction to database server; Introduction to relational and non-relational database; Introduction to big data storage and distributed system	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO4
TO9	Relational database Introduction to SQL; Obtain data from relational database –a single table	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO6, CLO8
TO10	Relational database Obtain data from relational database – multiple tables; Use of subquery	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO6, CLO8
TO11	Relational database Relational database structure creation and modification; Relational database design	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO10
TO12	MongoDB Brief overview of Linux operating system; Introduction to MongoDB CRUD (create, reading, update, delete) in MongoDB	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO6, CLO8
TO13	MongoDB Aggregation Pipelines; MongoDB API connector	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO10

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BUSN 391: Basics of Data Collection, Data Warehousing, and Data Cleansing

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO14	Introduction to Big data analysis and data warehousing Introduction to big data concepts; Data warehouse concepts and architectures	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO10
TO15	Introduction to Big data analysis tools Introduction to distributed system; Introduction to Hadoop, and map-reduce process	Lecture Exercises Assignments Project	Exercises Assignments Project Exams	CLO1-CLO10
TO16	Final Exam	Exam	Exam	CLO1-CLO10

12. Methods of Instruction

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

Lecture, exercises, assignments, exams and project

13. General Education Goals Addressed by this Course (this section is to fulfill state requirements)

Information

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

Independent/Critical Thinking

14. Needs

Instructional

Materials (text

etc.):

Required Text(s) There is no required textbook for this course. All reading materials will be distributed electronically.

Supporting Bibliography

(* denotes publications available in the NJCU library. Citations are in APA format.)

Batini, C., Catarci, T., & Scannapiceco, M. (2004). A survey of data quality issues in cooperative information systems. In Pre-conference ER tutorial.

Bodle, R. (2011). Regimes of sharing: Open APIs, interoperability, and Facebook. *Information, Communication & Society*, 14(3), 320-337.

Chang, F., Dean, J., Ghemawat, S., Hsieh, W. C., Wallach, D. A., Burrows, M., ... & Gruber, R. E. (2006, November). A distributed storage system for structured data. In *Proceedings OSDI* (pp. 6-8).

*Dasu, T., & Johnson, T. (2003). *Exploratory data mining and data cleaning* (Vol. 479). John Wiley & Sons.

- *De Waal, T., Pannekoek, J., & Scholtus, S. (2011). Handbook of statistical data editing and imputation (Vol. 563). John Wiley & Sons.
- Driscoll, K., & Walker, S. (2014). Big data, big questions | working within a black box: Transparency in the collection and production of big twitter data. *International Journal of Communication*, 8, 20.
- *Elmasri, R., & Navathe, S. (2010). Fundamentals of database systems. Addison-Wesley Publishing Company.
- Han, J., Haihong, E., Le, G., & Du, J. (2011, October). Survey on NoSQL database. In 2011 6th international conference on pervasive computing and applications (pp. 363-366). IEEE.
- Ilyas, I. F., & Chu, X. (2015). Trends in cleaning relational data: Consistency and deduplication. *Foundations and Trends® in Databases*, 5(4), 281-393.
- Hellerstein, J. M. (2008). Quantitative data cleaning for large databases. United Nations Economic Commission for Europe (UNECE).
- *Kimball, R., & Ross, M. (2013). The data warehouse toolkit: The definitive guide to dimensional modeling. John Wiley & Sons.
- Kroenke, D. M., Auer, D. J., Vandenberg, S. L., & Yoder, R. C. (2010). Database concepts. Prentice Hall.
- *Lakshman, A., & Malik, P. (2010). Cassandra: a decentralized structured storage system. *ACM SIGOPS Operating Systems Review*, 44(2), 35-40.
- Larsson, A. O. (2015). Studying Big Data—ethical and methodological considerations. *Internet research ethics*, 141-156.
- *Lomborg, S., & Bechmann, A. (2014). Using APIs for data collection on social media. *The Information Society*, 30(4), 256-265.
- Nayak, A., Poriya, A., & Poojary, D. (2013). Type of NOSQL databases and its comparison with relational databases. *International Journal of Applied Information Systems*, 5(4), 16-19.
- *Osborne, J. W. (2013). Best practices in data cleaning: A complete guide to everything you need to do before and after collecting your data. Sage.
- *Petersen, M. A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. *The Review of Financial Studies*, 22(1), 435-480.
- *Pokorny, J. (2013). NoSQL databases: a step to database scalability in web environment. *International Journal of Web Information Systems*, 9(1), 69-82.
- Rabianski, J. S. (2003). Primary and secondary data: Concepts, concerns, errors, and issues. *The Appraisal Journal*, 71(1), 43.
- Rahm, E., & Do, H. H. (2000). Data cleaning: Problems and current approaches. *IEEE Data Eng. Bull.*, 23(4), 3-13.
- Schneider, J. K., & Deenan, A. (2004). Reducing quantitative data errors: tips for clinical researchers. *Applied Nursing Research*, 17(2), 125-129.
- *Stonebraker, M. (2010). SQL databases v. NoSQL databases. *Commun. ACM*, 53(4), 10-11.
- *Taylor AG. SQL for Dummies. Vol 6th ed. Hoboken, NJ: For Dummies; 2006.
- Vis, F. (2013). A critical reflection on Big Data: Considering APIs, researchers and tools as data makers. *First Monday*, 18(10)

Technology Needs:

Existing or grant purchased technology will be utilized.

