EXHIBIT B

EXHIBIT B

OCEAN
COUNTY COLLEGE

BOARD OF TRUSTEES

Bylaw, Policy, and Curriculum Committee Agenda Items

To: Board of Trustees

From: Office of the President

Date: August 19, 2021

The following Bylaw, Policy, and Curriculum Committee items are recommended to the Ocean County College Board of Trustees for approval at its meeting on **Thursday, August 26, 2021**:

1. Recommend approval of the following new policy:

    a. Policy #3317, Personnel, Non-Academic Staff, General, Remote Work **(Exhibit B-1)**

2. Recommend approval of the following items as accepted by the College Senate at its meeting on August 5, 2021:

    a. New Program Option

        1) Associate in Applied Science in Computer Science/Informational Technology – Option in Artificial Intelligence **(Exhibit B-2)**

    b. New Certificate

        1) Certificate of Completion in Artificial Intelligence **(Exhibit B-3)**

    c. New Courses

        1) CSIT 191, Introduction to Artificial Intelligence **(Exhibit B-4)**
        2) CSIT 192, Introduction to Machine Learning **(Exhibit B-5)**
        3) CSIT 291, Computer Vision **(Exhibit B-6)**
        4) CSIT 292, Natural Language Processing **(Exhibit B-7)**
        5) CSIT 295, Artificial Intelligence Capstone **(Exhibit B-8)**
        6) SOCI 232, Social Justice **(Exhibit B-9)**

d. Revised Course

1) ENVI 241, Environmental Sustainability **(Exhibit B-10)**
2) SOWK 202, Social Work Seminar and Practicum **(Exhibit B-11)**

EXHIBIT B-1

Ocean County College, Toms River, NJ

PERSONNEL
NON-ACADEMIC STAFF
General
Remote Work #3317

POLICY

Ocean County College recognizes the benefit and utility of permitting employees to work from remote work locations, under special conditions and with prior approval. Remote work arrangements do not change an employee's terms and conditions of employment, including compliance with or the application of College policies and procedures.

For purposes of this policy, a remote work arrangement is one whereby an eligible College employee is authorized by appropriate management to perform the normal duties and responsibilities of his/her position, through the use of computers and other telecommunication tools, at a designated site other than the College location assigned to the employee.

Remote work arrangements are not intended to permit an employee to have time to work at other jobs, attend to personal business, or to provide dependent care. If persons in need of primary dependent care are regularly present in the remote work location when the employee is scheduled to work, the employee must demonstrate that another individual is present to provide the necessary care.

An employee working remotely is subject to the same policies, statutes, and procedures applicable to all employees, including, but not limited to, time and attendance and leave policies. Supervisors are responsible for ensuring compliance with the Fair Labor Standards Act. Remote work arrangements are not intended to circumvent any leave that an employee needs or has requested and is entitled to, pursuant to state and/or federal law or College policy.

Additionally, Ocean County College is a public employer, and as such, the NJ First Act, N.J.S.A. 52:14-7, will remain in force, and residency requirements must be met for all positions not exempted.

There are four types of remote work arrangements covered by this policy:

1. **Recurring Remote Work Arrangement**: Through June 30, 2022, the College will pilot a Recurring Remote Work Arrangement program for Non-Affiliated Administrative and Non-Affiliated Hourly employees. A recurring remote work arrangement is one that consists of the same day each week when an employee works at the remote location. These pre-approved arrangements may be for finite or indefinite periods of time, within the parameters of this policy. The recurring remote work arrangement must be approved by the employee's supervisor, area Vice President, and the Associate Vice President of Human Resources through a formal agreement which will cover: Terms of the Agreement, Employee Responsibilities, and College Responsibilities.

   A recurring remote work arrangement is a privilege that may be granted under appropriate circumstances to an individual who is deemed suited for such an arrangement, including the suitability of the employee's position.

   Approved recurring remote work arrangements are not transferrable. If an employee transfers to a new position, unit, or department, the existing remote work arrangement becomes null and void. If the employee wishes to pursue the same or similar remote work arrangement in the new position, the employee must go through the approval process again.

Employees eligible for recurring remote work arrangements: A Non-Affiliated Administrative and Non-Affiliated Hourly employee who has successfully completed his/her probationary period and is in good standing is eligible to apply for a recurring remote work arrangement consisting of up to one (1) remote work day per week, under the guidelines set forth in this policy. Good standing is defined as not being in any stage of a formal performance improvement, progressive disciplinary, or corrective action plan.

2. **Occasional (Non-Emergency):** This category of remote work encompasses instances when a supervisor assigns an employee a remote work day(s), generally for the purpose of accomplishing specific project work. It may also be utilized for an occasional, pre-approved occurrence, requested by an employee. All parameters of this policy apply. The employee's supervisor has the authority to approve these occasional instances of working remotely.

