

EXHIBIT B



BOARD OF TRUSTEES

Bylaw, Policy, and Curriculum Committee Agenda Items

To: Board of Trustees
From: Office of the President
Date: June 20, 2024

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, June 27, 2024**:

1. Recommend approval of the revised 2025 Ocean County College Academic Calendar (revised to change the 2025 Commencement Date from Thursday, May 22, 2025 to Wednesday, May 21, 2025 **(Exhibit B-1)**)
2. Recommend approval of the following revised policy:
 - a. Policy #2410, Administration, General, Nondiscrimination, Equal Opportunity, and Harassment **(Exhibit B-2)**
3. Recommend approval of the following items as accepted by the College Senate at its meetings on June 6, and June 20, 2024:
 - a. New Program
 - 1) Associate in Science in Public Health **(Exhibit B-3)**
 - b. Revised Program Option
 - 1) Associate in Applied Science in Computer Science/Informational Technology – Option in Artificial Intelligence **(Exhibit B-4)**
 - c. Revised Certificate of Completion
 - 1) Certificate of Completion in Advanced Manufacturing and Mechatronics **(Exhibit B-5)**

d. Revised Courses

- 1) CSIT 176, Computer Organization and Architecture (**Exhibit B-6**)
- 2) CSIT 192, Introduction to Machine Learning (**Exhibit B-7**)
- 3) CSIT 242, Penetration Testing Fundamentals (**Exhibit B-8**)
- 4) CSIT 243, Cisco Networking Fundamentals (**Exhibit B-9**)
- 5) CSIT 244, Digital Forensics Fundamentals (**Exhibit B-10**)
- 6) HEHP 100, Aerobic Conditioning (**Exhibit B-11**)
- 7) HEHP 101, Weight Training and Body Building (**Exhibit B-12**)
- 8) HEHP 237, Sports Officiating (**Exhibit B-13**)
- 9) HEHP 266, Exercise and Health Counseling (**Exhibit B-14**)

e. Inactivated Course

- 1) EDUC 278, Teaching Profession Practicum (**Exhibit B-15**)

EXHIBIT B-1

2025 ACADEMIC CALENDAR

Winter Intercession (Five-Day Week)

Thursday, January 2	Classes Begin
Friday, January 17	Last Day of Classes

Spring Semester 2025

Friday, January 17	Colloquium
Wednesday, January 22	Classes begin
Monday, February 17	No Classes
Monday, March 17 - Sunday, March 23	No Classes - Spring Break
Wednesday, May 14	Last Day of Classes (FOLLOW MONDAY SCHEDULE)
Wednesday, May 21	Commencement (Rain Date – Thursday, May 22)

Spring 2025 Quick Term

Wednesday, February 26	Classes Begin
Monday, March 17 - Sunday, March 23	No Classes - Spring Break
Wednesday, May 14	Last Day of Classes (FOLLOW MONDAY SCHEDULE)

Summer 2025 First Five Week /Ten-Week Sessions

Monday, May 19	Classes Begin
Thursday, May 22	No Classes
Monday, May 26	No Classes
Tuesday, June 24	Last Day of Classes (1st 5-week)
Friday, July 4	No Classes
Tuesday, July 29	Last Day of Classes (10-week)

Summer 2025 Second Five-Week /Six-Week Sessions

Wednesday, June 25	Classes Begin
Friday, July 4	No Classes
Tuesday, July 29	Last Day of Classes (2nd 5-week)
Tuesday, August 5	Last Day of Classes (6-week)

Summer 2025 Post Session (Four-Day Week)

Monday, August 4	Classes Begin
Wednesday, August 27	Last Day of Classes

Board Revised: June 27, 2024

EXHIBIT B-2

Ocean County College, Toms River, NJ

ADMINISTRATION
GENERAL
Nondiscrimination, Equal
Opportunity, and Harassment #2410

POLICY

Ocean County College is committed to providing a workplace and educational environment, as well as other benefits, programs, and activities, that are free from discrimination based on protected characteristics, harassment, and retaliation for engaging in protected activity. ~~The policy, procedures, and associated manual are designed to ensure compliance with federal and state civil rights laws and regulations and to affirm Ocean County College's commitment to promoting the goals of fairness and equity in all aspects of the educational program or activity. The policy, procedures, and associated manual provide a prompt, fair, and impartial process for those involved in an allegation of discrimination or harassment on the basis of protected class status, and for allegations of retaliation. Ocean County College values and upholds the equal dignity of all members of its community and strives to balance the rights of the parties in the grievance process during what is often a difficult time for all those involved.~~

~~Students, staff, administrators, and faculty are entitled to an employment and educational environment that is free of discriminatory harassment. Ocean County College's harassment policy is not meant to inhibit or prohibit educational content or discussions inside or outside of the classroom that include relevant but controversial or sensitive subject matters protected by academic freedom.~~

~~The College values and upholds the equal dignity of all members of its community and strives to balance the rights of the Parties in the resolution process during what is often a difficult time for all involved.~~

~~To ensure compliance with federal and state civil rights laws and regulations, and to affirm its commitment to promoting the goals of fairness and equity in all aspects of the education program or activity, Ocean County College has developed policies and procedures that provide for prompt, fair, and impartial resolution of allegations of protected characteristic discrimination, harassment or allegations of retaliation.~~

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Notice of Nondiscrimination

Ocean County College adheres to all federal and state civil rights laws and regulations prohibiting discrimination in public institutions of higher education.

Ocean County College does not discriminate against any employee, applicant for employment, student, or applicant for admission on the basis of actual or perceived: race, religion, hearing status, personal appearance, color, sex, pregnancy or related conditions, political belief or affiliation, source of income, place of business, residence, ethnicity, national origin (including ancestry), citizenship status, physical or mental disability (including perceived disability), age, marital status, family responsibilities, sexual orientation, gender identity, gender expression, genetic information (including family medical history), veteran or military status (including disabled veteran, recently separated veteran, active duty wartime or campaign badge veteran, and Armed Forces Service Medal veteran), predisposing genetic characteristics, domestic violence victim status, height, weight or any other protected category under applicable local, state, or federal law, including protections for those opposing discrimination or participating in any grievance process on-campus within the institution, with the Equal Employment Opportunity Commission, or other human/civil rights agencies.

This policy covers nondiscrimination in both employment and access to educational opportunities. Therefore, any member of the Ocean County College community whose acts deny, deprive, unreasonably interfere with or limit the educational, ~~or~~ employment or social access, benefits, and/or

Ocean County College, Toms River, NJ

ADMINISTRATION
GENERAL
Nondiscrimination, Equal
Opportunity, and Harassment #2410

opportunities of any member of the Ocean County College community, guest, or visitor on the basis of that person's actual or perceived membership in the protected classes listed above protected characteristic(s) is in violation of the Ocean County College policy on nondiscrimination.

Ocean County College is committed to maintaining compliance with the following laws:

New Jersey Law Against Discrimination - N.J.S.A. 10:5-1 et seq.
New Jersey State Wage and Hour Law - N.J.S.A 34:11-56a et seq.
Age Discrimination in Employment Act of 1967 - 29 U.S.C. 621-634
Americans with Disabilities Act of 1990 - 42 U.S.C 12101 et seq.
Civil Rights Act of 1966 - 42 U.S.C 1981
Title VI Civil Rights Act of 1964 - 42 U.S.C. 2000d
Title VI Civil Rights Act of 1964 - 42 U.S.C. 2000e
Civil Rights Act of 1991 - 29 U.S.C. 621 et seq. - 42 U.S.C. 1981, 1989, 2000e, 12101 et seq.
Equal Pay Act of 1963 - 29 U.S.C. 206 (d)
Executive Order 11246 - 30 Fed. Reg. 12319
Fair Labor Standards Act of 1968 - 29 U.S.C 201-219
Title IX Higher Education Act of 1965 (as amended by the Education Amendments of 1972, Title IX), 20 U.S.C. 1681-1686
Occupational Safety and Health Act of 1970, 29 U.S.C 651-678
Rehabilitation Act of 1973 - 29 U.S.C. 701-796i, 793-794, Section 503, and Section 504.
Revenue Sharing act of 1972 - 31 U.S.C. 6716-6722
Vietnam Era Veterans' Readjustment Act of 1974 - 38 U.S.C. 2011-2012

The College is also committed to maintaining compliance with any modification of existing antidiscrimination laws or new anti-discrimination laws which apply to Ocean County College.

When brought to the attention of the College, any such discrimination will be promptly and fairly addressed and remedied by the College according to the appropriate grievance process described in the Nondiscrimination, Equal Opportunity, and Harassment Grievance Procedural Manual.

Treatment of Complaints

Ocean County College will promptly and effectively address any such discrimination of which it has Knowledge/Notice using the appropriate resolution process(es) associated with this policy and/or others referenced in the procedure including the Progressive Discipline policy (Policy #3006), the Formal Student Complaint policy (Policy #5230), and/or the Student Discipline policy (Policy #5247).

Disability Discrimination and Accommodation

Ocean County College is committed to full compliance with the Americans With Disabilities Act of 1990 (ADA), as amended, and Section 504 of the Rehabilitation Act of 1973, which prohibit discrimination against qualified persons with disabilities, as well as other federal and state laws and regulations pertaining to individuals with disabilities.

Under the ADA and its amendments, a person has a disability if they have a physical or mental impairment that substantially limits a major life activity.

The ADA also protects individuals who have a record of a substantially limiting impairment regardless of whether they currently have a disability. A substantial impairment is one that significantly limits or restricts a major life activity such as hearing, seeing, speaking, breathing,

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~~performing manual tasks, walking, or caring for oneself.~~

~~The Director of Program Compliance has been designated as Ocean County College's ADA/504 Coordinator responsible for overseeing efforts to comply with these disability laws, including responding to grievances and conducting investigations of any allegation of noncompliance or discrimination based on disability. Grievances related to disability status and/or accommodations will be addressed using the procedures identified in the Nondiscrimination, Equal Opportunity, and Harassment Grievance Procedural Manual.~~

~~ator~~

Retaliation

It is prohibited for Ocean County College or any member of Ocean County College's community (in collusion with or on a party's behalf) to take materially adverse action by intimidating, threatening, coercing, harassing, or discriminating against any individual for the purpose of interfering with any right or privilege secured by law or policy, or because the individual has made a report or complaint, testified, assisted, or participated or refused to participate in any manner in an investigation, proceeding, or hearing under the policy. In accordance with Federal Title IX law, the College can and may require staff and faculty to participate in any Title IX investigation in which they are named a complainant, respondent, or witness.

Protected activity under this policy includes reporting an incident that may implicate this policy, participating in the complaint process, supporting a Complainant or Respondent, assisting in providing information relevant to an investigation, and/or acting in good faith to oppose conduct that constitutes a violation of this policy.

Adopted: December 9, 1991
Revised: June 23, 2003
Revised: April 28, 2022
Revised: November 3, 2022

EXHIBIT B-3



BOARD OF TRUSTEES

RESOLUTION

WHEREAS, Ocean County College desires to offer a new **Associate in Science degree program in Public Health**; and

WHEREAS, the Board of Trustees declares that this new program is within the institution's mission; and

WHEREAS, this new program is not unduly duplicative of other programs offered by New Jersey community colleges; and

WHEREAS, the operation of this new program is not unduly expensive;

NOW, THEREFORE, BE IT RESOLVED that the Ocean County College Board of Trustees, at its meeting on June 27, 2024, approves the Associate in Science degree program in Public Health.

Adopted: June 27, 2024

Stephan R. Leone
Secretary

New Program Proposal

Date Submitted: 05/20/24 10:14 am

Viewing: **AS.PUBH : Public Health, Associate in Science**

Last edit: 06/10/24 11:58 am

Changes proposed by: Mary Gibson (mgibson)

In Workflow

1. **BS Academic Administrator**
2. **BS Dean**
3. **Curriculum Committee Chair**
4. **Senate Chair**
5. **Vice President of Academic Affairs**
6. Cabinet
7. President
8. Board of Trustees Chair
9. Academic Administrator for Programs

Program Type	Associate of Science (AS)
Program Title	Public Health, Associate in Science
Academic School	Business and Social Sciences
Effective Catalog Year	2024-2025
Program Code	AS.PUBH
CIP Code	51.2201 - 51.2201

Objectives

Program Description

Approval Path

1. 04/29/24 12:48 pm
Tracey Taylor (ttaylor): Approved for BS Academic Administrator
2. 05/01/24 11:09 am
Rosann Bar (rbar): Approved for BS Dean
3. 05/10/24 12:40 pm
Caroline Brittain (cbrittain): Rollback to Initiator
4. 05/20/24 10:18 am
Tracey Taylor (ttaylor): Approved for BS Academic Administrator
5. 05/20/24 11:20 am
Rosann Bar (rbar):

Approved for BS
Dean
6. 05/23/24 3:19 pm
Caroline Brittain
(cbrittain):
Approved for
Curriculum
Committee Chair
7. 06/06/24 3:58 pm
Donna Rosinski-
Kauz (drosinski-
kauz): Approved for
Senate Chair

The A.S. in Public Health degree is designed to prepare students for careers in public health. Students will be introduced to how science, prevention, policy and education contributes to protecting and improving the health of people and their communities. This program is designed to transfer to four-year institutions.