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

Faculty for this course must be approved to teach 300-level business analytics courses.

Facility Needs:

Existing or grant-provided facilities will be utilized.

Library needs:**Relevant Periodical Sources**

Big Data, open access journal

International Journal of Information Management, Elsevier

* Journal of Big Data, a SpringerOpen Journal

* Journal of Database Management, IGI Global

Journal of Information & Knowledge Management, World Scientific

Relevant Online Materials

Online SQL MOOC: <http://cs.stanford.edu/people/widom/DB-mooc.html>

MongoDB documentation: <https://docs.mongodb.com/manual/>

Hadoop: <https://www.guru99.com/what-is-big-data.html>

15. Grade Determinants

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

A: Excellent

B+: Very Good

B: Good

C+: Above Average

C: Average

D: Below Average

F: Failure

I: Incomplete

R: Audit

9/15/22, 4:02 PM

BUSN 391: Basics of Data Collection, Data Warehousing, and Data Cleansing

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

Reviewer

Comments

Key: 2269

[Preview Bridge](#)

EXHIBIT B-10

Course Change Request

New Course Proposal

Date Submitted: 07/15/22 12:21 pm

Viewing: **HRTM 230 : Principles of Food and Beverage Management**

Last edit: 08/17/22 12:57 pm

Changes proposed by: Sean Bips (sbips)

Programs
referencing this
course

AS.HRTM.CA: Hospitality, Recreation, and Tourism Management,
Associate in Science Option in Culinary Arts

Learning Outcomes
Display (show only)

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 07/15/22 1:29 pm
Johanna Riemen (jriemen): Approved for BS Academic Administrator
2. 07/28/22 4:14 pm
Rosann Bar (rbar): Approved for BS Dean
3. 08/05/22 10:58 am
Susan O'Connor (soconnor): Approved for

Director of
Curriculum
4. 08/11/22 4:54 pm
Heather Sciarappa
(hsciarappa):
Approved for
Curriculum
Committee Chair
5. 09/08/22 6:04 pm
Robert Marchie
(rmarchie):
Approved for
Senate Chair
6. 09/09/22 1:05 pm
Joseph Konopka
(jkonopka):
Approved for Vice
President of
Academic Affairs

1. Course Information

Subject	HRTM - Hospitality, Recreation, and Tourism Management
Course Number	230
School	Business and Social Sciences
Course Title	Principles of Food and Beverage Management

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

This course explores the food and beverage industry and places an emphasis on managerial cost control concepts pertaining to operations in the foodservice industry. Additional topics of the course include inventory control, food storage techniques, food quality management, menu design, facility design, and recipe cost analysis.

4. Requisites

Prerequisites

None

Corequisites

None

5. Course Type

Course Fee Code

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need
for this course

This course provides students with an overview of food and beverage principles in the hospitality industry that pertains to managing a food and beverage operation in a variety of hospitality establishments. Cost control strategies, menu pricing techniques, facility design, and food safety procedures are explored in this course and provide students with the necessary knowledge and soft skills to enter into an entry level supervisory role in a food and beverage operation.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course, which satisfies a general education requirement?

No

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

Program-specific requirement

8. Consistency with the Vision and Mission Statements, the Academic Master Plan, and the strategic initiatives of the College

Please describe how this course is consistent with Ocean County College's current Vision Statement, Mission Statement, Academic Master Plan, and the strategic initiatives of the College:

	Add item
1	Demonstrating the college's commitment to offer comprehensive and educational programs that develop intentional learners that promote critical thinking about the world of Hospitality, Recreation and Tourism Management of all ages. (Mission Statement)
2	Seeking to ensure that students will thrive in an increasingly diverse and complex world, by providing global insight in the field of hospitality. (Vision Statement)
3	Preparing students for entrance into the Hospitality and Tourism workforce and/or for successful transfer to other educational institutions. (Academic Master Plan)
4	Seeking to empower students through the mastery of intellectual and Practical Skills with an emphasis on marketing strategies, customer service and financial management skills. (Academic Master Plan)
5	Challenging students to transfer information into knowledge and knowledge into action that will benefit the Hospitality, Recreation and Tourism industry both locally, nationally and internationally. (Academic Master Plan)

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Atlantic Cape CC
Course Title	Food Fundamentals
Course Number	HOSP 135
Number of Credits	3

Comments

Prerequisite: Successful completion of sanitation certification or HOSP132 (may be taken concurrently). Examines culinary operations as they relate to front-of-the-house personnel. Includes product identification, appropriate choice of cooking method, nutritional information and its application. Students will acquire skills in recipe writing, designing appropriate menu items and cultural associations with food. Focus is placed on kitchen organization and flow.