3. **Emergency**: This remote work arrangement is precipitated by a crisis or other emergency that significantly disrupts the operations of the College or a unit within the College. When needed to achieve business continuity and to maintain critical functions, operations, and services, remote work arrangements may be established until normal operations are restored at the regular work location. The College President, or designee, must invoke an emergency remote work order.

4. **Designated Remote Position**: The College may, in its sole discretion, designate a position to be performed remotely. In general, this designation will be made at the time of position posting and will be advertised as such.

Remote Work Site:

The location proposed by the employee for a remote work arrangement should be a predetermined site, such as a home office, and have a fixed work area that will provide the employee with adequate access to the tools necessary for remote work, such as a telephone, internet connection, etc. During the approval process, the employee and his/her supervisor will perform a work site assessment to determine the feasibility of the proposed location as the remote work site.

Workers Compensation Insurance covers job-related injuries that occur in the course and scope of employment. Injuries sustained at the remote work site, during scheduled work hours, should be reported immediately to the Office of Human Resources. The College reserves the right to inspect, or have a designated third party inspect, the remote work site in relation to reported work injuries and/or in the resolution of workers compensation cases.

Under no circumstances should the remote work site be used to hold in-person meetings or business visits with professional colleagues, vendors, students, or the public. Remote work arrangements do not convert the remote work site to a College place of business.

Costs/Expenses:

The College will provide the employee with a laptop computer and any necessary maintenance associated with the laptop. All other costs, whether related to the initial set-up or the maintenance of a remote work arrangement and/or location, will be borne by the employee. The College does not assume responsibility for operating costs, home maintenance, furniture purchases, or other costs incurred by the employee in the use of his/her home or other alternative work location.

The College may provide equipment beyond a laptop to be used by the employee in his/her remote work location. Any equipment provided to the employee is to be used only for authorized College business. The employee is responsible for protecting the equipment from theft, damage, and/or unauthorized use.

Miscellaneous office supplies are available from the employee's department and can be retrieved from campus as directed.

Accountability and Availability:

In general, a remote work arrangement should not change the regular days and hours that an employee is expected to be working. Changes to a work schedule should be pre-approved, and compensable overtime hours must be approved prior to work being performed.

If it is found that an employee is not performing work during regularly scheduled hours, the remote work arrangement may be revoked and the employee may be subject to disciplinary action.

An employee working remotely shall be as available for communication and contact during the scheduled work times as if he or she were working at the regularly-assigned work location.

The employee shall report to his/her regularly-assigned, on-campus work location on days when the remote work arrangement is not in effect. An employee may be required to report to the regularly-assigned work location or elsewhere, as needed, for work-related meetings or other events. Supervisors will give as much notice as is practicable; however, there is no notice requirement for this situation. Additionally, there will be no substitution made for a "missed" remote work day in the event an employee is required to report to the regularly-assigned work location or elsewhere on a day that is normally designated as a "remote work day."

An employee interested in requesting a remote work arrangement shall follow the procedure to this policy.

Adopted: August 26, 2021

EXHIBIT B-2

EXHIBIT B-2

BOARD OF TRUSTEES

RESOLUTION

WHEREAS, Ocean County College desires to offer a new **Artificial Intelligence Option** in its **Associate in Applied Science degree in Computer Science/Informational Technology**; and

WHEREAS, the Artificial Intelligence option is designed to introduce the student to the study of artificial intelligence and the real-world applications where artificial intelligence will be utilized; and

WHEREAS, a graduate of this program will have a firm understanding of artificial intelligence, the artificial intelligence project lifecycle, and various machine learning algorithms, as well as the ability to construct a neural network and apply it to topics such as vision and language processing; and

WHEREAS, this program prepares students for entry-level positions in a multitude of Artificial Intelligence careers in a variety of industries, including medical, manufacturing, financial, and automotive;

NOW, THEREFORE, BE IT RESOLVED that the Ocean County College Board of Trustees, at its meeting on August 26, 2021, approves the Artificial Intelligence Option of the Associate in Applied Science Computer Science/Information Technology degree.

August 26, 2021

_____

Carl V. Thulin, Jr.
Chair

New Program Proposal

Date Submitted: Fri, 21 May 2021 15:40:04 GMT

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

Last approved: Sun, 09 May 2021 19:00:20 GMT

Last edit: Mon, 02 Aug 2021 15:24:18 GMT

Changes proposed by: Kenneth Michalek (kmichalek)

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
2021-2022

Program Code
AAS.CS.AI

CIP Code
110101 - Computer and Information Sciences, General.