Program Objectives

Program Goals

Program goals	
PG1	Introduce students to the field of public health
PG2	Provide a comprehensive curriculum fostering essential skills for public health
PG3	Prepare students to transfer to four-year institution to continue their studies in public health

Program Learning

Outcomes

Students who successfully complete this program will be able to:	
PLO1	Describe the fundamental concepts of public health.
PLO2	Demonstrate basic knowledge and skills appropriate for students seeking advanced study in the field of Public Health.
PLO3	Apply basic scientific methods to analyze data that typically arise within fields of study related to the area of Public Health.
PLO4	Analyze historical and current key public health issues and the impact of these issues locally, Nationally, and globally.

Students who successfully complete this program will be able to:

PLO5 Explain basic public health practices and concepts from a legal, ethical, economic, and cultural perspective.

Learning Outcomes Display (show only)

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
ENGL 151					
HEHP 227	Exam	Project Paper	Presentation Paper	Exam	Project
STSC 150					
ENGL 152					
PSYC 172					
HEHP 225		Project Exam	Project	Project	
AHMT 110			Project	Paper Exam	
HEHP 188			Project	Project	
SOCI 181					
HEHP 183					
BUSN 151					
ANTH 134					
PSYC 278					
SOWK 191					
SOWK 192					
SOWK 194					
ENVI 142					
ENVI 205					
ENVI 210					
ENVI 217					
ENGL 152					
PSYC 172					

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
ENGL 151					
HEHP 227	Exam	Project Paper	Presentation Paper	Exam	Project
STSC 150					
HEHP 225		Project Exam	Project	Project	
AHMT 110			Project	Paper Exam	
HEHP 188			Project	Project	
SOCL 181					
HEHP 183					
BUSN 151					
ANTH 134					
PSYC 278					
SOWK 191					
SOWK 192					
SOWK 194					
ENVI 142					
ENVI 205					
ENVI 210					
ENVI 217					
HEHP 225		Project Exam	Project	Project	
AHMT 110			Project	Paper Exam	
ENGL 151					
HEHP 227	Exam	Project Paper	Presentation Paper	Exam	Project
STSC 150					

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Program Management

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
ENGL 152					
PSYC 172					
HEHP 188			Project	Project	
SOCL 181					
HEHP 183					
BUSN 151					
ANTH 134					
PSYC 278					
SOWK 191					
SOWK 192					
SOWK 194					
ENVI 142					
ENVI 205					
ENVI 210					
ENVI 217					
HEHP 188			Project	Project	
SOCL 181					
ENGL 151					
HEHP 227	Exam	Project Paper	Presentation Paper	Exam	Project
STSC 150					
ENGL 152					
PSYC 172					
HEHP 225		Project Exam	Project	Project	
AHMT 110			Project	Paper Exam	
HEHP 183					
BUSN 151					

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Program Management

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
ANTH 134					
PSYC 278					
SOWK 191					
SOWK 192					
SOWK 194					
ENVI 142					
ENVI 205					
ENVI 210					
ENVI 217					
HEHP 183					
BUSN 151					
ENGL 151					
HEHP 227	Exam	Project Paper	Presentation Paper	Exam	Project
STSC 150					
ENGL 152					
PSYC 172					
HEHP 225		Project Exam	Project	Project	
AHMT 110			Project	Paper Exam	
HEHP 188			Project	Project	
SOCI 181					
ANTH 134					
PSYC 278					
SOWK 191					
SOWK 192					
SOWK 194					
ENVI 142					
ENVI 205					

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
ENVI 210					
ENVI 217					
ANTH 134					
PSYC 278					
SOWK 191					
SOWK 192					
SOWK 194					
ENGL 151					
HEHP 227	Exam	Project Paper	Presentation Paper	Exam	Project
STSC 150					
ENGL 152					
PSYC 172					
HEHP 225		Project Exam	Project	Project	
AHMT 110			Project	Paper Exam	
HEHP 188			Project	Project	
SOC 181					
HEHP 183					
BUSN 151					
ENVI 142					
ENVI 205					
ENVI 210					
ENVI 217					
ENVI 142					
ENVI 205					
ENVI 210					
ENVI 217					

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
ENGL 151	Exam	Project Paper	Presentation Paper	Exam	Project
HEHP 227					
STSC 150					
ENGL 152					
PSYC 172					
HEHP 225		Project Exam	Project	Project	
AHMT 110			Project	Paper Exam	
HEHP 188			Project	Project	
SOC 181					
HEHP 183					
BUSN 151					
ANTH 134					
PSYC 278					
SOWK 191					
SOWK 192					
SOWK 194					

Required Qualifications

First Semester

ENGL 151	English I	3
HEHP 227	Introduction to Public Health	3
MATH 156 OR Higher		3-4
BIOL 161 OR BIOL 130	General Biology I or Human Anatomy and Physiology I	4
STSC 150	Student Success Seminar ¹	2
Total Credit Hours		15-16

Second Semester

ENGL 152	English II	3
BIOL 162 OR BIOL 131	General Biology II or Human Anatomy and Physiology II	4
PSYC 172	General Psychology	3
Public Health Elective ²		3
HEHP 184 Exploration of the U.S. Healthcare System and Healthcare Professions		3
Total Credit Hours		16

Third Semester

HEHP 225	Contemporary Health	3
Technology Gen Ed ³		3
Any General Education Course		3-4
AHMT 110	Medical Terminology	3
Public Health Elective ²		3
Total Credit Hours		15-16

Fourth Semester

HEHP 188	Introduction to Nutrition	3
SOC 181	Introduction to Sociology	3
Open Elective ⁵		3-4
Humanities General Education Course ⁴		3
Elective if needed to reach 60-credits		0-2
Total Credit Hours		12-15

¹ A variety of STSC -Student Success Seminar courses are available. Please speak to your academic advisor for assistance when selecting.

² Students have the opportunity to choose electives that focus on Health Administration, Community Health or Environmental Public Health.

Health Administration

HEHP 183	Introduction to Health Administration	3
BUSN 151	Introduction to Human Resource Management	3

Community Health

ANTH 134	Cultural Anthropology	3
PSYC 278	Life Span Development	3

<u>SOWK 191</u>	Foundations of the Community Health Worker	3
<u>SOWK 192</u>	Introduction to Community Healthcare Practice	3
<u>SOWK 194</u>	Interviewing and Communication Techniques	3
Environmental Public Health⁶		
<u>ENVI 142</u>	Industrial Hygiene	4
<u>ENVI 205</u>	Hazardous Materials Management	3
<u>ENVI 210</u>	Indoor Environmental Quality	3
<u>ENVI 217</u>	Occupational Safety and Health	3

³ Students may attempt to “test out” of the technology requirement. If they succeed, they must take an additional course(s) in math or science from the List of Approved General Education Courses.

⁴ Suggested General Humanities General Education courses

HIST 191 African-American History

PHIL 191 Introduction to Philosophy

PHIL 192 Contemporary Ethical Issues

⁵ Course selections should be based on the requirements of the intended transfer to a four-year institution. Students should speak to their advisor for clarification.

⁶ Students completing all Environmental Public Health electives, and CHEM 180 or higher, are eligible to receive the Certificate of Completion in Industrial Hygiene/Hazardous Materials Management.

Degree Requirements Breakdown

GCOM	Course Code & Title	Credits
	ENGL 151 ENGLISH I	3
	ENGL 152 ENGLISH II	3
GHUM	Course Code & Title	Credits
	HUMANITIES GENERAL EDUCATION REQUIREMENT	3
GSOC	Course Code & Title	Credits
	PSYC 172 GENERAL PSYCHOLOGY	3
GSOC/ GHUM	Course Code & Title	Credits
	SOCI 181 INTRODUCTION TO SOCIOLOGY	3

GMAT/ GSCI/ GTEC

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Program Management

Course Code & Title	Credits
MATH 156 INTRODUCTION TO STATISTICS	3
Technology General Education	3
BIOL 130 or BIOL 161	4

General Education

Course Code & Title	Credits
Any General Education Requirement	3-4
BIOL 131 or BIOL 162	4

Concentration Courses

Course Code & Title	Credits
AHMT 110 Medical Terminology	3
HEHP 188 Introduction to Nutrition	3
HEHP 184 Exploration of the U.S. Healthcare System and Healthcare Professions	3
HEHP 225 Contemporary Health	3
HEHP 227 Introduction to Public Health	3

Elective Courses

Course Code & Title	Credits
ANTH 134 Cultural Anthropology	3
BUSN 151 Introduction to Human Resource Management	3
ENVI 142 Industrial Hygiene	4
ENVI 205 Hazardous Materials Management	3
ENVI 210 Indoor Environmental Quality	3
ENVI 217 Occupational Safety and Health	3
HEHP 183 Health Administration	3
PSYC 279 Life Span Development	3
SOWK 191 Foundations of the Community Health Worker	3
SOWK 192 Introduction to Community Healthcare Practice	3

Course Code & Title	Credits
SOWK 194 Interviewing and Communication Techniques	3

Reviewer

Comments

Caroline Brittain (cbrittain) (05/10/24 12:40 pm): Rollback: Hi Mary, Based on the committee meeting yesterday, this is being rolled back for additional edits. -Caroline

Key: 109

EXHIBIT B-4

Date Submitted: 05/30/24 8:14 am

Viewing: **AAS.CS.AI : Computer**

Science/Informational Technology - Option in Artificial Intelligence, Associate in Applied Science

Last approved: 04/16/24 2:16 pm

Last edit: 05/30/24 8:14 am

Changes proposed by: James Marshall (jmarshall)

In Workflow

1. STEM Academic Administrator
2. STEM Dean
3. Executive Director of Curriculum and Program Development
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. Cabinet
8. President
9. Board of Trustees Chair
10. Academic Administrator for Programs

Catalog Pages Using this Program

[Artificial Intelligence, an Option to the Associate in Applied Science in Computer Science](#)

Program Type	Option
Program Title	Computer Science/Informational Technology - Option in Artificial Intelligence, Associate in Applied Science
Option Title	Artificial Intelligence
Academic School	Science, Technology, Engineering, Mathematics
Base Program	Computer Science/Information Technology, Associate in Applied Science
Effective Catalog Year	2024-2025
Program Code	AAS.CS.AI
CIP Code	110101 - Computer and Information Sciences, General.

Program Description

Approval Path

1. 05/30/24 9:08 am
Cynthia Fallon (cfallon): Approved for STEM Academic Administrator
2. 06/04/24 12:31 pm
Sylvia Riviello (sriviello): Approved for STEM Dean
3. 06/04/24 2:29 pm
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

Program
Development

- 4. 06/14/24 11:59 am
Caroline Brittain
(cbrittain):
Approved for
Curriculum
Committee Chair
- 5. 06/24/24 11:04 am
Donna Rosinski-
Kauz (drosinski-
kauz): Approved for
Senate Chair

History

- 1. May 9, 2021 by
soconnor
- 2. Aug 30, 2021 by
Kenneth Michalek
(kmichalek)
- 3. Nov 17, 2021 by
soconnor
- 4. Apr 16, 2024 by
James Marshall
(jmarshall)

This career program prepares students for entry-level positions in a multitude of Artificial Intelligence careers to be utilized in a variety of industries including the medical, manufacturing, financial, and automotive industries. Artificial Intelligence careers include positions such as Data Analytics Engineer, Data Scientist, Machine Learning Specialist, Big Data Engineer and Software Development Professional. The curriculum has been designed to introduce the student to the study of Artificial Intelligence and expose the student to real-world applications where AI is utilized in the areas of Machine Learning, Computer Vision, Natural Language Processing and Neural Networks. The curriculum also includes courses in programming, math, social sciences and humanities. A graduate of the program will have a firm understanding of Artificial Intelligence, the AI Project Lifecycle, various Machine Learning Algorithms such as Supervised and Unsupervised Learning and the ability to construct a Neural Network and apply it to topics such as vision and language processing.

The department recommends the following minimal criteria for prospective students in the Computer Science/Information Technology program:

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

Program Learning

Outcomes

Students who successfully complete this program will be able to:

PLO1	Explain what artificial intelligence is and give examples of applications where it is used.
PLO2	Describe the A.I. project lifecycle and identify the activities that occur during each stage of the cycle.
PLO3	Explain what data science and analytics are, how they are used for machine learning, and how to apply the various types of machine learning algorithms.
PLO4	Describe the techniques and concepts used in computer vision, how computers see, and how an image is represented.
PLO5	Investigate the various algorithms used in natural language processing (NLP) applications and the techniques used to train these algorithms to recognize language.
PLO6	Demonstrate how neural networks are used in the fields of computer vision and natural language processing.
PLO7	Identify the challenges that A.I. will bring into the world including career challenges, ethical issues, and social impacts.