Requisites:

HOSP-132 (may be taken concurrently) or successful completion of sanitation certification - Must be completed prior to taking this course.

Take HOSP-132 - Recommended to be taken either prior to or at the same time as this course, but is not required.

Institution	County College of Morris
Course Title	Food and Beverage Purchasing and Cost Controls
Course Number	HOS-213
Number of Credits	3

Comments

LECT 3 hrs

A more advanced course dealing with the concepts of selection and procurement in the hospitality industry. Special emphasis is given to food cost, the purchasing function, procurement and inventory controls. In addition, forecasting, budgeting, cash management, and profit and loss statements also are studied. Included in the course is the opportunity to receive one NRAEF certificate (Inventory and Purchasing) towards the ManageFirst Certification.

Prerequisites: HOS-102

Corequisites: HOS-102.

Institution	Brookdale CC
Course Title	Storeroom/Purchasing Operations
Course Number	CULA133
Number of Credits	2

Comments

Description: The student will learn about the storeroom operations of purchasing, receiving, storage, requisitioning and record keeping. Through lecture, demonstration and hands-on

experience in the lab the students will learn product identification, packaging, seasonality and availability, freshness and the quality factors of maturity and ripeness, appropriate culinary uses, taste, texture and other selection points. The student will also be involved with the developing of stock and inventory control. They will learn about different ordering methods: bidding, phone quotes and contracts.

Institution Rowan College at Burlington County
 Course Title Food and Beverage Management
 Course Number HOS 130
 Number of Credits 3

Comments

This course will provide an overview of food and beverage management for restaurants; foodservice operations; hotels and resorts; and casinos.

Institution Mercer County CC
 Course Title Culinary Math
 Course Number HOS 111
 Number of Credits 1

Comments

Focus on key mathematic concepts related to culinary arts. Students demonstrate a working knowledge of topics including calculating yield percent, determining portion costs, periodic food costs, 'selling price' determinations, weights and measures, changing recipe yields, and converting between metric and U.S. measurements. 1 lecture hour

Transferability of Course

Georgian Court
 University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
EC Elective Credit	Elective	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
FEX 3000	Elective	

Monmouth

University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
INTR99070	Elective	

Rutgers - New

Brunswick, Mason

Gross School of the

Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
HTMS 2110	Major	

If not transferable
to any institution,
explain:

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:	
CLO1	Review ordering procedures and demonstrate product quality management in a food and beverage operation.
CLO2	Demonstrate menu planning skills that consider factors of seasonality and cost control.

Students who successfully complete this course will be able to:

CLO3	Review methods of food and beverage management pricing methods.
CLO4	Effectively implement marketing methods for the food and beverage industry.
CLO5	Identify critical elements of food safety accident prevention procedures.
CLO6	Develop a functional facility design layout for foodservice businesses.
CLO7	Demonstrate preparation methods that include cost control measures in the stages of purchasing, receiving, and storage to successfully prepare for restaurant service.
CLO8	Apply nutritional components in menu planning

11. Topical Outline

(include as many themes/skills as needed)

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	Menu Planning a. Design and Menu Engineering b. Budget c. Supplier Management d. Menu Types and Nutrition e. Food Safety	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Test on readings and discussions, research paper, case study, internet assignments	CLO1, CLO2, CLO3, CLO5, CLO8
TO2	Cost Control a. Purchasing b. Receiving c. Food Storage d. Budgeting for a Restaurant e. Understanding Food and Beverage Cost	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Test on readings and discussions, research paper, case study, internet assignments	CLO, CLO2, CLO3, CLO5, CLO7

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO3	Food and Beverage Marketing a. Hospitality Marketing Mix b. Market Segmentation c. Digital Marketing for Food Businesses	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Test on readings and discussions, research paper, case study, internet assignments	CLO2, CLO4
TO4	Facility and Layout Design a. Pace and Flow of Restaurant b. Front of House Design Concept c. Back of House Design Concepts	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Test on readings and discussions, research paper, case study, internet assignments	CLO5, CLO6, CLO7
TO5	Quality Control Food and Beverage Management a. Nutritional Ingredients b. Supplier Management c. Kitchen Maintenance	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Test on readings and discussions, research paper, case study, internet assignments	CLO1, CLO2, CLO3, CLO5, CLO7

12. Methods of Instruction

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

Lecture, group discussions, case studies, discussion forums, research papers, group projects, and other classroom activities will be employed.