Objectives

Program Description

EXHIBIT B-2

The program description should be developed with the program goals in mind. Also, consider that it will be what goes into the college catalog and will represent the program publicly in the future. Try to make it readable for students and informative but not too busy. This should give a brief synopsis of what the program offers in terms of content, transfer, and career.

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

	Students who successfully complete this program will be able to:
	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							
			Second Semester				
ENGL 152							
MATH 156							
MATH 201							
CSIT 168							
CSIT 213							
			Sophomore				
			First Semester				
MATH 265							
CSIT 192							
			Second Semester				
CSIT 291							
CSIT 292							
			FirstSemester				
			SecondSemester				

Required Qualifications

Plan of Study Grid

Freshman

	First Semester	**Credit Hours**
ENGL 151	English I	3.00000
Mathematics/Science/Technology Gen. Ed. Requirement		3
CSIT 165	Programming I	4.00000
CSIT 191	Course CSIT 191 Not Found	3
Humanities or Social Science Gen. Ed. Requirement		3
	Credit Hours	16

	Second Semester	
ENGL 152	English II	3.00000
MATH 156	Introduction to Statistics	3.00000
MATH 201	Precalculus Techniques and Applications	4
CSIT 168	Introduction to Python Programming	2.00000
CSIT 213	Database Management	3.00000
	Credit Hours	15
	Sophomore	
	First Semester	
MATH 265	Calculus I	4.00000
CSIT 192	Course CSIT 192 Not Found	3
Computer Science Elective		3
Any Gen. Ed. Requirement		4
	Credit Hours	14
	Second Semester	
CSIT 291	Course CSIT 291 Not Found	3
CSIT 292	Course CSIT 292 Not Found	3
CSIT Elective		3
Any Gen. Ed. Requirement		4
Elective (to meet 60 credits)		2
	Credit Hours	15
	Total 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

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

Reviewer Comments

Sylvia Riviello (sriviello) (Tue, 25 May 2021 13:15:24 GMT): Rollback: Computer Science/Artificial Intelligence, Associate in Applied Science
Sylvia Riviello (sriviello) (Tue, 25 May 2021 16:57:10 GMT): Rollback: Title should read; AAS.CS.AI: Computer Science/Artificial Intelligence, Associate in Applied Science
Susan O'Connor (soconnor) (Tue, 29 Jun 2021 15:05:55 GMT): Rollback: edits needed

Key: 85

EXHIBIT B-3

EXHIBIT B-3

BOARD OF TRUSTEES

RESOLUTION

WHEREAS, Ocean County College desires to offer a new Certificate of Completion in Artificial Intelligence (CIP Code 110102); and

WHEREAS, the Certificate of Completion in Artificial Intelligence is designed to provide students with the skills necessary to pursue a career in the field of Artificial Intelligence; and

WHEREAS, students who apply to this program are expected to either possess a degree in computer science with the necessary programming background or possess equivalent industry experience; and

WHEREAS, knowledge of math in statistics, probability, and calculus is also a required prerequisite, and;

WHEREAS, students who successfully complete this certificate will have a firm understanding of Artificial Intelligence, the AI Project Lifecycle, various Machine Learning Algorithms such as Supervised and Unsupervised Learning, and Neural Networks; and

WHEREAS, this certificate program consists of 20 credits;

NOW, THEREFORE, BE IT RESOLVED that the Ocean County College Board of Trustees, at its meeting on August 26, 2021, approves the Certificate of Completion in Artificial Intelligence.

August 26, 2021

_____

Carl V. Thulin, Jr.
Chair

New Program Proposal

Date Submitted: Mon, 12 Apr 2021 16:10:05 GMT

Viewing: CC.AI : Certificate of Completion in Artificial Intelligence

Last edit: Mon, 02 Aug 2021 15:31:20 GMT

Changes proposed by: Kenneth Michalek (kmichalek)

Program Type
Certificate of Completion

Program Title
Certificate of Completion in Artificial Intelligence

Academic School
Science, Technology, Engineering, Mathematics

Effective Catalog Year
2021-2022

Program Code
CC.AI

CIP Code
110102 - Artificial Intelligence.

Program Description

The program description should be developed with the program goals in mind. Also, consider that it will be what goes into the college catalog and will represent the program publicly in the future. Try to make it readable for students and informative but not too busy. This should give a brief synopsis of what the program offers in terms of content, transfer, and career.

The Ocean County College Certificate of Completion in Artificial Intelligence provides students with the skills necessary to pursue a career in the exciting field of AI. The curriculum focuses on the study of Artificial Intelligence and the real-world applications where AI is utilized. This includes Machine Learning, Computer Vision, Natural Language

Processing and Neural Networks. Students who achieve this certificate will have a firm understanding of Artificial Intelligence, the AI Project Lifecycle, various Machine Learning Algorithms such as Supervised and Unsupervised Learning, and Neural Networks.