Learning Outcomes Display (show only)

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7
Freshman							
First Semester							
ENGL 151							
CSIT 165							
CSIT 191	Exam	Exam	Exam	Exam		Exam	Exam
Second Semester							
ENGL 152							
MATH 156							
MATH 196							
CSIT 168							
CSIT 213							
Sophomore							
First Semester							
MATH 265							
CSIT 192	Exam	Exam	Exam	Exam	Exam	Exam	Exam
Second Semester							
CSIT 292					Paper	Exam	
CSIT 291				Exam		Exam	
FirstSemester							
SecondSemester							

Required Qualifications

Plan of Study Grid

Freshman

First Semester Credit HoursENGL 151 English I 3Mathematics/Science/Technology Gen. Ed. Requirement 3CSIT 165 Programming I 4CSIT 191 Introduction to Artificial Intelligence 3Humanities or Social Science Gen. Ed. Requirement 3Credit Hours 16

Second Semester

ENGL 152 English II 3MATH 156 Introduction to Statistics 3~~MATH 201 Precalculus Techniques and Applications~~ ~~4~~MATH 196 Precalculus 4Or Higher =CSIT 168 Introduction to Python Programming 2CSIT 213 Database Management 3Credit Hours 15

Sophomore

First Semester

MATH 265 Calculus I 4CSIT 192 Introduction to Machine Learning 3Computer Science Elective 3Any Gen. Ed. Requirement 4Credit Hours 14

Second Semester

CSIT 292 Natural Language Processing 3CSIT 291 Computer Vision 3CSIT Elective 3Any Gen. Ed. Requirement 4Elective (to meet 60 credits) 2Credit Hours 15Total Credit Hours 60

How does this
option differ from
it's base program?

This curriculum has been designed to introduce the student to the study of Computer Science but specializes in the area of Artificial Intelligence.

Degree Requirements Breakdown

GCOM	Course Code & Title	Credits
	ENGL 151	3
	ENGL 152	3
GHUM	Course Code & Title	Credits
	N/A	N/A
GSOC	Course Code & Title	Credits
	N/A	N/A
GSOC/ GHUM	Course Code & Title	Credits
	HUMN/SOSC GEN ED REQ	3
GMAT/ GSCI/ GTEC	Course Code & Title	Credits
	MATH GEN ED REQ	3
General Education	Course Code & Title	Credits
	ANY GEN ED COURSE	8
Concentration Courses	Course Code & Title	Credits
	CSIT 191	3
	CSIT 168	2
	CSIT 213	3
	MATH 201	4
	CSIT 192	3
	MATH 265	4
	CSIT-291	3
	CSIT-292	3
	CSIT Elective	6
	CSIT 165	4
	MATH 156	3

Elective Courses

	Course Code & Title	Credits
Elective		2

Board Approval

History of Board approval dates

Option to existing program Board Approved on 8/27/21

Reviewer

Comments

Key: 85

EXHIBIT B-5

Date Submitted: 04/04/24 10:43 am

Viewing: **CC.AMAM : Advanced Manufacturing and Mechatronics, Certificate of Completion**

Last approved: 01/08/24 11:44 am

Last edit: 05/16/24 9:35 am

Changes proposed by: Cynthia Fallon (cfallon)

In Workflow

1. STEM Academic Administrator
2. STEM Dean
3. Executive Director of Curriculum and Program Development
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. Cabinet
8. President
9. Board of Trustees Chair
10. Academic Administrator for Programs

Catalog Pages Using this Program

[Advanced Manufacturing and Mechatronics, Certificate of Completion](#)

Program Type	Certificate of Completion
Program Title	Advanced Manufacturing and Mechatronics, Certificate of Completion
Academic School	Science, Technology, Engineering, Mathematics
Effective Catalog Year	2024-2025
Program Code	CC.AMAM
CIP Code	144201 - Mechatronics, Robotics, and Automation Engineering.

Program Description

Approval Path

1. 04/04/24 10:54 am
Cynthia Fallon (cfallon): Approved for STEM Academic Administrator
2. 04/04/24 11:23 am
Sylvia Riviello (sriviello): Approved for STEM Dean
3. 04/10/24 3:06 pm
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

Program

Development

4. 04/25/24 4:17 pm

Caroline Brittain

(cbrittain):

Approved for

Curriculum

Committee Chair

5. 06/06/24 3:58 pm

Donna Rosinski-

Kauz (drosinski-

kauz): Approved for

Senate Chair

History

1. Jan 6, 2022 by

Pamela Bogdan

(pbogdan)

2. Jun 23, 2022 by

soconnor

3. Apr 10, 2023 by

soconnor

4. Jan 8, 2024 by

soconnor

The Advanced Manufacturing and Mechatronics Certificate of Completion program is designed for those students planning to work in a manufacturing industry. The Mechatronics Certificate of Completion program will prepare students to enter the workforce with the ability to operate and maintain equipment found in a modern manufacturing environment.

As manufacturing advances into a more automated production system, a higher level of technical expertise is required of the labor force. The certificate holders will have experience with the operation and maintenance of computer numeric controlled (CNC) machines and programmable logic controllers (PLCs), as well as a working knowledge of basic electronics, pneumatic, and mechanical systems.

Program Learning

Outcomes

Students who successfully complete this program will be able to:

PLO1

Make use of their working knowledge of basic electronics, pneumatic, and mechanical systems in the context of advanced manufacturing and mechatronics.

Students who successfully complete this program will be able to:

PLO2 Utilize their entry level skills for the operation and maintenance of computer numeric controlled (CNC) machines and programmable logic controllers (PLCs).

Learning Outcomes Display (show only)

Course Code	PLO 1	PLO 2
Freshman		
First Semester		
ENGR 181	Project	Project
ENGT 102	Project	
MATH 156		
ENGT 144	Exam	Exam
Second Semester		
ENGT 114	Project	Project
ENGT 140		Project
ENGT 150		Project
MECH 150	Project	
FirstSemester		
SecondSemester		

Required Qualifications

Plan of Study Grid

Freshman

First Semester

MATH 156 or higher (not MATH 171 or MATH 181)

ENGR 181 Graphics for Engineers

ENGT 102 Manufacturing Processes

MATH 156 Introduction to Statistics (or higher, excluding MATH 171)

ENGT 144 DC/AC Electric Circuits

Credit Hours

Second Semester

ENGT 114 Principles of Quality Control In Manufacturing

ENGT 140 Introduction to Computer Numeric Controlled (CNC) Machines

Credit Hours

3-6

2

3

3

4

12

3

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Program Management

ENGT 150 Automated Control Systems	4
MECH 150 Introduction to Hydraulics and Pneumatics	4
Credit Hours	14
Total Credit Hours	26

Degree Requirements Breakdown

GC	Course Code & Title	Credits
GC	--	--
GHUM	Course Code & Title	Credits
GHUM	--	--
GSOC	Course Code & Title	Credits
GSOC	--	--
GSOC/ GHUM	Course Code & Title	Credits
GSOC/ GHUM	--	--
GMAT/ GSCI/ GTEC	Course Code & Title	Credits
GMAT/ GSCI/ GTEC	MATH 156 or higher (not MATH <u>171</u> 171 or MATH 181)	3-6
General Education	Course Code & Title	Credits
General Education	--	--
Concentration Courses	Course Code & Title	Credits
Concentration Courses	ENGT 144 DC/AC Electric Circuits	4
Concentration Courses	ENGR 181 Graphics for Engineers	2
Concentration Courses	ENGT 102 Manufacturing Process	3
Concentration Courses	ENGT 114 Principles of Quality Control & Quality Management	3
Concentration Courses	ENGT 140 Introduction to Computer Numeric Controlled (CNC) Machines	3
Concentration Courses	ELET 150 Automated Control Systems	4

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Program Management

Course Code & Title	Credits	
MECH 150 Introduction to Hydraulics and Pneumatics	4	
Elective Courses	Course Code & Title	Credits
--	--	--

Board Approval

History of Board approval dates

March 29, 2018

Board of Trustees Approval Date: July 22, 2021

Course codes updated to ENGT in summer 2022 after they were approved by governance in spring.

Reviewer
Comments

Key: 18

EXHIBIT B-6

Date Submitted: 06/03/24 10:53 am

Viewing: **CSIT 176 : Computer Organization & Architecture**

Last approved: 04/30/21 4:00 am

Last edit: 06/03/24 10:53 am

Changes proposed by: Cynthia Fallon (cfallon)

Catalog Pages
referencing this
course

[Computer Science/ Information Technology_\(CSIT\)](#)

Programs
referencing this
course

[AS.CS: Computer Science, Associate in Science](#)

[AS.ENGR: Engineering, Associate in Science](#)

[AS.CS.GDD: Computer Science with Game Development & Design
Option, Associate in Science](#)

[AAS.CS: Computer Science/Information Technology, Associate in
Applied Science](#)

[AS.CS.IT: Computer Science with Information Technology Option,
Associate in Science](#)

[CT.INFO: Information Technology, Certificate of Proficiency](#)

Learning Outcomes
Display (show only)

In Workflow

1. STEM Academic Administrator
2. STEM Dean
3. Executive Director of Curriculum and Program Development
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. Cabinet
8. President
9. Board of Trustees Chair
10. STEM Academic Administrator
11. Colleague


Approval Path

1. 06/03/24 12:11 pm
Cynthia Fallon (cfallon): Approved for STEM Academic Administrator
2. 06/04/24 12:32 pm
Sylvia Riviello (sriviello): Approved for STEM Dean
3. 06/04/24 2:28 pm
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

- Program Development
- 4. 06/14/24 11:59 am
Caroline Brittain (cbrittain):
Approved for Curriculum Committee Chair
- 5. 06/24/24 11:04 am
Donna Rosinski-Kauz (drosinski-kauz): Approved for Senate Chair

History

- 1. Apr 30, 2021 by soconnor

AS.CS: Computer Science, Associate in Science 

PLO 1: 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.

PLO 6: Demonstrate independent thinking through mathematical, scientific, and philosophical reasoning.

1. Course Information

Subject	CSIT - Computer Science/ Information Technology
School	Science, Technology, Engineering, Mathematics
Course Title	Computer Organization & Architecture

2. Hours

Semester Hours	3.00000
Lecture	3
Lab	0

Practicum

0

3. Catalog Description

For display in the
online catalog

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

4. Requisites

Prerequisites

CSIT-124, or CSIT-165, or CSIT-163 ~~CSIT-165~~

Corequisites

None

5. Course Type

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

6. Justification

Describe the need
for this course

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

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

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Brookdale CC
Course Title	Computer Architecture Using Assembly Language
Course Number	COMP135
Number of Credits	3
Comments	

Institution Rowan College at Burlington County
Course Title Computer Organization
Course Number CSE 225
Number of Credits 3
Comments

Institution Camden County College
Course Title Computer Organization
Course Number CSC-240
Number of Credits 3
Comments

Institution Middlesex County College
Course Title Computer Architecture and Assembly Language
Course Number CSC 233
Number of Credits 4
Comments

Institution County College of Morris
Course Title Computer Architecture and Assembly Language
Course Number CMP-230
Number of Credits 3
Comments

Institution Passaic County CC
 Course Title Computer Organization and Architecture
 Course Number CIS 236
 Number of Credits 3
 Comments

Institution Raritan Valley CC
 Course Title Computer Architecture & Assembly Language
 Course Number CISY 256
 Number of Credits 4
 Comments

Transferability of Course

Georgian Court
 University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
Elective, 3 credits	EC (ELECTIVE CREDIT)	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CPS2390, COMPUTER ASSEMBLY LANG, 3 credits	Major	

Monmouth
 University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CS286, Computer Architecture I, 3 Credits	Major	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CS06205, Computer Organization, 3 Credits	Major	

Rutgers - New Brunswick, Mason Gross School of the Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Will not transfer

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
COMPUTER SCIENCE & INFO SYS, ELECTIVE, 3 credits	General Ed. (Computer Science)	

If not transferable to any institution, explain:

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:

- CLO1 Discuss the history of the digital computer
- CLO2 Use binary and hexadecimal number systems
- CLO3 Explain Boolean and logical operators, basic digital logic circuits, and design simple circuit using digital logic gates
- CLO4 Describe the representation of numeric data
- CLO5 Describe the concept of an instruction set architecture
- CLO6 Write programs and subroutines in Assembly Language that use various classes of machine instructions
- CLO7 Explain Input/Output (I/O) fundamentals: handshaking and buffering

Students who successfully complete this course will be able to:

CLO8	Explain the operation of interrupts
CLO9	Explain addressing modes

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	History of Computer Architectures 1) Languages and Virtual machines 2) Evolution of computers	Hands-on; In-class & Lab exercises, Programing Projects	Quizzes; Exam, Programing Projects	CLO1
TO2	Data Representation 1) Data types 2) Number systems 3) Mathematical and logical operations	Hands-on; In-class & Lab exercises, Programing Projects	Programming Exercises; Exam, Programing Projects	CLO2
TO3	Digital Logic 1) Logic gates 2) Boolean algebra 3) Logic circuits 4) Digital logic simulators	Hands-on; In-class & Lab exercises, Programing Projects	Programming Exercises; Exam, Programing Projects	CLO3
TO4	Computer Systems 1) Processors 2) Memory 3) Storage 4) Input/Output 5) Interrupts	Hands-on; In-class & Lab exercises, Programing Projects	Programming Exercises; Exam, Programing Projects	CLO3, 5
TO5	Assembly Language 1) Overview of architecture of different machines 2) Data type representation on different machines	Hands-on; In-class & Lab exercises, Programing Projects	Programming Exercises; Exam, Programing Projects	CLO3, 4, 5, 6, 7, 8, 9

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Course Inventory Management

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	3) Instruction Formats 4) Integral operations 5) Addressing modes 6) The use of carry, borrow and overflow flags 7) Creating assembly language programs			
TO6	Assembly Language – Advanced Concepts 1) Subroutines 2) Parameter passing 3) Recursion	Hands-on; In-class & Lab exercises, Programming Projects	Programming Exercises; Exam, Programing Projects	CLO3, 4, 5, 6, 7, 8, 9

12. Methods of Instruction

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

Class lecture, discussion, demonstrations, lab assignments, programs and online presentations.