13. General Education Goals Addressed by this Course (this section is to fulfill state requirements)

Information

Communication-Written and Oral

Quantitative Knowledge and Skills Yes

Related Course CLO2, CLO3

Learning Outcome

Related Outline TO1

Component

Assessment of General Education Goal (Recommended but not limited to)

Test on readings and discussions, research paper, case study, internet assignments

Scientific Knowledge and Reasoning

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness Yes

Related Course CLO2

Learning Outcome

Related Outline TO1

Component

Assessment of General Education Goal (Recommended but not limited to)

Test on readings and discussions, research paper, case study, internet assignments

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course CLO2

Learning Outcome

Related Outline CLO2

Component

Assessment of General Education Goal (Recommended but not limited to)

Test on readings and discussions, research paper, case study, internet assignments

14. Needs

Instructional

Materials (text
etc.):

Textbook

Technology Needs:

N/A

Human Resource

Needs (Presently

Employed vs. New

Faculty):

Presently employed faculty

Facility Needs:

Classroom

Library needs:

N/A

15. Grade Determinants

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

A: Excellent

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.

Reviewer

Comments

Key: 2248

[Preview Bridge](#)

EXHIBIT B-11

Course Change Request

New Course Proposal

Date Submitted: 07/18/22 2:03 pm

Viewing: **HRTM 231 : Culinary Fundamentals**

Last edit: 08/17/22 12:56 pm

Changes proposed by: Sean Bips (sbips)

Programs

referencing this

course

[AS.HRTM.CA: Hospitality, Recreation, and Tourism Management,](#)

[Associate in Science Option in Culinary Arts](#)

Learning Outcomes

Display (show only)

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 07/18/22 2:05 pm
Johanna Riemen (jriemen): Approved for BS Academic Administrator
2. 07/28/22 4:25 pm
Rosann Bar (rbar): Approved for BS Dean
3. 08/05/22 10:58 am
Susan O'Connor (soconnor): Approved for

Director of
Curriculum
4. 08/18/22 2:03 pm
Heather Sciarappa
(hscarappa):
Approved for
Curriculum
Committee Chair
5. 09/08/22 6:04 pm
Robert Marchie
(rmarchie):
Approved for
Senate Chair
6. 09/09/22 1:05 pm
Joseph Konopka
(jkonopka):
Approved for Vice
President of
Academic Affairs

1. Course Information

Subject	HRTM - Hospitality, Recreation, and Tourism Management
Course Number	231
School	Business and Social Sciences
Course Title	Culinary Fundamentals

2. Hours

Semester Hours	3
Lecture	2
Lab	2
Practicum	0

3. Catalog Description

For display in the
online catalog

This course provides students with a comprehensive understanding of basic cooking skills and kitchen managerial concepts. Food safety techniques and introductory level cooking techniques are explored. An overview of culinary mathematics and recipe management concepts are introduced, which includes recipe execution techniques and food plating methods.

4. Requisites

Prerequisites

None

Corequisites

5. Course Type

Course Fee Code

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need
for this course

The demand for trained cooks and chefs has greatly increased over the past several years, and the location of Ocean County is especially significant due to the high level of tourism that exists in this part of the state.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course, which satisfies a general education requirement?

No

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

Program-specific requirement

8. Consistency with the Vision and Mission Statements, the Academic Master Plan, and the strategic initiatives of the College

Please describe how this course is consistent with Ocean County College's current Vision Statement, Mission Statement, Academic Master Plan, and the strategic initiatives of the College:

	Add item
1	Demonstrating the college's commitment to offer comprehensive and educational programs that develop intentional learners that promote critical thinking about the world of Hospitality, Recreation and Tourism Management of all ages. (Mission Statement)
2	Seeking to ensure that students will thrive in an increasingly diverse and complex world, by providing global insight in the field of hospitality. (Vision Statement)
3	Preparing students for entrance into the Hospitality and Tourism workforce and/or for successful transfer to other educational institutions. (Academic Master Plan)
4	Seeking to empower students through the mastery of intellectual and Practical Skills with an emphasis on marketing strategies, customer service and financial management skills. (Academic Master Plan)
5	Challenging students to transfer information into knowledge and knowledge into action that will benefit the Hospitality, Recreation and Tourism industry both locally, nationally and internationally. (Academic Master Plan)

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Atlantic Cape CC
Course Title	Culinary Fundamentals
Course Number	CULN111
Number of Credits	3
Comments	

Institution Brookdale CC
Course Title Basic Food Skills I
Course Number CULA111
Number of Credits 3

Comments

Prerequisite(s): READ 095 or satisfactory completion of the College's foundational studies requirement in reading, and MATH 012 or MATH 015 or satisfactory completion of the College's foundational studies requirement in computation and a grade of "C" or higher in CULA 115.
Description: The students will gain knowledge of the principles of food preparation through classroom instruction and laboratory experiences. Emphasis will be placed on knife skills, measuring, identification of tools and equipment, and terms and concepts. Students will prepare stocks, soups and sauces as the foundation for cooking competencies needed in more advanced food preparation courses.