Students who apply to this program are expected to either possess a degree in computer science with the necessary programming background or possess equivalent industry experience. Knowledge of math in statistics, probability, and calculus is also a required prerequisite.

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	Evaluate the techniques used in Data Science and Analytics, and examine how they are used in Machine Learning.
PLO3	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.
PLO4	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.
PLO5	Experiment with the techniques and concepts used in Computer Vision such as pixels, matrices, image features, Support Vector machines and Convolutional Neural Networks.
PLO6	Assess the various algorithms used in Natural Language Processing applications and the methods used to train these algorithms to recognize language.
PLO7	Analyze how Neural Networks are used in the fields of Computer Vision and Natural Language Processing.
PLO8	Identify the challenges that AI will bring into the world including career challenges as well as the ethical and social impacts.

Learning Outcomes Display (show only)

Course Code	**PLO 1**	**PLO 2**	**PLO 3**	**PLO 4**	**PLO 5**	**PLO 6**	**PLO 7**	**PLO 8**
				Freshman				
				First Semester				
CSIT 168								
CSIT 191								
				Second Semester				
CSIT 192								
CSIT 213								
				Sophomore				

Learning Outcomes Display (show only)

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8
			First Semester					
CSIT 291								
CSIT 292								
			Second Semester					
CSIT 295								
			FirstSemester					
			SecondSemester					

Required Qualifications

Plan of Study Grid

	Freshman	
	First Semester	**Credit Hours**
CSIT 168	Introduction to Python Programming	2.00000
CSIT 191	Course CSIT 191 Not Found	3
	Credit Hours	5
	Second Semester	
CSIT 192	Course CSIT 192 Not Found	3
CSIT 213	Database Management	3.00000
	Credit Hours	6
	Sophomore	
	First Semester	
CSIT 291	Course CSIT 291 Not Found	3
CSIT 292	Course CSIT 292 Not Found	3
	Credit Hours	6
	Second Semester	
CSIT 295	Course CSIT 295 Not Found	3
	Credit Hours	3
	Total Credit Hours	20

Degree Requirements Breakdown

GCOM

Course Code & Title	Credits
NA	0

GHUM

Course Code & Title	Credits
NA	0

GSOC

Course Code & Title	Credits
NA	0

GSOC/ GHUM

Course Code & Title	Credits
NA	0

GMAT/ GSCI/ GTEC

Course Code & Title	Credits
NA	0

General Education

Course Code & Title	Credits
NA	0

Concentration Courses

Course Code & Title	Credits
CSIT-191	3
CSIT-192	3
CSIT-291	3
CSIT-292	3
CSIT-295	3
CSIT 168	2
CSIT 213	3

Elective Courses

Course Code & Title	Credits
NA	0

Reviewer Comments

Cynthia Fallon (cfallon) (Wed, 07 Apr 2021 15:39:10 GMT): Rollback: Sending back for edits.

Susan O'Connor (soconnor) (Tue, 29 Jun 2021 15:34:20 GMT): Rollback: edits needed

Key: 81

EXHIBIT B-4

New Course Proposal

Date Submitted: Wed, 21 Apr 2021 08:50:06 GMT

Viewing: CSIT 191 : Introduction to Artificial Intelligence

Last edit: Mon, 02 Aug 2021 15:27:14 GMT

Changes proposed by: Kenneth Michalek (kmichalek)

Learning Outcomes Display (show only)

1. Course Information

Subject
CSIT - Computer Science/ Information Technology

School
Science, Technology, Engineering, Mathematics

Course Title
Introduction to Artificial Intelligence

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 the emerging field of Artificial Intelligence and its applications. Students will be provided a basic understanding of what comprises the many fields of Artificial Intelligence (AI). Students will also explore how AI is used in Machine Learning and Neural Networks. Topics covered include the various areas of Machine Learning such as Supervised Learning, Unsupervised Learning, and Reinforcement Learning as well as Neural network applications such as Computer Vision and Natural Language Processing. This course will also examine and discuss the impacts of AI in the world, in the student's daily lives, and the potential impacts to their careers.

4. Requisites

Prerequisites
None

Corequisites
None

5. Course Type

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

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 business programs. Students will master the concepts and applications of Artificial Intelligence, study the AI Project life cycle, and be exposed to AI topics such as Machine Learning and Neural Networks.