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

Yes

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Course Inventory Management

Related Course All

Learning Outcome

Related Outline All

Component

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

Programming Exercises; Exam

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course All

Learning Outcome

Related Outline All

Component

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

Programming Exercises; Exam

14. Needs

Instructional
Materials (text

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Course Inventory Management

etc.):

Textbook and/or open educational resources, Assembly Language Programming Software, Logic Gate Simulation Software and/or actual Integrated Circuits

Technology Needs:

Computer lab equipped with necessary software to accommodate each student

Human Resource

Needs (Presently

Employed vs. New

Faculty):

(Presently Employed vs. New Faculty): Faculty (Fulltime, Adjunct and Lecturers)

Facility Needs:

Computer lab equipped with necessary software to accommodate each student. Ideally a computer-equipped podium with a connect projector (for demonstrations)

Library needs:

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.

16. Board Approval

6/24/24, 1:44 PM

Course Inventory Management

History of Board

approval dates

Board of Trustees Approval Date: February 28, 2011

Board of Trustees Approval Date: March 26, 2012

Approval of Form: September 2017

Board of Trustees Approval Date: March 26, 2020

Board of Trustees Approval Date: April 7, 2023

Reviewer

Comments

Key: 519

EXHIBIT B-7

Date Submitted: 06/03/24 11:00 am

Viewing: **CSIT 192 : Introduction to Machine Learning**

Last approved: 04/04/24 4:35 am

Last edit: 06/03/24 11:00 am

Changes proposed by: Cynthia Fallon (cfallon)

Catalog Pages
referencing this
course

[Computer Science/ Information Technology_\(CSIT\)](#)

Programs
referencing this
course

[CC.AI: Certificate of Completion in Artificial Intelligence](#)
[AAS.CS.AI: Computer Science/Informational Technology - Option in Artificial Intelligence, Associate in Applied Science](#)

Learning Outcomes
Display (show only)

In Workflow

1. STEM Academic Administrator
2. STEM Dean
3. Executive Director of Curriculum and Program Development
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. Cabinet
8. President
9. Board of Trustees Chair
10. STEM Academic Administrator
11. Colleague

Approval Path

1. 06/03/24 12:11 pm
Cynthia Fallon (cfallon): Approved for STEM Academic Administrator
2. 06/04/24 12:32 pm
Sylvia Riviello (sriviello): Approved for STEM Dean
3. 06/04/24 2:29 pm
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

Program

Development

4. 06/14/24 11:59 am

Caroline Brittain

(cbrittain):

Approved for

Curriculum

Committee Chair

5. 06/24/24 11:04 am

Donna Rosinski-

Kauz (drosinski-

kauz): Approved for

Senate Chair

History

1. Oct 16, 2021 by
Kenneth Michalek
(kmichalek)
2. Oct 27, 2021 by
soconnor
3. Apr 4, 2024 by
Kenneth Michalek
(kmichalek)

CC.AI: Certificate of Completion in Artificial Intelligence

PLO 1: Explain what Artificial Intelligence is and give examples of applications where it is used.

PLO 2: Evaluate the techniques used in Data Science and Analytics, and examine how they are used in Machine Learning.

PLO 3: Demonstrate how to apply the various types of Machine Learning methods which includes Supervised Learning, Unsupervised Learning and Reinforcement Learning and compares strengths and weaknesses.

PLO 4: Apply various Machine Learning Supervised and Unsupervised algorithms such as k-Nearest Neighbors, Linear Models, Decision Trees, Support Vector Machines and Naïve Bayes Classifiers to solve real-world problems.

PLO 7: Analyze how Neural Networks are used in the fields of Computer Vision and Natural Language Processing.

AAS.CS.AI: Computer Science/Informational Technology - Option in Artificial Intelligence, Associate in Applied Science

PLO 1: Explain what artificial intelligence is and give examples of applications where it is used.

PLO 2: Describe the A.I. project lifecycle and identify the activities that occur during each stage of the cycle.

PLO 3: Explain what data science and analytics are, how they are used for machine learning, and how to apply the various types of machine learning algorithms.

PLO 4: Describe the techniques and concepts used in computer vision, how computers see, and how an image is represented.

PLO 5: Investigate the various algorithms used in natural language processing (NLP) applications and the techniques used to train these algorithms to recognize language.

PLO 6: Demonstrate how neural networks are used in the fields of computer vision and natural language processing.

PLO 7: Identify the challenges that A.I. will bring into the world including career challenges, ethical issues, and social impacts.

1. Course Information

Subject	CSIT - Computer Science/ Information Technology
School	Science, Technology, Engineering, Mathematics
Course Title	Introduction to Machine Learning

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

This course introduces the student to Machine Learning and how it is used in the development of Artificial Intelligence and other applications. The topics of data modeling, acquisition, and data exploration and why they are important for AI applications will be explained. The course will cover how to use the Python language with various libraries (NumPy, pandas, scikit-learn) and Machine Learning algorithms (supervised, semi-supervised, unsupervised, reinforcement) to solve real-world data science problems. The concepts of classification, regression, and

clustering will be explored in conjunction with several Machine Learning algorithms such as k-Nearest Neighbors (KNN), Decision Trees and Linear Models. Open lab time required.

4. Requisites

Prerequisites

CSIT 191 and CSIT 165, or CSIT-124 ~~165~~

Corequisites

5. Course Type

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need

for this course

This is a required course for Computer Science, Associate in Applied Science with Artificial Intelligence Concentration. This course can also be used as an elective for any computer science and engineering programs. Students will master the concepts and applications of Machine Learning, study data modeling concepts and apply the fundamentals of Machine Learning algorithms to solve data science problems.

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 | Offer comprehensive educational programs that develop intentional learners of all ages and ensure the full assessment of student learning in these programs. (Mission Statement) |
| 2 | Foster educational innovation through effective teaching-learning strategies, designed to develop and nurture intentional learners who are informed and empowered. (Vision Statement) |
| 3 | Employ technology and learning outcomes assessment to ensure student success in an increasingly diverse and complex world. (Vision Statement) |
| 4 | Prepare students for entrance into the workforce and empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan) |
| 5 | Challenge students to transfer information into knowledge and knowledge into action. (Academic Master Plan) |

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Transferability of Course

Georgian Court
University

Kean University

Monmouth
University

Rowan University

Rutgers - New
Brunswick, Mason

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Course Inventory Management

Gross School of the
Arts

Stockton University

If not transferable
to any institution,
explain:

This is a required course for Computer Science, Associate in Applied Science with Artificial Intelligence Concentration. There is no known course for the schools listed here where transfer credit will be given.

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:

CLO1	Explain what Machine Learning is and where it is used.
CLO2	Describe Data modeling, acquisition, and exploration and explain their importance in solving problems using Machine Learning.
CLO3	Demonstrate how to use the Python language and several libraries such as NumPy, pandas, and scikit-learn in the development of Machine Learning applications.
CLO4	Show how to apply the various types of Machine Learning including Supervised Learning, Unsupervised Learning and Reinforcement Learning and compare their advantages and disadvantages
CLO5	Examine the concepts of Classification, Regression, and Clustering and how they are used in Machine Learning.
CLO6	Apply various Machine Learning Supervised and Unsupervised algorithms such as k-Nearest Neighbors, Linear Models, Decision Trees, Support Vector Machines and Naïve Bayes Classifiers.
CLO7	Assess what a Neural Network is and how to use it to improve algorithm accuracy.

11. Topical Outline

(include as many themes/skills as needed)

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Course Inventory Management

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	<p>Introduction to Machine Learning</p> <p>a) History of Machine Learning</p> <p>b) What exactly is Machine Learning and what type of problems can it solve.</p> <p>c) Machine Learning, trends and the future direction of the technology.</p>	<p>Reading assignments</p> <p>In-class demonstrations</p> <p>In-class exercises</p> <p>In-class discussion</p> <p>Presentations</p>	<p>Homework</p> <p>Exam</p>	CLO1
TO2	<p>Data Science Fundamentals</p> <p>a) Mathematical concepts relevant to Machine Learning: graphs, slope functions, probability, statistics, vectors and matrices</p> <p>b) Data and it's importance to Machine Learning</p> <p>c) Data Acquisition, Exploration and Modeling</p> <p>d) Data Import</p> <p>e) Data Visualization</p> <p>f) Data Interpretation</p>	<p>Reading assignments</p> <p>In-class demonstrations</p> <p>In-class exercises</p> <p>In-class discussion</p> <p>Presentations</p>	<p>Homework</p> <p>Exam</p>	CLO1,CLO2, CLO3
TO3	<p>Python for Machine Learning</p> <p>a) Python's use in Machine Learning</p> <p>b) NumPy – Numerical Python arrays, functions</p> <p>c) Pandas - Python Data Analysis Library</p> <p>d) scikit-learn</p>	<p>Reading assignments</p> <p>In-class demonstrations</p> <p>In-class exercises</p> <p>In-class discussion</p> <p>Presentations</p>	<p>Homework</p> <p>Exam</p>	CLO1-CLO7

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Course Inventory Management

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO4	e) matplotlib f) Jupyter Notebooks Machine Learning Problem Areas and Scope a) Supervised Learning, Classification, Regression b) Unsupervised Learning, Clustering c) Reinforcement Learning d) Review various algorithms functions and limitations e) Compare machine learning models	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1, CLO2, CLO3, CLO4
TO5	Machine Learning Algorithms a) k-Nearest Neighbors b) Linear Models c) Decision Trees d) Support Vector Machines e) Naïve Bayes Classifiers	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1, CLO3, CLO4, CLO5, CLO6
TO6	Neural Networks a) The Human neural network b) Understanding how neural networks work c) Artificial neural networks d) Model outputs, Output visualization and validation	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1, CLO3, CLO7

12. Methods of Instruction

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Course Inventory Management

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

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

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 Yes

Related Course CLO1-CLO7
Learning Outcome

Related Outline T01-T06
Component

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

Presentations

Exams

Homework

Information Literacy Yes

Related Course CLO1,CLO2,CLO5-CLO7
Learning Outcome

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Course Inventory Management

Related Outline TO1,TO2,TO5-T06

Component

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

Presentations

Exams

Homework

 Society and Human Behavior

 Humanistic Perspective

 Historical Perspective

 Global and Cultural Awareness

 Ethical Reasoning and Action

Independent/Critical Thinking

Yes

Related Course CLO1-CLO7

Learning Outcome

Related Outline TO1-T06

Component

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

Presentations

Exams

Homework

14. Needs

Instructional
Materials (text
etc.):

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Course Inventory Management

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

Technology Needs:

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

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

Presently employed

Facility Needs:

Laboratory classrooms equipped with computer workstations, each configured to support AI applications. Podium computer similarly equipped plus the ability to present audio-video presentations to the class.

Library needs:

NA

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.

16. Board Approval

6/24/24, 1:44 PM

Course Inventory Management

EXHIBIT B - 7

History of Board
approval dates

New course board approved: August 26, 2021

Reviewer
Comments

Key: 2228

EXHIBIT B-8

Date Submitted: 06/03/24 10:57 am

Viewing: **CSIT 242 : Penetration Testing**

Fundamentals

Last approved: 04/10/23 2:58 pm

Last edit: 06/03/24 10:57 am

Changes proposed by: Cynthia Fallon (cfallon)

Catalog Pages
referencing this
course

[Computer Science/ Information Technology_\(CSIT\)](#)

Programs
referencing this
course

[AAS.CS.CY: Computer Science/Informational Technology - Option in
Cybersecurity, Associate in Applied Science](#)

Learning Outcomes
Display (show only)

In Workflow

1. STEM Academic Administrator
2. STEM Dean
3. Executive Director of Curriculum and Program Development
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. Cabinet
8. President
9. Board of Trustees Chair
10. STEM Academic Administrator
11. Colleague

Approval Path

1. 06/03/24 12:11 pm
Cynthia Fallon (cfallon): Approved for STEM Academic Administrator
2. 06/04/24 12:33 pm
Sylvia Riviello (sriello): Approved for STEM Dean
3. 06/04/24 2:29 pm
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

Program
Development
4. 06/14/24 11:59 am
Caroline Brittain
(cbrittain):
Approved for
Curriculum
Committee Chair
5. 06/24/24 11:04 am
Donna Rosinski-
Kauz (drosinski-
kauz): Approved for
Senate Chair

History

1. Apr 10, 2023 by
Joseph Brickley
(jbrickley)

1. Course Information

Subject	CSIT - Computer Science/ Information Technology
School	Science, Technology, Engineering, Mathematics
Course Title	Penetration Testing Fundamentals

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

Penetration testing fundamentals assesses the most up-to-date penetration testing, vulnerability assessment, and management skills necessary to determine the resiliency of the network against attacks. It will cover fundamental methodologies, techniques, tools to identify vulnerabilities, exploit, assess security risk to networks, operating systems, and applications.