Institution Rowan College at Burlington County
Course Title Culinary Arts
Course Number CUL 107
Number of Credits 4

Comments

Institution County College of Morris
Course Title Food Management
Course Number HOS 102
Number of Credits 3

Comments

Institution Mercer County CC
Course Title Food Preparation I

Course Number HOS 101

Number of Credits 3

Comments

Introduction to the principles, skills, and techniques associated with the culinary arts, involving various cooking methods including classic and modern techniques. Identification of various kitchen staples, food products, and equipment used within the commercial food operation. Hands-on activities require the preparation of a wide variety of recipes. Chef whites required. 1 lecture / 4 laboratory hours

Transferability of Course

Georgian Court University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
EC Elective	Elective	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
FEX3000	Elective	

Monmouth University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
INTR 99070	Elective	

Rutgers - New Brunswick, Mason Gross School of the Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

If not transferable
to any institution,
explain:

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:	
CLO1	Utilize general cooking methods that include sauteing, poaching, frying, grilling, and roasting.
CLO2	Demonstrate knife skills and food safety procedures in the kitchen.
CLO3	Apply the appropriate use of ingredients, choice of seasoning, and cooking technique for assigned menu items.
CLO4	Execute the production of stocks and sauces and apply the use of these ingredients in appropriate dishes.
CLO5	Explain the significance of food and beverage cost and demonstrate the necessary methods in order to adjust recipes yields.
CLO6	Demonstrate proper usage of equipment and apply food safety and kitchen sanitation methods.
CLO7	Adhere to all proper temperatures when receiving, storing, and serving food.

11. Topical Outline

(include as many themes/skills as needed)

Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)

9/15/22, 4:04 PM

HRTM 231: Culinary Fundamentals

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	Food Safety and Sanitation a. Cleanliness in the Kitchen b. Personal Hygiene c. Foodborne Illness Prevention d. Proper Temperature for Receiving, Storing, and Serving	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment 6. cooking practical	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO6, CLO7
TO2	Knife Skills and Food Preparation Set Up a. Proper Knife Handling b. Knife Cut Techniques c. Sharpening Methods d. Mise En Place	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO2, CLO6
TO3	Recipe Execution and Culinary Math a. Weight Conversions b. Recipe Conversion Factor c. Butcher Test d. Food and Beverage Cost Management	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO1, CLO2, CLO3, CLO5, CLO7
TO4	Stocks, Soups, and Sauces a. Mother Sauces b. Making a Roux c. Natural Thickeners d. Garnishes	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO1, CLO2, CLO3, CLO4, CLO6, CLO7
TO5	Plating and Service Techniques a. French Style b. Russian Style c. American Style d. Buffet	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO1, CLO2, CLO3, CLO4, CLO6, CLO7

9/15/22, 4:04 PM

HRTM 231: Culinary Fundamentals

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO6	Hot/Cold Entree Production a. Balance of Ingredients b. Protein Cookery c. Vegetable Cookery d. Starch Cookery	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO1, CLO2, CLO3, CLO6, CLO7

12. Methods of Instruction

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

Lecture, group discussions, case studies, discussion forums, research papers, group projects, cooking demos, and other classroom activities will be employed.

13. General Education Goals Addressed by this Course (this section is to fulfill state requirements)

Information

Communication-Written and Oral

Quantitative Knowledge and Skills Yes

Related Course CLO5
Learning Outcome

Related Outline TO3
Component

Assessment of General Education Goal (Recommended but not limited to)

Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments

Scientific Knowledge and Reasoning

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness Yes

Related Course CLO3, CLO4

Learning Outcome

Related Outline T05

Component

Assessment of General Education Goal (Recommended but not limited to)

Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course CLO1, CLO2, CLO3, CLO4, CLO5,

Learning Outcome CLO6, CLO7

Related Outline T01, T02, T03, T04, T05, T06

Component

Assessment of General Education Goal (Recommended but not limited to)

Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments

14. Needs

Instructional

Materials (text
etc.):

Textbook, Kitchen Equipment

Technology Needs:

Menu Presentation Digital Screen

Human Resource

Needs (Presently

Employed vs. New

Faculty):

Presently employed faculty

Facility Needs:

Kitchen Access

Library needs:

N/A

15. Grade Determinants

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

A: Excellent

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.

9/15/22, 4:04 PM

HRTM 231: Culinary Fundamentals

EXHIBIT B - 11

Reviewer
Comments

Key: 2266

[Preview Bridge](#)

EXHIBIT B-12

Course Change Request

New Course Proposal

Date Submitted: 07/18/22 4:25 pm

Viewing: **HRTM 232 : Advanced Culinary Concepts**

Last edit: 09/15/22 3:46 pm

Changes proposed by: Sean Bips (sbips)

Programs

referencing this

course

AS.HRTM.CA: Hospitality, Recreation, and Tourism Management,

Associate in Science Option in Culinary Arts

Learning Outcomes

Display (show only)

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 07/18/22 4:36 pm
Johanna Riemen (jriemen): Approved for BS Academic Administrator
2. 07/28/22 4:35 pm
Rosann Bar (rbar): Approved for BS Dean
3. 08/05/22 10:58 am
Susan O'Connor (soconnor): Approved for