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 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 Artificial Intelligence is and give examples of applications where it is used.
CLO2	Examine the AI Project Lifecycle and identify the activities that occur during each stage of the cycle.
CLO3	Show what Data Science and Analytics is and how they are used for Machine Learning.
CLO4	Demonstrate when and how to apply the various types of Machine Learning including Supervised Learning, Unsupervised Learning and Reinforcement Learning.
CLO5	Explain what a Neural Network is.
CLO6	Discuss how Neural Networks are used in the fields of Computer Vision and Natural Language Processing.
CLO7	Identify the challenges that AI will bring into the world including career challenges as well as ethical challenges and social impacts.

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 Artificial Intelligence a) History of AI b) Applications that currently make us of AI c) AI Project Lifecycle and Problem Scoping d) The 3 domains of AI - Data, Computer Vision, Natural Language Processing e)Discussions of the various complex social issues surrounding AI. f) Current AI trends in the marketplace. g) Brief overview of	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam Presentations	CL01, CLO2

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	future direction of technology.			
TO2	Data Science Fundamentals and Introduction to Machine Learning a) Problem Solving Techniques b) Basic Data Science Concepts c) Regression, Clustering, Classification Techniques d) What is Machine Learning	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam Presentations	CL01,CLO3
TO3	Machine Learning Concepts a) What are the different ways a machine learns b) Supervised Learning c) Unsupervised Learning d) Reinforcement Learning e) Applications of Machine Learning and challenges	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam Presentations Lab assignments	CL01, CLO3, CLO4
TO4	Neural Networks a) What are Neural Networks b) Neural Network applications c) Computer Vision d) Natural Language Processing e) Challenges	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam Presentations Lab assignments	CL01, CLO5, CLO6
TO5	Assessing AI for the future	Reading assignments In-class	Homework Exam	CL01, CLO7

Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
a) Research and present on the potential impact of AI to our world b) Project: Imagining a future job in an AI world c) Appreciate the complexity of social issues d)Discuss AI ethics issues e.g. privacy, bias, access to AI e)Be able to determine where AI solutions would be appropriate	demonstrations In-class exercises In-class discussion Presentations	Presentations	

12. Methods of Instruction

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 Learning Outcome
CLO1,CLO3,CLO4,CLO5,CLO6

Related Outline Component
TO1-TO5

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

Presentations
Exams

Information Literacy
Yes

Related Course Learning Outcome
CLO1-CLO7

Related Outline Component
TO1-TO5

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

Presentations
Exams

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

_____

Ethical Reasoning and Action

_____

Independent/Critical Thinking
Yes

Related Course Learning Outcome
CLO1-CLO7

Related Outline Component
TO1-TO5

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

Presentations
Exams

14. Needs

Instructional Materials (text etc.):
Appropriate textbooks and/or open educational resources will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials.

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

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

Reviewer Comments
Carolyn Showalter (cshowalter) (Mon, 05 Apr 2021 14:56:49 GMT): Rollback: per our conversation

Key: 2227

EXHIBIT B-5

New Course Proposal

Date Submitted: Wed, 21 Apr 2021 08:50:15 GMT

Viewing: CSIT 192 : Introduction to Machine Learning

Last edit: Mon, 02 Aug 2021 15:28:23 GMT

Changes proposed by: Kenneth Michalek (kmichalek)

Learning Outcomes Display (show only)

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, CSIT 168, and MATH 156

Corequisites

5. Course Type

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

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 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)

	Major Themes/ Skills	**Assignments (Recommended but not limited to)**	**Assessments (Recommended but not limited to)**	**Course Learning Outcome(s)**
TO1	Introduction to Machine Learning a) History of Machine Learning b) What exactly is Machine Learning and what type of problems can it solve. c) Machine Learning, trends and the future direction of the technology.	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1
TO2	Data Science Fundamentals a) Mathematical concepts relevant to	Reading assignments In-class demonstrations In-class exercises	Homework Exam	CL01,CLO2, CLO3

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	Machine Learning: graphs, slope functions, probability, statistics, vectors and matrices b) Data and it's importance to Machine Learning c) Data Acquisition, Exploration and Modeling d) Data Import e) Data Visualization f) Data Interpretation	In-class discussion Presentations		
TO3	Python for Machine Learning a) Python's use in Machine Learning b) NumPy – Numerical Python arrays, functions c) Pandas - Python Data Analysis Library d) scikit-learn e) matplotlib f) Jupyter Notebooks	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1-CLO7
TO4	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

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
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	CL01, 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	CL01,CLO3, CLO7

12. Methods of Instruction

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 Learning Outcome
CLO1-CLO7

Related Outline Component
TO1-TO6

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

Presentations
Exams
Homework

Information Literacy
Yes

Related Course Learning Outcome
CLO1,CLO2,CLO5-CLO7

Related Outline Component
TO1,TO2,TO5-TO6

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 Learning Outcome
CLO1-CLO7

Related Outline Component
TO1-TO6

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

Presentations
Exams
Homework

14. Needs

Instructional Materials (text etc.):
Appropriate textbooks and/or open educational resources will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials.