4. Requisites

Prerequisites

None ~~CSIT-165~~

Corequisites

None ~~CSIT-185~~

5. Course Type

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

6. Justification

Describe the need
for this course

This course provides the required training in Cybersecurity programs of study and helps students prepare for the fundamental of penetration testing.

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

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Raritan Valley CC
Course Title	Ethical Hacking and Penetration Testing
Course Number	NTWK290
Number of Credits	3
Comments	

Institution	County College of Morris
Course Title	Ethical Hacking and Systems Defense Course
Course Number	CMP243
Number of Credits	3
Comments	

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 2000	Free Elective	

Monmouth
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CS002 200-Level Computer Science Elective 3	Computer Science Elective	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CST 03215, Penetration Testing Fundamentals, 3	Major	

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
CSISEC Computer Science & Info Systems Elective 4	Computer Science 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	Describe the fundamentals of penetration testing and vulnerability management.
CLO2	Describe the history, development, and principles of cybersecurity.
CLO3	Identify key (vs. secondary) risk elements faced by computer network systems.
CLO4	Assess the current security landscape, including the nature of the threat, the general status of common vulnerabilities, and the likely consequences of security failures.
CLO5	Analyze security components within organizational context: identity and access management, data protection, security operations.
CLO6	Create a plan for the third-party risk assessments.

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	<ol style="list-style-type: none"> 1.Planning a Pen Test 2.Rules of Engagement 3.Resources and Budgets 4.Impact and Constraints 5.Support Resources 	Reading, Class discussion	Quiz/ Exam	CLO1, CLO2
TO2	<ol style="list-style-type: none"> 1. Legal Groundwork 2. Scope Considerations 3. Project Strategy and Risk 4. Scope Vulnerabilities 5. Compliance-Based Assessments 	Reading, Class discussion	Quiz/ Exam	CLO3

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO3	<ol style="list-style-type: none"> 1. Scanning and Enumeration 2. Scanning and Demo 3. Packet Investigation 4. Packet Inspection Demo 5. Application and Open-Source Resources 	Reading, Class discussion	Quiz/ Exam	CLO2, CLO3
TO4	<ol style="list-style-type: none"> 1. Vulnerability Scanning 2. Vulnerability Scanning Demo 3. Target Considerations 4. Nmap Timing and Performance Options 5. Prioritization of Vulnerabilities 6. Common Attack Techniques 	Reading, Class discussion	Quiz/ Exam	CLO4
TO5	<ol style="list-style-type: none"> 1. Credential Attacks 2. Weaknesses in Specialized Systems 3. Remote Social Engineering 4. Spear Phishing Demo 5. In-Person Social Engineering 6. Network-Based Exploits 7. FTP Exploit Demo 8. Man-in-the-Middle Exploits 9. Wireless Exploits 10. Application Exploits, Part 1 	Reading, Class discussion	Quiz/ Exam	CLO4, CLO5
TO6	<ol style="list-style-type: none"> 1. SQL Injection Demo 2. Application Exploits, Part 2 3. Application Exploits, 	Reading, Class discussion	Quiz/ Exam	CLO5, CLO6

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	Part 3 4. Cross-Site Scripting Demo 5. Code Vulnerabilities 6. Local Host Vulnerabilities 7. Privilege Escalation (Linux) 8. Privilege Escalation (Windows) 9. Misc. Privilege Escalation 10. Misc. Local Host Vulnerabilities 11. Physical Security 12. Post-Exploitation Techniques			
TO7	1. Persistence and Stealth 2. Nmap Scoping and Output Options 3. Pen Testing Toolbox 4. Using Kali Linux 5. Scanners and Credential Tools 6. Code Cracking Tools 7. Open-Source Research Tools 8. Wireless and Web Pen Testing Tools 9. Remote Access Tools 10. Analyzers and Mobile Pen Testing Tools	Reading, Class discussion	Quiz/ Exam	CLO5, CLO6
TO8	1. Other Pen Testing Tools 2. Using Scripting in Pen Testing 3. Bash Scripting Basics 4. Bash Scripting	Reading, Class discussion	Quiz/ Exam	CLO4, CLO5, CLO6

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO9	Techniques 5. PowerShell Scripts 1. Ruby Scripts 2. Python Scripts 3. Scripting Languages Comparison 4. Writing Reports 5. Post Report Activities 6. Mitigation Strategies 7. Communication	Reading, Class discussion	Quiz/ Exam	CLO4, CLO5, CLO6

12. Methods of Instruction

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

Class lecture, presentations, discussions, lab assignments/exercises, case studies, and projects.

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

Information

Communication-Written and Oral Yes

Related Course CLO1-CLO6
 Learning Outcome

Related Outline TO1-TO9
 Component

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

N/A

Quantitative Knowledge and Skills

Scientific Knowledge and Reasoning

Technological Competency Yes

Related Course CLO1-CLO6

Learning Outcome

Related Outline TO1-TO9

Component

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

N/A

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course CLO1-CLO6

Learning Outcome

Related Outline TO1-TO9

Component

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

N/A

14. Needs

Instructional

Materials (text
etc.):

Appropriate textbook(s) will be selected. Please contact the department for current adoptions.

Technology Needs:

N/A

Human Resource

Needs (Presently
Employed vs. New
Faculty):

N/A

Facility Needs:

N/A

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.

16. Board Approval

History of Board
approval dates

Board of Trustees Approval Date: March 17, 2023

Reviewer
Comments

Key: 2279

EXHIBIT B-9

Date Submitted: 06/03/24 10:59 am

Viewing: CSIT 243 : Cisco Networking Fundamentals

Last approved: 04/10/23 3:03 pm

Last edit: 06/03/24 10:59 am

Changes proposed by: Cynthia Fallon (cfallon)

Catalog Pages
referencing this
course

[Computer Science/ Information Technology.\(CSIT\).](#)

Programs
referencing this
course

[AAS.CS.CY: Computer Science/Informational Technology - Option in Cybersecurity, Associate in Applied Science](#)

Learning Outcomes
Display (show only)

In Workflow

1. STEM Academic Administrator
2. STEM Dean
3. Executive Director of Curriculum and Program Development
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. Cabinet
8. President
9. Board of Trustees Chair
10. STEM Academic Administrator
11. Colleague

Approval Path

1. 06/03/24 12:11 pm
Cynthia Fallon (cfallon): Approved for STEM Academic Administrator
2. 06/04/24 12:35 pm
Sylvia Riviello (sriviello): Approved for STEM Dean
3. 06/04/24 2:29 pm
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

- Program Development
- 4. 06/14/24 11:59 am
Caroline Brittain (cbrittain):
Approved for Curriculum Committee Chair
- 5. 06/24/24 11:04 am
Donna Rosinski-Kauz (drosinski-kauz): Approved for Senate Chair

History

- 1. Apr 10, 2023 by Joseph Brickley (jbrickley)

1. Course Information

Subject	CSIT - Computer Science/ Information Technology
School	Science, Technology, Engineering, Mathematics
Course Title	Cisco Networking Fundamentals

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the online catalog

This course provides a deep dive into the Cisco network. The course introduces network fundamentals (OSI model, IPs, Subnetting, etc.), an overview of Cisco products, hardware components, how to perform Layer 1 and Layer 2 basic Cisco configurations tools, such as PuTTY, TFTP/SFTP/FTP servers, loopback plugs, and Microsoft Windows basic. After this initial understanding (which will cover CCT routing and switching) the course will cover an introduction into basic configurations on Cisco routers work, common switching/routing issues, network/device architectures, outline basic threat defense technologies, and describing the functions and features off Cisco iOS and NX-OS.

4. Requisites

Prerequisites

CSIT-184, or CSIT-185

Corequisites

CSIT-186

5. Course Type

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need
for this course

Students in the cybersecurity field will benefit from understanding and knowing how to utilize current Cisco fundamentals to be successful in their academic and professional careers.

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 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 entrance into the workforce. (Academic Master Plan)
4	Seeking to empower students through the mastery of intellectual and Practical Skills. (Academic Master Plan)
5	Challenging students to transfer information into knowledge and knowledge into action. (Academic Master Plan)

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Bergen CC
Course Title	Networking Fund I
Course Number	INF-164
Number of Credits	3
Comments	

Institution	Sussex County CC
Course Title	Networks and Telecommunications

Course Number COMS 230
Number of Credits 3
Comments

Institution Raritan Valley CC
Course Title NTWK 270
Course Number Introduction to Cisco Networking
Number of Credits 3
Comments

Institution Raritan Valley CC
Course Title Routing and Switching Essentials
Course Number 271
Number of Credits 3
Comments

Institution Mercer County CC
Course Title Fundamentals of Computer Networks
Course Number NET104
Number of Credits 3
Comments

Institution Passaic County CC
Course Title Networking Essentials

Course Number CIS 180
 Number of Credits 3
 Comments

Transferability of Course

Georgian Court
 University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CSCISEC Comp. Science/Info Systems Elective, 3	Elective	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CPSX1003 Computer Science Free Elective , 3	Elective	

Monmouth
 University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
FE001 100-Level Free Elective, 3	Elective	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CST 09295, Advanced Networking, 3	Elective	

Rutgers - New
 Brunswick, Mason
 Gross School of the
 Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
04:547:331, Networking and Internet Technology, 3	Required for Information Technology and Informatics Major	Will not transfer

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CSISEC computer Science & Info Systems Elective, 4	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	Understand fundamental networking concepts
CLO2	Understand network access and segmentation techniques, including VLANs
CLO3	Understand network routing and switching using Cisco Devices
CLO4	Understand various services in an IP network, including DNS and DHCP
CLO5	Understand key network security concepts, including L2, L3, and WLAN Security

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	Basic Network Connectivity and Communications	Reading Class discussion Research	Quiz Exam	CLO1
TO2	Ethernet Concepts	Reading Class discussion Research	Quiz Exam	CLO1, CLO3
TO3	Communicating Between Networks	Reading Class discussion Research	Quiz Exam	CLO3

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO4	IP Addressing	Reading Class discussion Research	Quiz Exam	CLO1, CLO3, CLO4
TO5	Network Applications Communications	Reading Class discussion Research	Quiz Exam	CLO1, CLO4,
TO6	Building and Securing a Small Network	Reading Class discussion Research	Quiz Exam	CLO3, CLO4, CLO5
TO7	Switching Concepts and VLANs	Reading Class discussion Research	Quiz Exam	CLO2, CLO3
TO8	Redundant Networks	Reading Class discussion Research	Quiz Exam	CLO1, CLO4
TO9	Available and Reliable Networks	Reading Class discussion Research	Quiz Exam	CLO1, CLO4
TO10	L2 Security and WLANs	Reading Class discussion Research	Quiz Exam	CLO1, CLO2, CLO5
TO11	Routing Concepts and Configuration	Reading Class discussion Research	Quiz Exam	CLO3

12. Methods of Instruction

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

- a. Class Lecture
- b. Discussion
- c. Demonstrations
- d. Labs
- e. Online presentations, online activities, and assessments.

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 Yes

Related Course CL01-CL05
Learning Outcome

Related Outline TO1-TO11
Component

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

N/A

Information Literacy Yes

Related Course CL01-CL05
Learning Outcome

Related Outline TO1-TO11
Component

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

N/A

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course CL01-CL05

Learning Outcome

Related Outline TO1-TO11

Component

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

N/A

14. Needs

Instructional

Materials (text

etc.):

Appropriate textbook(s) will be selected. Please contact the department for current adoptions.

Technology Needs:

N/A

Human Resource

Needs (Presently

Employed vs. New

Faculty):

N/A

Facility Needs:

N/A

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.

16. Board Approval

History of Board

approval dates

Board of Trustees Approval Date: March 17, 2023

Reviewer

Comments

Key: 2275

EXHIBIT B-10

Date Submitted: 06/03/24 10:58 am

Viewing: **CSIT 244 : Digital Forensics**

Fundamentals

Last approved: 04/10/23 3:04 pm

Last edit: 06/03/24 10:58 am

Changes proposed by: Cynthia Fallon (cfallon)

Catalog Pages
referencing this
course

[Computer Science/ Information Technology_\(CSIT\)](#)

Programs
referencing this
course

[AAS.CS.CY: Computer Science/Informational Technology - Option in
Cybersecurity, Associate in Applied Science](#)

Learning Outcomes
Display (show only)

In Workflow

1. STEM Academic Administrator
2. STEM Dean
3. Executive Director of Curriculum and Program Development
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. Cabinet
8. President
9. Board of Trustees Chair
10. STEM Academic Administrator
11. Colleague

Approval Path

1. 06/03/24 12:11 pm
Cynthia Fallon (cfallon): Approved for STEM Academic Administrator
2. 06/04/24 12:35 pm
Sylvia Riviello (sriviello): Approved for STEM Dean
3. 06/04/24 2:29 pm
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

- Program Development
- 4. 06/14/24 11:59 am
Caroline Brittain (cbrittain):
Approved for Curriculum Committee Chair
- 5. 06/24/24 11:04 am
Donna Rosinski-Kauz (drosinski-kauz): Approved for Senate Chair

History

- 1. Apr 10, 2023 by Joseph Brickley (jbrickley)

1. Course Information

Subject	CSIT - Computer Science/ Information Technology
School	Science, Technology, Engineering, Mathematics
Course Title	Digital Forensics Fundamentals

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the online catalog

This course introduces the methodology and procedures associated with digital forensic analysis. The objective of this class is to emphasize the fundamentals and importance of digital forensics. Students will learn different techniques and procedures that enable them to perform a digital investigation. This course focuses mainly on the analysis of physical storage media and volume analysis. It covers the major phases of digital investigation such as preservation, analysis and acquisition of artifacts that reside in hard disks and random-access memory.