Director of
Curriculum
4. 08/18/22 2:03 pm
Heather Sciarappa
(hsciarappa):
Approved for
Curriculum
Committee Chair
5. 09/08/22 6:04 pm
Robert Marchie
(rmarchie):
Approved for
Senate Chair
6. 09/09/22 1:05 pm
Joseph Konopka
(jkonopka):
Approved for Vice
President of
Academic Affairs

1. Course Information

Subject	HRTM - Hospitality, Recreation, and Tourism Management
Course Number	232
School	Business and Social Sciences
Course Title	Advanced Culinary Concepts

2. Hours

Semester Hours	3
Lecture	2
Lab	2
Practicum	0

3. Catalog Description

For display in the
online catalog

This course explores advanced cooking styles and concepts. The course expands upon previously learned skills in HRTM 131 and introduces principles of appetizer, entree, and dessert production. Kitchen managerial concepts are reviewed with an emphasis placed on mastery of all cooking methods. Traditional and modern culinary methods in American regional cuisine are discussed along with an introduction to international fusion dishes. General kitchen terminology, management methods, and advanced menu planning concepts are stressed.

4. Requisites

Prerequisites

HRTM 231

Corequisites

5. Course Type

Course Fee Code

Course Type for vocational (approved for Perkins funding)
Perkins Reporting

6. Justification

Describe the need
for this course

The demand for trained cooks and chefs have greatly increased over the past several years, and the location of Ocean County is especially significant due to the high level of tourism that exists in this part of the state.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a course, which satisfies a general education requirement?

No

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

Program-specific requirement

8. Consistency with the Vision and Mission Statements, the Academic Master Plan, and the strategic initiatives of the College

Please describe how this course is consistent with Ocean County College's current Vision Statement, Mission Statement, Academic Master Plan, and the strategic initiatives of the College:

Add item	
1	Demonstrating the college's commitment to offer comprehensive and educational programs that develop intentional learners that promote critical thinking about the world of Hospitality, Recreation and Tourism Management of all ages. (Mission Statement)
2	Seeking to ensure that students will thrive in an increasingly diverse and complex world, by providing global insight in the field of hospitality. (Vision Statement)
3	Preparing students for entrance into the Hospitality and Tourism workforce and/or for successful transfer to other educational institutions. (Academic Master Plan)
4	Seeking to empower students through the mastery of intellectual and Practical Skills with an emphasis on marketing strategies, customer service and financial management skills. (Academic Master Plan)
5	Challenging students to transfer information into knowledge and knowledge into action that will benefit the Hospitality, Recreation and Tourism industry both locally, nationally and internationally. (Academic Master Plan)

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Atlantic Cape CC
Course Title	Basic Food Skills II
Course Number	CULA112
Number of Credits	3
Comments	

Description: The students will build upon the information learned in Basic Food Preparation Skills I and increase their knowledge of food preparation through classroom instruction and laboratory experiences. Emphasis will be placed on rice, pasta and starch, legumes, vegetables, fruit and nuts. This course is a foundation course for cooking competencies needed in more advanced food preparation courses.

Institution Brookdale CC
Course Title Basic Food Skills II
Course Number CULA112
Number of Credits 3

Comments

Prerequisite(s): CULA 115 and a grade of "C" or higher in CULA 111; MATH 012 or MATH 015 or satisfactory completion of the College's foundational studies requirement in computation, and READ 095 or satisfactory completion of the College's foundational studies requirement in reading.

Description: The students will build upon the information learned in Basic Food Preparation Skills I and increase their knowledge of food preparation through classroom instruction and laboratory experiences. Emphasis will be placed on rice, pasta and starch, legumes, vegetables, fruit and nuts. This course is a foundation course for cooking competencies needed in more advanced food preparation courses.

Institution County College of Morris
Course Title Food Production
Course Number HOS 103
Number of Credits 3

Comments

Institution Mercer County CC
Course Title Food Preparation II
Course Number HOS 102
Number of Credits 3

Comments

HOS 101 and HOS 118 or equivalent proficiency

Refines culinary skills in quantity food preparation through operation of a student-run restaurant. Includes kitchen and dining room organization and operations; menu development and design; management of service and culinary personnel; service standards; serving the general public; merchandising and sales promotion; and banquet management. Chef whites required. 1 lecture / 4 laboratory hours

Institution Rowan College at Burlington County

Course Title Techniques and Traditions

Course Number CUL 122

Number of Credits 4

Comments

Transferability of Course

Georgian Court

University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
EC Elective	Elective	Unable to determine status

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
FEX3000	Elective	

Monmouth

University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
INTR 99070		

Rutgers - New
Brunswick, Mason
Gross School of the
Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Unable to determine status

If not transferable
to any institution,
explain:

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:	
CLO1	Create stocks, soups, and sauces, as well as produce variations of all traditional mother sauces.
CLO2	Execute advanced knife skills and maintain a high degree of professionalism in the kitchen.
CLO3	Recognize the uses of seasonal and non-seasonal ingredients and apply multiple cooking methods.
CLO4	Demonstrate cooking techniques with international ingredients and execute a nutritious, well-balanced, properly seasoned meal.
CLO5	Demonstrate advanced plating techniques to present various dishes.
CLO6	Prepare appetizers, entrees, and desserts from recipes and understand how to effectively cost out menu items.