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

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

Reviewer Comments
Carolyn Showalter (cshowalter) (Mon, 05 Apr 2021 14:56:31 GMT): Rollback: per our conversation
Susan O'Connor (soconnor) (Tue, 29 Jun 2021 15:56:22 GMT): Rollback: edits needed

Key: 2228

EXHIBIT B-6

New Course Proposal

Date Submitted: Wed, 21 Apr 2021 08:50:26 GMT

Viewing: CSIT 291 : Computer Vision

Last edit: Mon, 02 Aug 2021 15:29:08 GMT

Changes proposed by: Kenneth Michalek (kmichalek)

Learning Outcomes Display (show only)

1. Course Information

Subject
CSIT - Computer Science/ Information Technology

School
Science, Technology, Engineering, Mathematics

Course Title
Computer Vision

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 Computer Vision and how it is used in current Artificial Intelligence and other applications. The theoretical grounding of the basic concepts and techniques in the Computer Vision domain will be explored. Computer vision concepts covered include pixels, convolutional neural networks, and various vision related AI algorithms. This course will also explain how computers represent, analyze, and recognize images. Students will learn how to use the Intel OpenVino Toolkit to perform image classification and object detection. Open lab time required.

4. Requisites

Prerequisites
CSIT 192

Corequisites

5. Course Type

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

6. Justification

Describe the need for this course
This is a required course for Computer Science, Associate in Applied Science with Artificial Intelligence Concentration. Students will master the concepts and applications of Computer Vision, study Computer Vision algorithms and various image detection and classification techniques. Students will use this knowledge and a pre-trained industry model to evaluate a Computer Vision application.

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 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 Computer Vision is and current applications of the technology.
CLO2	Describe the techniques and concepts used in Computer Vision such as pixels, matrices, image features, Support Vector machines and Convolutional Neural Networks.
CLO3	Demonstrate how Computers see and how an image is represented.
CLO4	Analyze topics of pre-processing images, K-Nearest Neighbor algorithm and train a CV application based on a simple machine learning implementation.
CLO5	Evaluate pre-trained industry models used in CV applications such as the OpenVINO toolkit and the Neural Compute Stick and use it to perform image classification and object detection.

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 Computer Vision a) What is Computer Vision b) How Computers See c) Computer Vision Applications	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1
TO2	Basics of Computer Vision a) Image Representation (pixels, matrices) b) CV Concepts: Thresholding, masking, region of interest c) Geometric transformation, resizing and cropping d) Convolutional Neural Networks	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CL01,CLO2,CLO3

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO3	Computer Vision Models and Algorithms a) Introduction to CV models b) Training and Evaluating CV models c) Modifying CV model to improve accuracy and efficiency	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1,CLO2,CLO3, CLO5
TO4	Applying CV Models a) Preprocessing images b) Introduction to K-Nearest Neighbor algorithm c) Training a Simple Machine Learning CV algorithm d) Support Vector Machines in CV applications	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO3,CLO4
TO5	CV Industry Model Review a) OpenVINOTM Toolkit b) Neural Compute Stick 2 (NCS2) c) Using a Pre-trained model from OpenVINOTM d) Run an inference model using the Neural Compute Stick 2 e) Image classification f) Object detection	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CL01-CLO5

12. Methods of Instruction

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 Learning Outcome
CLO1-CLO5

Related Outline Component
TO1-TO5

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

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

Presentations
Exams
Homework

_____

Information Literacy
Yes

Related Course Learning Outcome
CLO1,CLO3

Related Outline Component
TO1-TO3

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

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 Learning Outcome
CLO1-CLO5

Related Outline Component

TO1-TO5

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

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

Presentations
Exams
Homework

14. Needs

Instructional Materials (text etc.):
Appropriate textbooks and/or open educational resources will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials.