4. Requisites

Prerequisites

None ~~CSIT 165 and CSIT 184~~

Corequisites

5. Course Type

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need

for this course

This course provides the required training in Cybersecurity programs of study and helps students prepare for the fundamental of digital forensics.

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

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	County College of Morris
Course Title	Digital Forensic
Course Number	CMP 160
Number of Credits	3
Comments	

Institution	Middlesex County College
Course Title	Computer Forensics

Course Number CSC 258

Number of Credits 3

Comments

Institution Brookdale CC

Course Title Computer Forensics and Investigation

Course Number NETW 236

Number of Credits 3

Comments

Institution Camden County College

Course Title Digital Forensics & Investigation

Course Number CST 210

Number of Credits 3

Comments

Institution Essex County College

Course Title Computer & Internet Forensics

Course Number CSC 230

Number of Credits 3

Comments

Institution Passaic County CC

Course Title Computer Forensics and Investigation

Course Number CIS 289

Number of Credits 3

Comments

Institution Raritan Valley CC

Course Title Privacy, Ethics, & Computer Forensics

Course Number NTWK 274

Number of Credits 3

Comments

Institution Rowan College of South Jersey

Course Title Computer Forensics

Course Number CS 241

Number of Credits 3

Comments

Institution Union County College

Course Title Digital Forensics Essentials

Course Number CST 170

Number of Credits 3

Comments

Transferability of Course

Georgian Court
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
EC Elective Credit, 3	Elective	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
TECHX1003, 3	Technology Elective	

Monmouth
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
FE0001 100-level Free Elective 3	Elective	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CST 03252, Foundations of Computer Forensics, 3	Required	

Rutgers - New
Brunswick, Mason
Gross School of the
Arts

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CSISEC, Computer Science & Info Systems Elective, 3	Computer Science 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 Discuss the fundamental concepts of computer forensics, digital evidence, forensic readiness, identify the roles and responsibilities of a forensic investigator and review legal compliance issues in computer forensics.
- CLO2 Examine the computer forensic investigation process and its phases.
- CLO3 Describe different disk drives, characteristics, and logical structure, understand Windows, Linux, and Mac boot processes, and examine various file systems and formats.
- CLO4 Discuss data acquisition concepts, types, format, and methodology.
- CLO5 Examine various anti-forensics techniques and identify countermeasures.
- CLO6 Examine various volatile and non-volatile information gathering techniques for Windows, Linux, and Mac systems, including Windows memory and registry analysis, cache, cookie, history analysis, and metadata investigation.
- CLO7 Explain network forensics fundamentals, event correlation, and perform network traffic investigation.
- CLO8 Appraise web server logs and perform web application forensics to detect and investigate various attacks on web applications.
- CLO9 Discuss malware forensics fundamentals, list and perform different types of malware analysis.

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	1. Fundamentals of Computer Forensics 2. Digital Evidence 3. Forensic Readiness 4. Roles and Responsibilities of a Forensic Investigator 5. Legal Compliance in Computer Forensics	Reading, Class discussion	Quiz/ Exam	CLO1, CLO2

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO2	<ol style="list-style-type: none"> 1. Forensic Investigation Process and its Importance 2. Forensic Investigation Process - Pre-investigation Phase 3. Forensic Investigation Process - Investigation Phase 4. Forensic Investigation Process - Post-investigation Phase 	Reading, Class discussion	Quiz/ Exam	CLO3
TO3	<ol style="list-style-type: none"> 1. Different Types of Disk Drives and their Characteristics 2. Logical Structure of a Disk 3. Booting Process of Windows, Linux, and Mac Operating Systems 4. File Systems of Windows, Linux, and Mac Operating Systems 5. File System Examination 	Reading, Class discussion	Quiz/ Exam	CLO2, CLO3
TO4	<ol style="list-style-type: none"> 1. Data Acquisition Fundamentals 2. Types of Data Acquisition 3. Data Acquisition Format 4. Data Acquisition Methodology 5. Anti-forensics and its Techniques 6. Anti-forensics Countermeasures 	Reading, Class discussion	Quiz/ Exam	CLO4, CLO5

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO5	<ol style="list-style-type: none"> 1. Volatile and Non-Volatile Information 2. Windows Memory and Registry Analysis 3. Cache, Cookie, and History Recorded in Web Browsers 4. Windows Files and Metadata 5. Volatile and Non-Volatile Data in Linux 6. Memory Forensics 7. Mac Forensics 	Reading, Class discussion	Quiz/ Exam	CLO4, CLO5
TO6	<ol style="list-style-type: none"> 1. Network Forensics Fundamentals 2. Event Correlation Concepts and Types 3. Identify Indicators of Compromise (IoCs) from Network Logs 4. Investigate Network Traffic 5. Web Application Forensics 6. IIS and Apache Web Server Logs 	Reading, Class discussion	Quiz/ Exam	CLO5, CLO6
TO7	<ol style="list-style-type: none"> 1. Investigating Web Attacks on Windows-based Servers 2. Detect and Investigate Attacks on Web Applications 3. Dark Web 4. Dark Web Forensics 5. Tor Browser Forensic 	Reading, Class discussion	Quiz/ Exam	CLO6, CLO7

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO8	1. Email Basics 2. Email Crime Investigation and its Steps 3. Malware, its Components and Distribution Methods 4. Malware Forensics Fundamentals 5. PowerShell Scripts	Reading, Class discussion	Quiz/ Exam	CLO7, CLO8, CLO6
TO9	1. Recognize Types of Malware Analysis 2. Static Malware Analysis 3. Analyze Suspicious Word Documents 4. Dynamic Malware Analysis 5. System Behavior Analysis 6. Network Behavior Analysis 7. Communication	Reading, Class discussion	Quiz/ Exam	CLO8, CLO9

12. Methods of Instruction

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

Class lecture, presentations, discussions, lab assignments/exercises, case studies and projects.

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

Information

Communication-Written and Oral Yes

Related Course CLO1-CLO9

Learning Outcome

Related Outline TO1-TO9

Component

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

N/A

Quantitative Knowledge and Skills

Scientific Knowledge and Reasoning

Technological Competency Yes

Related Course CLO1-CLO9

Learning Outcome

Related Outline TO1-TO9

Component

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

N/A

Information Literacy Yes

Related Course CLO1-CLO9

Learning Outcome

Related Outline TO1-TO9

Component

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

N/A

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.):

Text: Appropriate textbook(s) will be selected. Please contact the department for current adoptions.

Technology Needs:

N/A

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

N/A

Facility Needs:

N/A

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.

16. Board Approval

History of Board
approval dates

Board of Trustees Approval Date: March 17, 2023

Reviewer

Comments

Key: 2280

EXHIBIT B-11

Date Submitted: 05/31/24 2:08 pm

Viewing: **HEHP 100 : Aerobic Conditioning**

Last approved: 06/09/21 12:18 pm

Last edit: 06/03/24 9:33 am

Changes proposed by: Katherine Toy (ktoy)

Catalog Pages

referencing this course

[Health and Human Performance \(HEHP\)](#)

Programs

referencing this course

[CT.EXER: Exercise Science, Certificate of Proficiency](#)

Learning Outcomes

Display (show only)

In Workflow

1. **BS Academic Administrator**
2. **BS Dean**
3. **Executive Director of Curriculum and Program Development**
4. **Curriculum Committee Chair**
5. **Senate Chair**
6. **Vice President of Academic Affairs**
7. Cabinet
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 05/31/24 2:32 pm
Tracey Taylor (ttaylor): Approved for BS Academic Administrator
2. 06/03/24 9:33 am
Rosann Bar (rbar): Approved for BS Dean
3. 06/03/24 10:33 am
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

- Program Development
- 4. 06/14/24 11:59 am
Caroline Brittain (cbrittain):
Approved for Curriculum Committee Chair
- 5. 06/24/24 11:04 am
Donna Rosinski-Kauz (drosinski-kauz): Approved for Senate Chair

History

- 1. Jun 9, 2021 by soconnor

1. Course Information

Subject HEHP - Health and Human Performance
 School Business and Social Sciences
 Course Title Aerobic Conditioning

2. Hours

Semester Hours	1.00000
Lecture	0.00
Lab	2.00
Practicum	0.00

3. Catalog Description

For display in the online catalog

This course is an introduction to the physiological concepts of cardiovascular components of fitness. A variety of training techniques will be explored including This course is an aerobic conditioning program that utilizes jogging, power walking, stationary cycling, ellipticals.

~~steppers, elliptical~~, treadmills, and rhythmic exercise to promote lifetime participation. ~~exercise;~~
~~and calisthenics.~~

4. Requisites

Prerequisites

None

Corequisites

None

5. Course Type

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

6. Justification

Describe the need
 for this course

HEHP 100 Aerobic conditioning gives individual students the opportunity to continue their exercise programs and expand their knowledge. Students interested ~~enrolled~~ in Exercise Science and enrolled in General Studies – Health and Physical Education Concentration would be able to both continue their personal strength development and increase their knowledge of human physiology.

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:

Elective

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 Creatively and engagingly present the most current and relevant training (Vision Statement).
- 2 Provide high quality academic instruction, advisement, and enrichment activities that inspire success in students through instruction from experts on the field (Mission statement).
- 3 Deliver innovative instruction on health and well-being necessary to confront the challenges facing individuals, families, and communities. (Master Plan).

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Bergen CC
Course Title	Aerobic Conditioning
Course Number	WEX111
Number of Credits	1
Comments	

Institution	Raritan Valley CC
Course Title	Concepts of Aerobic Conditioning
Course Number	FITN132
Number of Credits	1
Comments	

Transferability of Course

Georgian Court
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
GENED (GENERAL ED), 1 credit	General Ed	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
PED1130 (AEROBIC DANCING), 1 credit	Aerobic Dancing	

Monmouth
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
PE001 (LIFETIME SPORTS), 1 credit	Lifetime Sports	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
INTR99070 (FREE ELECTIVE), 1 credit	Elective	

Rutgers - New
Brunswick, Mason
Gross School of the
Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Will not transfer

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
TRCREC (ELECTIVE TRANS CREDIT), 1 credit	Elective	

If not transferable
to any institution,
explain:

NJtransfer indicates Rutgers – New Brunswick does not accept transfer credit for this course.

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:

CLO1	Display a high level of aerobics fitness (measured by physical fitness and testing).
CLO2	Use the proper techniques for each of the various aerobic fitness methods.
CLO3	<u>Explain the body's physiological response to aerobic training.</u> Develop an individualized, personal, comprehensive aerobic fitness program.
<u>CLO4</u>	<u>Explore the health benefits that aerobic fitness can have on an individual's health status.</u>
<u>CLO5</u>	<u>Develop an individualized, personal, comprehensive aerobic fitness program.</u>

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	Walking	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3
TO2	Aerobic dance	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3
TO3	Jogging/Treadmills	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO4	Cross country running/Skiing	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3
TO5	Cycling/Stationary bikes	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3
TO6	Rope jumping	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3
TO7	Rowing	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3
TO8	Rhythmic and continuous activities	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3
TO9	Swimming	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3
TO10	Skating (roller and ice)	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3

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Course Inventory Management

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO11	Rebound running (mini tramps)	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3
TO12	Elliptical and steppers	Reading Class discussion Group work Guest Lectures	Quiz on reading Graded oral presentation of project Test Research paper	CLO1, CLO2, <u>CLO3, CLO4,</u> <u>CLO5</u> CLO3

12. Methods of Instruction

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

- o Practical skill development and assessment
- o Lecture
- o Group work
- o Student presentations
- o Guest speakers

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 Yes

Related Course CLO1, CLO2, CLO3, CLO4, CLO5

Learning Outcome ~~CLO3~~

Related Outline TO1 - TO12

Component

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

Test

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course CLO1, CLO2, CLO3, CLO4, CLO5

Learning Outcome ~~CLO3~~

Related Outline TO1 - TO12

Component

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

Test

14. Needs

Instructional

Materials (text
etc.):

An appropriate text and/or open educational resources will be selected. Contact the department for current adoptions.