11. Topical Outline

(include as many themes/skills as needed)

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	Advanced Knife Skills and Cooking Techniques a. Advanced Knife Cuts b. Dry Heat Cooking c. Moist Cooking Methods d. Sous Vide Cookery	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment 6. Cooking practical	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO1, CLO2, CLO3, CLO6
TO2	Hot and Cold Appetizers and Entrees a. Non-Vegetarian Cookery b. Vegetarian Cookery c. Sauces d. Garnishes	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment 6. Cooking practical	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO1, CLO2, CLO3, CLO6
TO3	International Foods a. Asian Cuisine b. European Cuisine c. Mexican Cuisine d. Indian Cuisine	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment 6. Cooking practical	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO1, CLO2, CLO3, CLO4, CLO6
TO4	Desserts a. Cakes, Pies, and Pastries b. Ice Cream c. Creams and Custards d. Dessert Sauces	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment 6. Cooking practical	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO1, CLO6
TO5	Advanced Plating Techniques a. Height and Texture b. Placement of Food Items c. Dish Selection d. Recipe Consistency and Portion Control	1. reading 2. class discussion 3. group project 4. in-class activities 5. writing assignment 6. Cooking practical	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO2, CLO3, CLO5, CLO6

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HRTM 232: Advanced Culinary Concepts

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO6	American Regional Cuisine a. New England Cuisine b. Southern Cuisine c. Mid-Atlantic Cuisine d. American Fusion	1.reading 2.class discussion 3. group project 4. in-class activities 5. writing assignment 6. Cooking practical	Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments	CLO1,CLO2, CLO3, CLO4, CLO6

12. Methods of Instruction

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

Lecture, group discussions, case studies, discussion forums, research papers, group projects, cooking demos, and other classroom activities will be employed.

13. General Education Goals Addressed by this Course (this section is to fulfill state requirements)

Information

Communication-Written and Oral

Quantitative Knowledge and Skills Yes

Related Course CLO1,CLO2, CLO3, CLO4, CLO5,
Learning Outcome CLO6

Related Outline TO1, TO2,TO3, TO4,TO5,TO6
Component

Assessment of General Education Goal (Recommended but not limited to)

Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments

Scientific Knowledge and Reasoning

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness Yes

Related Course CLO4

Learning Outcome

Related Outline TO3, TO6

Component

Assessment of General Education Goal (Recommended but not limited to)

Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course CLO1, CLO2, CLO3, CLO4, CLO5,

Learning Outcome CLO6

Related Outline TO1, TO2, TO3, TO4, TO5, TO6

Component

Assessment of General Education Goal (Recommended but not limited to)

Tests on readings and discussions, research paper, case study, internet assignments, cooking assignments

14. Needs

Instructional

Materials (text
etc.):

Textbook, Kitchen Equipment

Technology Needs:

Digital Monitor Use for Menu

Human Resource

Needs (Presently
Employed vs. New

Faculty):

Presently employed faculty

Facility Needs:

Kitchen Access

Library needs:

N/A

15. Grade Determinants

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

A: Excellent

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.

Reviewer

Comments

Rosann Bar (rbar) (07/28/22 4:34 pm): Should this be a 200-level course?

Key: 2267

[Preview Bridge](#)

EXHIBIT B-13

Course Change Request

Date Submitted: 06/10/22 11:50 am

Viewing: **MATH 281 : Differential Equations**

Last approved: 06/08/22 12:27 pm

Last edit: 07/14/22 4:26 pm

Changes proposed by: Vandana Saini (vsaini)

Catalog Pages
referencing this
course

Approved General Education Courses
Approved General Education Courses
Mathematics (MATH)

Programs
referencing this
course

AS.ENGR: Engineering, Associate in Science

Learning Outcomes
Display (show only)

In Workflow

1. STEM Academic Administrator
2. STEM Dean
3. Director of Curriculum
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. President's Leadership Team Chair
8. President
9. Board of Trustees Chair
10. STEM Academic Administrator
11. Colleague

Approval Path

1. 06/10/22 1:23 pm
Carolyn Showalter (cshowalter):
Approved for STEM Academic Administrator
2. 06/16/22 1:20 pm
Sylvia Riviello (sriviello): Approved for STEM Dean
3. 06/30/22 3:32 pm
Susan O'Connor (soconnor):
Approved for

Director of
Curriculum

4. 07/14/22 4:28 pm

Heather Sciarappa
(hscarappa):