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

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

Reviewer Comments
Carolyn Showalter (cshowalter) (Mon, 05 Apr 2021 14:56:16 GMT): Rollback: per our conversation
Susan O'Connor (soconnor) (Tue, 29 Jun 2021 15:57:27 GMT): Rollback: edits needed
Susan O'Connor (soconnor) (Mon, 02 Aug 2021 15:29:08 GMT): update transfer chart at later time

Key: 2229

EXHIBIT B-7

New Course Proposal

Date Submitted: Wed, 21 Apr 2021 08:50:36 GMT

Viewing: CSIT 292 : Natural Language Processing

Last edit: Mon, 02 Aug 2021 15:29:36 GMT

Changes proposed by: Kenneth Michalek (kmichalek)

Learning Outcomes Display (show only)

1. Course Information

Subject
CSIT - Computer Science/ Information Technology

School
Science, Technology, Engineering, Mathematics

Course Title
Natural Language Processing

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 Natural Language Processing (NLP) and how it is used in current Artificial Intelligence and other applications. The steps involved in NLP data processing such as collection, conversion into a “bag of words”, and visualization using the Python language with NLP tools will be demonstrated. The course will cover the various algorithms used in Natural Language Processing and how these algorithms are “trained” to recognize words. Students will use this information learned in this course to develop a language recognition application. Open lab time required.

4. Requisites

Prerequisites
CSIT 192 Introduction to Machine Learning

Corequisites

5. Course Type

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

6. Justification

Describe the need for this course
This is a required course for Computer Science, Associate in Applied Science with Artificial Intelligence Concentration. Students will master the concepts and applications of Natural Language Processing, study the NLP data collection process and NLP algorithms that are used to recognize language. Students will use this knowledge to develop a language recognition application as part of the course.

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 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 Natural Language Processing is and current applications of the technology.
CLO2	Describe the NLP data process which includes the topics of data acquisition, collection, conversion (bag of words) and visualization.
CLO3	Investigate the various algorithms used in NLP applications and the techniques used to train these algorithms to recognize language.
CLO4	Build a language recognition application using the various NLP tools examined in the course.
CLO5	Apply the Term Frequency-Inverse Document Frequency (TFIDF) strategy to select and rank important words from a “bag of words” and process the words using a machine learning model in conjunction with the sklearn library.
CLO6	Make use of the various NLP algorithms and tools to build a chatbot.

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 Natural Language Processing a) Describe natural language processing and current applications of the technology b) Describe the difference between natural and formal language c) The fundamental concepts used in NLP d) Future trends of the technology	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1
TO2	NLP Data Processing a) Overview of NLP	Reading assignments In-class	Homework Exam	CL01,CLO2

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	data processing b) Collecting data for NLP applications c) Conversion of Data into a “Bag of Words” d) Data Pipelining e) Using Python process and visualize NLP Data f) Storage and maintenance of NLP Data g) Separating dataset for model training	demonstrations In-class exercises In-class discussion Presentations		
TO3	NLP Algorithms a) Understanding of algorithms used in NLP b) Ranking word frequency using Term frequency-inverse document frequency (TFIDF) c) Stemming, Lemmatization and Tokenization d) Training the NLP algorithm e) Machine Learning Models and the sklearn library	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1,CLO2,CLO3, CLO5
TO4	Language Recognition Application a) Application Design b) Process data for the Language Recognition Application c) Build and test the Application	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CLO1,CLO3,CLO4,CLO5

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO5	Chatbots a) List the application of Chatbots b) Provide content for the Chatbot using data from online sources c) Cosine similarity function d) Chatbot Functionality	Reading assignments In-class demonstrations In-class exercises In-class discussion Presentations	Homework Exam	CL01-CLO6

12. Methods of Instruction

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 Learning Outcome
CLO1-CLO6

Related Outline Component
TO1-TO5

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

Presentations
Exams
Homework

Information Literacy
Yes

Related Course Learning Outcome
CLO1,CLO2

Related Outline Component
TO1,TO2,TO3

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 Learning Outcome
CLO1-CLO6

Related Outline Component
TO1-TO5

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

Presentations
Exams
Homework

14. Needs

Instructional Materials (text etc.):
Appropriate textbooks and/or open educational resources will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials.

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

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

Reviewer Comments
Carolyn Showalter (cshowalter) (Mon, 05 Apr 2021 14:55:57 GMT): Rollback: per our conversation
Susan O'Connor (soconnor) (Tue, 29 Jun 2021 15:57:36 GMT): Rollback: edits needed
Susan O'Connor (soconnor) (Mon, 02 Aug 2021 15:29:36 GMT): update transfer chart at later time

Key: 2230

EXHIBIT B-8

New Course Proposal

Date Submitted: Wed, 21 Apr 2021 08:50:46 GMT

Viewing: CSIT 295 : Artificial Intelligence Capstone

Last edit: Mon, 02 Aug 2021 15:30:19 GMT

Changes proposed by: Kenneth Michalek (kmichalek)

Learning Outcomes Display (show only)

1. Course Information

Subject
CSIT - Computer Science/ Information Technology

School
Science, Technology, Engineering, Mathematics

Course Title
Artificial Intelligence Capstone

2. Hours

Semester Hours
3

Lecture
3

Lab
0

Practicum
0

3. Catalog Description

For display in the online catalog

This course will provide the student, working with a faculty member and potential industry partner, the opportunity to design, implement, and deploy an Artificial Intelligence based application using the AI Project cycle. The student will use their knowledge of AI to document the project, develop the projects goals, design the application, produce a schedule, build the application, and provide the evaluation criteria for an assessment of how well the application met the stated goals. The student will use the various domains of AI such as natural language processing, computer vision, and machine learning to design and implement the application. The student will prepare a presentation summarizing their application and demonstrate how effective it was in meeting the stated goals to the faculty member.