Technology Needs:

N/A

Human Resource

Needs (Presently
Employed vs. New
Faculty):

N/A

Facility Needs:

N/A

Library needs:

Research Material in the College Library

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

6/24/24, 1:47 PM

Course Inventory Management

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: November 5, 2020

Reviewer
Comments

Key: 881

EXHIBIT B-12

Date Submitted: 05/31/24 2:12 pm

Viewing: **HEHP 101 : Weight Training and Body Building**

Last approved: 06/09/21 12:18 pm

Last edit: 06/03/24 9:31 am

Changes proposed by: Katherine Toy (ktoy)

Catalog Pages
referencing this
course

[Health and Human Performance \(HEHP\)](#)

Programs
referencing this
course

[CT.EXER: Exercise Science, Certificate of Proficiency](#)

Learning Outcomes
Display (show only)

In Workflow

1. **BS Academic Administrator**
2. **BS Dean**
3. **Executive Director of Curriculum and Program Development**
4. **Curriculum Committee Chair**
5. **Senate Chair**
6. **Vice President of Academic Affairs**
7. Cabinet
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 05/31/24 2:33 pm
Tracey Taylor (ttaylor): Approved for BS Academic Administrator
2. 06/03/24 9:32 am
Rosann Bar (rbar): Approved for BS Dean
3. 06/03/24 10:34 am
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

- Program Development
- 4. 06/14/24 11:59 am
Caroline Brittain (cbrittain): Approved for Curriculum Committee Chair
- 5. 06/24/24 11:04 am
Donna Rosinski-Kauz (drosinski-kauz): Approved for Senate Chair

History

- 1. Jun 9, 2021 by soconnor

1. Course Information

Subject HEHP - Health and Human Performance
 School Business and Social Sciences
 Course Title Weight Training and Body Building

2. Hours

Semester Hours	1.00000
Lecture	0.00
Lab	2.00
Practicum	0.00

3. Catalog Description

For display in the online catalog

This course is an introduction to ~~designed for students whose primary interest is learning~~ the concepts ~~principles~~ of weight training ~~strength~~ and basic physiology and science behind

effective strength conditioning and muscular development to promote lifetime participation.

body-shaping: A variety of proper training and spotting techniques will be examined.

4. Requisites

Prerequisites

None

Corequisites

None

5. Course Type

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

6. Justification

Describe the need
for this course

HEHP 101 Weight Training and Body Building gives individual students the opportunity to continue their exercise programs and expand their knowledge. Students interested **enrolled** in Exercise Science and enrolled in General Studies – Health and Physical Education Concentration would be able to both continue their personal strength development and increase their knowledge of human physiology. This course can be used towards HEHP requirements by Ocean County College students seeking to transfer to Kean @ Ocean in the Physical Education/Exercise Science and Physical Education and Health Teacher Certification programs.

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:

Elective

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	Creatively and engagingly present the most current and relevant training (Vision Statement).
2	Provide high quality academic instruction, advisement, and enrichment activities that inspire success in students through instruction from experts on the field (Mission statement).
3	Deliver innovative instruction on health and well-being necessary to confront the challenges facing individuals, families, and communities. (Master Plan).

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Brookdale CC
Course Title	Weight Training
Course Number	FITN167
Number of Credits	1
Comments	

Institution	Mercer County CC
Course Title	N/A
Course Number	
Number of Credits	
Comments	

Institution Atlantic Cape CC
 Course Title N/A
 Course Number
 Number of Credits
 Comments

Transferability of Course

Georgian Court
 University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
GENED (GENERAL ED), 1 credit	General Education	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
PED1011 (STRENGTH FITNESS), 1 credit	Strength Fitness	

Monmouth
 University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
PE001 (LIFETIME SPORTS), 1 credit	Lifetime Sports	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
INTR99070 (FREE ELECTIVE), 1 credit	Elective	

Rutgers - New
 Brunswick, Mason

Gross School of the
Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Will not transfer

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
TRCREC (ELECTIVE TRANS CREDIT), 1 credit	Elective	

If not transferable
to any institution,
explain:

NJtransfer indicates that the course is not transferable to Rutgers New Brunswick

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:

CLO1	Develop the ability to solve problems by collecting, organizing, and evaluating information.
CLO2	Develop the understanding of health and well-being necessary to confront the challenges facing individuals, families, and communities.
CLO3	Gain strength through resistance training and weight lifting.
CLO4	Develop and demonstrate proper techniques for weight lifting.
CLO5	Develop an individualized, written, comprehensive weight-training program.
CLO6	Demonstrate knowledge and basic skills levels of weight training and bodybuilding for lifetime physical activity/social and recreational enrichment.
<u>CLO7</u>	<u>Explain the body's physiological response to strength training.</u>

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	Skeletal muscles and joint actions	Activity Group work Student presentations Guest speakers	Exam	CLO1, <u>CLO2</u> , <u>CLO7</u> CLO2
TO2	Applying the overload principle	Activity Group work Student presentations Guest speakers	Exam	CLO1, <u>CLO2</u> , <u>CLO7</u> CLO2
TO3	Pre-training considerations	Activity Group work Student presentations Guest speakers	Exam	CLO1, CLO2
TO4	Basic lifts with barbells and dumbbells	Activity Group work Student presentations Guest speakers	Exam	CLO3 - <u>CLO7</u> CLO6
TO5	Alternate lifts for body building	Activity Group work Student presentations Guest speakers	Exam	CLO3 - <u>CLO7</u> CLO6
TO6	Long range training programs	Activity Group work Student presentations Guest speakers	Exam	CLO3, CLO5, <u>CLO6</u> , <u>CLO7</u> CLO6
TO7	Exercising without special equipment	Activity Group work Student presentations Guest speakers	Exam	CLO3, CLO5, CLO6
TO8	Strength training	Activity Group work Student presentations Guest speakers	Exam	CLO3 - <u>CLO7</u> CLO6
TO9	Competitive lifting, power lifting, Olympic	Activity Group work	Exam	CLO3 - <u>CLO7</u> CLO6

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	weightlifting cyclical training or per iodization	Student presentations Guest speakers		

12. Methods of Instruction

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

- Activity
- Group work
- Student presentations
- Guest speakers

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 Yes

Related Course CLO1 - CLO6
Learning Outcome

Related Outline T01 - T09
Component

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

Test

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course CLO1 - ~~CLO7~~ ~~CLO6~~
Learning Outcome

Related Outline TO1 - TO9
Component

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

Test

14. Needs

Instructional
Materials (text
etc.):

An appropriate text and/or open educational resources will be selected. Contact the department for current adoptions.

Technology Needs:

N/A

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

N/A

Facility Needs:

N/A

Library needs:

Research Material in the College Library

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.

16. Board Approval

History of Board
approval dates

Board of Trustees Approval Date: March 7, 2008

Board of Trustees Approval Date: March 26, 2012

PLT Approval of Form: May 22, 2012

Board of Trustees Approval Date: November 5, 2020

Reviewer

Comments

Key: 882

EXHIBIT B-13

Date Submitted: 05/31/24 2:13 pm

Viewing: **HEHP 237 : Sports Officiating**

Last approved: 06/09/21 11:24 pm

Last edit: 05/31/24 2:13 pm

Changes proposed by: Katherine Toy (ktoy)

Catalog Pages
referencing this
course

[Health and Human Performance \(HEHP\)](#)

Learning Outcomes
Display (show only)

In Workflow

1. BS Academic Administrator
2. BS Dean
3. Executive Director of Curriculum and Program Development
4. Curriculum Committee Chair
5. Senate Chair
6. Vice President of Academic Affairs
7. Cabinet
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 05/31/24 2:34 pm
Tracey Taylor (ttaylor): Approved for BS Academic Administrator
2. 06/03/24 9:30 am
Rosann Bar (rbar): Approved for BS Dean
3. 06/03/24 10:34 am
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

Program
Development
4. 06/14/24 11:59 am
Caroline Brittain
(cbrittain):
Approved for
Curriculum
Committee Chair
5. 06/24/24 11:04 am
Donna Rosinski-
Kauz (drosinski-
kauz): Approved for
Senate Chair

History

1. Jun 9, 2021 by
soconnor

1. Course Information

Subject	HEHP - Health and Human Performance
School	Business and Social Sciences
Course Title	Sports Officiating

2. Hours

Semester Hours	3.00000
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

This is an elective course designed to teach students and adults in the community the rules and regulations for specific sports and how to apply them in games. Current rules changes will be

reviewed and discussed, as well as the psychology of officiating, responsibilities of the official, game control techniques, and issues faced by sports officials.

4. Requisites

Prerequisites

None

Corequisites

None

5. Course Type

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need

for this course

This course is designed to serve as an elective for many students choosing to major in a sports-related field. This course will also serve to enhance the level of sports officials within the local community and assist struggling leagues with finding officials. It will prepare students for certification to officiate the sports covered within the course and assist them in earning extra money as a part-time official.

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:

Elective

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	Creatively and engagingly present the most current and relevant training (Vision Statement).
2	Provide high quality academic instruction, advisement, and enrichment activities that inspire success in students through instruction from experts on the field (Mission statement).
3	Seek 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

Transferability of Course

Georgian Court
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
EXSCIEC (EXERCISE SCIENCE ELECTIVE), 3 credits	Elective	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
PEDX1003" PHYSICAL EDUC FREE ELECTIVE), 3 credits	Elective	

Monmouth
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
FE001 (100 LEVEL FREE ELECTIVE), 3 credits	Elective	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
PHED35205 (TCHG CONCEPTS TEAM SPORTS), 3 credits	Teaching Concepts of Sports Teams	

Rutgers - New Brunswick, Mason Gross School of the Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Will not transfer

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
TRCREC00 (ELECTIVE TRANS CREDIT), 3 credits	Elective	

If not transferable to any institution, explain:

NJTransfer indicates the course is not transferable to Rutgers New Brunswick

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:

- CLO1 Demonstrate orally or in writing sufficient knowledge of the rules in certain athletic contests.
- CLO2 Demonstrate competent officiating techniques as well as exhibit required mechanics of officiating the sport.
- CLO3 Improve spectator, coach, and participants conduct through identification of the rules and the psychological aspects of officiating.
- CLO4 Describe the rights and responsibilities of spectators, coaches, and participants, and illustrate how to react in an undesirable situation.
- CLO5 Develop an officiating style and philosophy that reflects the important link between fitness and good officiating.

Students who successfully complete this course will be able to:

CLO6 Take the certification test in a specific sport or enumerate the certification requirements.

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 Officiating	Reading Class discussion	Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO3, CLO5
TO2	Building a Sports Officiating Career	Reading Class discussion	Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO2
TO3	Developing an Officiating Style (Part 1)	Reading Class discussion	Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO3, CLO4
TO4	Developing an Officiating Style (Part 2)	Reading Class discussion	Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO3, CLO4
TO5	Developing an Officiating Style (Part 3)	Reading Class discussion	Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO3, CLO4
TO6	Getting Fit to Officiate	Reading Class discussion	Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO5
TO7	Managing Professional Responsibilities	Reading Class discussion	Course discussion and participation, official	CLO4

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO8	Successful Sports Officiating and Exam	Reading Class discussion	evaluations, assignments, quizzes, and exams Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO2, CLO6
TO9	FIFA Laws of the Games (Soccer Rules)	Reading Class discussion	Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO1, CLO3
TO10	NCAA Basketball Rules	Reading Class discussion	Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO1, CLO3
TO11	NCAA Softball Rules	Reading Class discussion	Course discussion and participation, official evaluations, assignments, quizzes, and exams	CLO1, CLO3
<u>TO12</u>	<u>NCAA Volleyball Rules</u>	<u>Reading</u> <u>Class discussion</u>	<u>Course discussion and participation, official evaluations, assignments, quizzes, and exams</u>	<u>CLO1, CLO3</u>

12. Methods of Instruction

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

Practical skill development and assessment

- Lecture and laboratory practice.
- Printed texts and planned non-print media.
- Movies and clips dealing with officiating of sports.
- Self-assessment and official assessment portfolio.

- PowerPoint presentations.
- Guest speakers-local as well as professional officials when possible

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

Information

Communication-Written and Oral Yes

Related Course CLO1

Learning Outcome

Related Outline TO8

Component

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

Quiz on reading

Graded oral presentation of project

Test

Research paper

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 Yes

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

Learning Outcome CLO6

Related Outline TO1 - TO12 ~~TO11~~

Component

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

Quiz on reading

Graded oral presentation of project

Test

Research paper

14. Needs

Instructional

Materials (text

etc.):

An appropriate text and/or open educational resources will be selected. Contact the department for current adoptions.

Technology Needs:

Human Resource

Needs (Presently

Employed vs. New

Faculty):

Facility Needs:

Library needs:

Research Material in the College Library: N/A

a. Guides dealing with individual sports.

b. Rule books dealing with individual sports.

- c. Casebooks and officiating handbooks dealing with individual sports.
- d. Sports officiating equipment (flags, whistles, etc.).

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.