Approved for
Curriculum

Committee Chair

5. 09/08/22 6:04 pm

Robert Marchie
(rmarchie):

Approved for
Senate Chair

6. 09/09/22 1:05 pm

Joseph Konopka
(jkonopka):

Approved for Vice
President of
Academic Affairs

History

1. Jun 8, 2022 by
Susan O'Connor
(soconnor)

1. Course Information

Subject	MATH - Mathematics
Course Number	281
School	Science, Technology, Engineering, Mathematics
Course Title	Differential Equations

2. Hours

Semester Hours 4

Lecture 4

Lab	0
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Practicum	0
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3. Catalog Description

For display in the
online catalog

This course includes the following topics: modeling and solving first-order differential equations and higher-order differential equations, both linear and non-linear, solution of differential equations by power series and Laplace transforms, matrices and determinants, Fourier series, and an introduction to partial differential equations.

4. Requisites

Prerequisites

Math 266 ~~267~~

Corequisites

None

5. Course Type

Course Fee Code 1

Course Type for non-vocational (not approved for Perkins
Perkins Reporting funding)

6. Justification

Describe the need
for this course

This is a required course at most colleges and universities for mathematics and engineering majors.

7. General Education

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

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MATH 281: Differential Equations

General Education

Category

Mathematics

General Education Approved

Status

8. Consistency with the Vision and Mission Statements, the Academic Master Plan, and the strategic initiatives of the College

Please describe how this course is consistent with Ocean County College's current Vision Statement, Mission Statement, Academic Master Plan, and the strategic initiatives of the College:

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

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Brookdale CC
Course Title	Elementary Differential Equations
Course Number	Math 274
Number of Credits	4
Comments	

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MATH 281: Differential Equations

Institution Mercer County CC

Course Title Differential Equations

Course Number Math 252

Number of Credits 4

Comments

Institution Middlesex County College

Course Title Differential Equations

Course Number Mat 234

Number of Credits 4

Comments

Transferability of Course

Georgian Court
University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
MA218, Differential Equations, 3 credits	Major	

Kean University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
MATH3455, Differential Equations, 3 credits	Major	

Monmouth
University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status

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MATH 281: Differential Equations

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MA311, Differential Equations, 3 credits	Major	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MATH01231, Ordinary Differential Equations, 3 credits	Major	

Rutgers - New

Brunswick, Mason

Gross School of the

Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
<u>01640EC, 4</u> 01640244, 3 credits	<u>Elective</u> Major	

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
Math free elective, 3 credits	Elective	

If not transferable
to any institution,
explain:

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:	
CLO1	Apply appropriate techniques for approximating the solution to an initial-value problem for an ordinary differential equation, including the use of a power series.
CLO2	Apply appropriate techniques for solving ordinary differential equations of varying order, including those equations developed from real-world models.
CLO3	Utilize appropriate computer software, such as WinPlot, in the visualization of the solutions to an ordinary differential equation.

Students who successfully complete this course will be able to:

CLO4	Apply integral transforms, such as the Laplace and Fourier transforms, to the solving process of an ordinary or partial differential equation.
CLO5	Apply matrix methods to solving a system of linear differential equations.
CLO6	Solve problems related to the one-dimensional heat equation using separation of variables for an initial-boundary-value problem for a partial differential equation.

11. Topical Outline

(include as many themes/skills as needed)

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	Differential equations of first-order	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO1, CLO2, CLO3
TO2	Applications of first-order differential equations	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO2
TO3	Homogeneous linear differential equations	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO2
TO4	Nonhomogeneous linear differential equations	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO2
TO5	Inverse differential operators	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO2
TO6	Laplace transforms	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO4
TO7	Power series solutions of differential equations	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO1
TO8	General applications of differential equations	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO2
TO9	Fourier series and simple Fourier analysis	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO4
TO10	Introduction to partial differential equations	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO6

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MATH 281: Differential Equations

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO11	Systems of linear differential equations	Lecture, Computer Lab Activities	Homework, Quizzes, Exams	CLO5

12. Methods of Instruction

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

Lecture, Class Discussion, Group Discussion, Computer Applications, Graphing calculator
applications.

13. General Education Goals Addressed by this Course (this section is to fulfill state requirements)

Information

Communication-Written and Oral

Quantitative Knowledge and Skills Yes

Related Course ALL
Learning Outcome

Related Outline ALL
Component

Assessment of General Education Goal (Recommended but not limited to)

Course Exams

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

14. Needs

Instructional

Materials (text
etc.):

An appropriate textbook, as selected by the department

Technology Needs:

Computer software, such as Derive, Converge, and WinPlot

Human Resource

Needs (Presently
Employed vs. New
Faculty):

Facility Needs:

Library needs:

15. Grade Determinants

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MATH 281: Differential Equations

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

A: Excellent

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.

16. Board Approval

History of Board
approval dates

Board of Trustees Approval Date: May 31, 2018

Reviewer
Comments

Key: 1704

[Preview Bridge](#)