16. Board Approval

History of Board

approval dates

Board of Trustees Approval Date: March 7, 2008

Board of Trustees Approval Date: March 26, 2012

PLT Approval of Form: May 22, 2012

Board of Trustees Approval Date: November 5, 2020

Reviewer

Comments

EXHIBIT B-14

Date Submitted: 05/31/24 2:21 pm

Viewing: **HEHP 266 : Exercise and Health Counseling**

Last approved: 06/09/21 11:24 pm

Last edit: 05/31/24 2:21 pm

Changes proposed by: Katherine Toy (ktoy)

Catalog Pages
referencing this
course

[Health and Human Performance \(HEHP\)](#)

Programs
referencing this
course

[CT.EXER: Exercise Science, Certificate of Proficiency](#)

[CT.NUTR: Nutrition, Certificate of Proficiency](#)

Learning Outcomes
Display (show only)

In Workflow

1. **BS Academic Administrator**
2. **BS Dean**
3. **Executive Director of Curriculum and Program Development**
4. **Curriculum Committee Chair**
5. **Senate Chair**
6. **Vice President of Academic Affairs**
7. Cabinet
8. President
9. Board of Trustees Chair
10. BS Academic Administrator
11. Colleague

Approval Path

1. 05/31/24 2:36 pm
Tracey Taylor (ttaylor): Approved for BS Academic Administrator
2. 06/03/24 9:29 am
Rosann Bar (rbar): Approved for BS Dean
3. 06/03/24 10:34 am
James Marshall (jmarshall): Approved for Executive Director of Curriculum and

- Program Development
- 4. 06/14/24 11:59 am
Caroline Brittain (cbrittain):
Approved for Curriculum Committee Chair
- 5. 06/24/24 11:04 am
Donna Rosinski-Kauz (drosinski-kauz): Approved for Senate Chair

History

- 1. Jun 9, 2021 by soconnor

1. Course Information

Subject	HEHP - Health and Human Performance
School	Business and Social Sciences
Course Title	Exercise and Health Counseling

2. Hours

Semester Hours	3.00000
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the online catalog

This is a personal trainer certification course designed to develop and enhance clinical and practical fitness assessment and performance skill. The student will learn to properly screen and evaluate individuals for safe participation in an exercise program, **program**; design and

implement exercise prescriptions for multiple populations, **populations**; and apply principles of exercise in a personal training environment. Students may earn their Certified Personal Trainer credentials **A personal training certification is available through the National Council of Strength and Fitness** upon successful completion of a nationally recognized certification exam. **course requirements: It is highly recommended that students who enroll in this course have completed HEHP 228, HEHP 239, and HEHP 188 or HEHP 252.**

4. Requisites

Prerequisites

None

Corequisites

None

5. Course Type

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

6. Justification

Describe the need
 for this course

Employment of healthcare occupations is projected to grow 18 percent from 2016 to 2026, adding about 2.4 million new jobs. Healthcare occupations are projected to add more jobs than any of the other occupational groups. This projected growth is mainly due to an aging population, leading to greater demand for healthcare services (Bureau of Labor Statistics, 2018).

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:

Elective

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

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution Brookdale CC

Course Title

Course Number

Number of Credits

Comments

None

Institution Mercer County CC

Course Title Exercise Measurement and Prescription

Course Number HPE 242

Number of Credits 3

Comments
(2 lecture hours/ 3 laboratory hours)

Institution Middlesex County College

Course Title

Course Number

Number of Credits

Comments
None

Institution Atlantic Cape CC

Course Title

Course Number

Number of Credits

Comments
None

Transferability of Course

Georgian Court
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
EXSCIEC (Exercise Science Elective), 3 credits	Elective	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
		Will not transfer

Monmouth University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
HE001 (100 Level Health Elect), 3 credits	Elective	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
PHED35075 (GE Health PE/HES ELCT)	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
		Will not transfer

If not transferable to any institution, explain:

This course has not yet been evaluated by Rutgers—New Brunswick, School of Arts & Sciences or Stockton University.

This or a similar course is not currently offered by Brookdale Community College Middlesex County College, or Atlantic Cape Community College.

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:

CLO1	Identify health risks that may require physician release for physical activity.
CLO2	Explain the effect of exercise on the human body.
CLO3	Demonstrate the knowledge and ability to instruct proper technique.
CLO4	Explain the function of the different energy systems.
CLO5	Teach progressive resistance training principles.
CLO6	Demonstrate an understanding of exercise prescription and health promotion principles.
CLO7	Demonstrate emergency preparedness and procedures in the event of an accident.
CLO8	Identify materials and resources for continued education and instructor development.

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	Anatomy and Structure a. Skeletal anatomy b. Muscular anatomy	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO4, CLO7
TO2	Biomechanical Terms and Application a. Joint structure b. Spinal review	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO4, CLO7
TO3	Types of Warm-ups a. Functional concepts b. Functional design	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO3
TO4	Flexibility Assessment a. Physiology of assessment b. Flexibility training techniques	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO3
TO5	Health Screening assessment	Reading assignment, class discussion, or writing	Quiz, exam, activity, assignment, project,	CLO1, CLO6, CLO8

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	a. Blood pressure factors b. Cardiac structural identification	component	paper, or presentation	
TO6	Health Appraisal Protocols a. Health status questionnaire b. Case study interpretation	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO1, CLO6, CLO8
TO7	Health Behavior Evaluation a. Behavior form review b. Medical release	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO1, CLO8
TO8	Cardio respiratory Fitness a. Assessment overview b. Fitness components	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO4
TO9	Sub maximal Testing a. Preparation checklist b. Types of sub maximal testing	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO6, CLO8
TO10	Aerobic Exercise Prescription a. Physiologic adaptations b. Aerobic training principles	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO2
TO11	Anaerobic Exercise Prescription a. Muscular strength and endurance b. Rationale for resistance training	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO5
TO12	Function Resistance Training a. Traditional vs. functional training	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO5

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO13	b. Functional training programming Assessing Body Composition a. Defining body composition b. Overview of assessment techniques	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO6
TO14	Metabolic and Nutritional Assessment a. Energy balance b. Nutrient considerations	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO6, CLO8
TO15	Recommendations for Weight Loss a. Factors affecting weight loss b. Goal establishment	Reading assignment, class discussion, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO2, CLO8

12. Methods of Instruction

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

- Practical skill development and assessment
- Lecture
- Cooperative education
- Video
- Practical demonstration with skeleton and models.

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 Yes

Related Course CLO1, CLO4, CLO6

Learning Outcome

Related Outline TO1, TO2, TO5, TO8, TO11, TO13-
Component TO15

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

Quiz, exam, activity, assignment, project, paper, or presentation

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course CLO1-CLO8

Learning Outcome

Related Outline TO3- TO7, TO9, TO11, TO12

Component

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

Quiz, exam, activity, assignment, project, paper, or presentation

14. Needs

Instructional
Materials (text
etc.):

An appropriate textbook will be selected. Please contact the Department Office for current adoptions.

Technology Needs:

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

Facility Needs:

Library needs:

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.

16. Board Approval

History of Board

approval dates

Board of Trustees Approval Date: March 7, 2008

Board of Trustees Approval Date: March 26, 2012

Board of Trustees Approval Date: July 26, 2018

Reviewer

Comments

Key: 927

EXHIBIT B-15

Course Change Request

A deleted record cannot be edited

Course Inactivation Proposal

Date Submitted: 06/03/24 3:24 pm


Viewing: **EDUC 278 : Teaching Profession Practicum**

Last approved: 04/29/21 4:00 am

Last edit: 06/03/24 3:24 pm

Changes proposed by: James Marshall (jmarshall)

Justification for this inactivation request [Course has run once since 2019 \(Spring 2020\). It was recommended for inactivation by the Program Chair and the department has no plans to offer it.](#)

Learning Outcomes [AA.LA.EDUC: Education, Associate in Arts](#) 

Display (show only) PLO 5: Demonstrate writing skills when detailing the clinical observation experience by providing both a reflective narration and clinical report of what was observed.

1. Course Information

Subject	EDUC - Education
School	Business and Social Sciences
Course Title	Teaching Profession Practicum

2. Hours

Semester Hours	2.00000
Lecture	1.00
Lab	0.00
Practicum	4.00

3. Catalog Description

For display in the online catalog This course will engage students in 60 hours of observation and reflection as required by the NJ Department of Education for sophomore field experience. The practicum will team the student with a certified teacher; while the coursework will apply skill sets observed and taught through the semester. Students will create a teaching portfolio that will serve as a basis for future reference.

4. Requisites

Prerequisites	Permission of Instructor
Corequisites	None

5. Course Type

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

Describe the need for this course This course will fulfill the NJ Department of Education's required 50 observation hours mandated for students in their second year of college and intent on entering the field of Education. This field experience will be documented through both an observation log and a reflection journal. Students enrolling in this class should have a GPA of 3.0 or better.

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:

Elective

8. Consistency with the Vision and Mission Statements, the Academic Master Plan, and the strategic initiative

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

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

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution Brookdale CC
 Course Title Education Field Experience
 Course Number EDUC 199
 Number of Credits 3
 Comments Separate observation component of 60 hours for no credits

Institution County College of Morris
 Course Title Behavioral Observation in Education
 Course Number EDUC 211
 Number of Credits 3
 Comments

Institution Raritan Valley CC
 Course Title Education Field Experience
 Course Number EDUC 230
 Number of Credits 3
 Comments Raritan offers an AA in Education. This would suffice the Grades 5-8 teaching candidate.

Institution Mercer County CC

Course Title Education Field Experience
 Course Number EDU 210
 Number of Credits 3
 Comments

Institution Atlantic Cape CC
 Course Title Early Childhood Practicum
 Course Number EDU 252
 Number of Credits 3
 Comments

Transferability of Course

Institution	Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
Georgian Court University	3105 Introduction to Inclusive Education (includes 60-hour clinical experience) (3 credits) 3302 Inclusive Early Childhood Curriculum and Assessment (includes 60-hour clinical experience) (3 credits)	Elective Credit	
Kean University	SPED2120"K3" (INTRO FLD EXP SPED) (3 credits) EMSE 2800 Intro. Field Exp. K~ 6 (3 credits)	Major	
Monmouth University	EDU 250, Foundations of Teaching and Learning, 3 credits		Will not transfer
Rowan University			Will not transfer
Rutgers - New Brunswick, Mason Gross School of the Arts	05300200 (EXPLORING TEACHING AS A PROFESSION) 3 Credits	Major	
Stockton University	EDUC 1515 Diversity in Fam, School & Community 4 credits	Stockton accepts our EDUC 175 course content; however it has not accepted the 50 hours of classroom observation mandated by the state.	Will not transfer

If not transferable to any institution, explain:

10. Course Learning Outcomes

Learning Outcomes

Students who successfully complete this course will be able to:	
CLO1	Distinguish key components of a professional resume.
CLO2	Delineate key aspects of creating a productive learning environment.
CLO3	Develop grade appropriate rules for classroom management.
CLO4	Identify and create strategies for developing classroom procedures.
CLO5	Provide examples of appropriate strategies for use with disaffected students.
CLO6	Identify the key aspects of creating an instructional teaching plan.
CLO7	Utilize Bloom's Taxonomy when creating objectives.
CLO8	Create a bank of strategies to address the needs of individual students including at-risk, gifted/talented and Visual, Auditory, Kinesthetic, Tactile (VAKT) learners.
CLO9	Analyze various types of assessment and identify when to apply them.
CLO10	Observe clinically (without judgment or bias) and document observations of a New Jersey certified teacher.
CLO11	Develop a reflective journal of instructional strategies and teaching ideas for future reference.

11. Topical Outline

(Include as many themes/skills as needed)

	Major Themes/ Skills	Assignments (Recommended but not limited to)	
TO1	Resume building	Reading Assignment, Writing Component, Group Activity Discussion Review of resumes Generate key components of resume Research	Test Que Quiz Resume Group Pi Oral Pre: Group Pi
TO2	Classroom Organization	Reading Assignment, Writing Component, Group Activity Observation of actual classroom Discussion Research Journal Entries	Test Que Quiz Observa Design a
TO3	Classroom Management a. Rules b. Consequences c. Procedures	Reading Assignment, Writing Component, Observation Classroom Scenarios (role playing) Interview Research Journal Classroom Observation	Test Que Quiz Create a Journal
TO4	Student Behavior	Reading Assignment, Writing Component, Observation Classroom Scenarios (role playing) Interview Journal Research	Test Que Quiz Group Pi Oral Pre: Written .
TO5	Instructional Planning and Strategies	Reading Assignment, Writing Component Discussions Research Review of actual lesson plans Interview	Test Que Quiz Actual le Group Pi Oral Pre: Written .
TO6	Individual Differences	Reading Assignment, Writing Component, Observation Classroom Scenarios Interview Research Journal	Test Que Quiz Group Pi Oral Pre:

TO7	Evaluation of Student Progress	Reading Assignment, Writing Component, Observation Interview Research Journal Review of actual assessment/evaluation forms	Written Test Que Quiz Group Pr Oral Pre Written
TO8	Professional Growth and Development	Criteria provided for clinical observations and reflection journal Observation Writing Assignment Discussion	Observa Reflectiv Discussi Written

12. Methods of Instruction

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

- Lectures
- PowerPoint presentations
- Discussions
- Interactive learning activities and videos
- Internet searches and review of educational materials will be integrated into class sessions
- The use of the smart board, overhead projector and computers will provide varied activities
- The text and supplemental reading materials will be provided to stimulate discussions and engage students in critical thinking

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 Yes

Related Course CLO2, CLO3, CLO4, CLO6, CLO7,
Learning Outcome CLO8, CLO9

Related Outline TO2, TO3, TO4, TO5, TO6, TO7
Component

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

Assignment of General Education Core (recommended but not limited to)

- Quiz
- Observation Journal
- Design an optimal learning environment
- Create a chart of Rules
- Create a list of Procedures
- Actual lesson plan
- Group Project,
- Oral Presentation
- Written Assignment

14. Needs

Instructional Materials (text etc.): An appropriate textbook will be selected. Please contact the Department Office for current adoptions.

Technology Needs: Internet Access - possible assignment to computer labs.

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

Facility Needs:

Library needs:

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