4. Requisites

Prerequisites
CSIT 291 and CSIT 292

Corequisites

5. Course Type

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

6. Justification

Describe the need for this course
This is an optional course for Computer Science, Associate in Applied Science with Artificial Intelligence Concentration. Students will design, implement, and deploy an Artificial Intelligence application with a faculty member and potentially an industry partner. Students will use and apply the knowledge they learned via the AAS in CS/Artificial Intelligence program to evaluate the application and present the detailed results to the faculty member.

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	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 Gross School of the Arts

Stockton University

If not transferable to any institution, explain:
This is an optional 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	Apply knowledge of the AI Project lifecycle to document AI projects, develop the AI project goals, put forth a design for the project and produce a detailed schedule.
CLO2	Develop detailed evaluation criteria to be used in the assessment of the AI application and for the data collection process.
CLO3	Build the AI application using the tools and techniques learned from AI courses and use the various domains of AI such as natural language processing, computer vision and machine learning to implement the application. Choose the appropriate AI model for the domain.
CLO4	Assess how well the AI application met the goals of the project as well as the schedule constraints.
CLO5	Summarize the AI project and prepare and present information to a faculty member and an industry partner.

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	AI Capstone Project Definition a) Problem Statement and Scope b) Project goals c) Schedule d) High level Design e) Evaluation Criteria	Demonstrations Documentation Presentations	Demonstrations Documentation Presentations	CL01
TO2	AI Application Data and Design a) Data collection, exploration, modeling b) Methodologies c) Design d) Review of Application with Faculty	Demonstrations Documentation Presentations	Demonstrations Documentation Presentations	CL01,CLO2,CLO3

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO3	AI Application Development a) Equipment Requirements b) Application implementation c) Initial evaluation and assessment d) Tuning e) Review f) Deployment	Demonstrations Documentation Presentations	Demonstrations Documentation Presentations	CLO1,CLO2,CLO3, CLO4
TO4	AI Application Assessment a) Preparation of Results b) Final Assessment of AI Application c) Presentation to Faculty	Demonstrations Documentation Presentations	Demonstrations Documentation Presentations	CLO4,CLO5

12. Methods of Instruction

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

o Discussion
o Demonstrations
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 Learning Outcome
CLO1-CLO5

Related Outline Component
TO1-TO4

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

Demonstrations
Documentation
Presentations

Information Literacy
Yes

Related Course Learning Outcome
CLO1

Related Outline Component
TO1

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

Demonstrations
Documentation
Presentations

Society and Human Behavior

Humanistic Perspective

Historical Perspective

_____

Global and Cultural Awareness

_____

Ethical Reasoning and Action

_____

Independent/Critical Thinking
Yes

Related Course Learning Outcome
CLO1-CLO5

Related Outline Component
TO1-TO4

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

Demonstrations
Documentation
Presentations

14. Needs

Instructional Materials (text etc.):
Appropriate textbooks and/or open educational resources will be selected. Contact the department for current adoptions. Class notes, presentations, software and online materials.

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

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

Reviewer Comments
Carolyn Showalter (cshowalter) (Mon, 05 Apr 2021 14:55:39 GMT): Rollback: per our conversation
Susan O'Connor (soconnor) (Tue, 29 Jun 2021 15:57:46 GMT): Rollback: edits needed
Susan O'Connor (soconnor) (Mon, 02 Aug 2021 15:30:19 GMT): update transfer chart at later time

Key: 2231

EXHIBIT B-9

New Course Proposal

Date Submitted: Thu, 20 May 2021 16:57:16 GMT

Viewing: SOCI 232 : Social Justice

Last edit: Thu, 20 May 2021 20:22:04 GMT

Changes proposed by: Charlotte Langeveld (clangeveld)

Learning Outcomes Display (show only)

1. Course Information

Subject
SOCI - Sociology

School
Business and Social Sciences

Course Title
Social Justice

2. Hours

Semester Hours
3

Lecture
3

Lab
0

Practicum
0

3. Catalog Description

For display in the online catalog

This course presents concepts of justice, conflict, and social change, including ways in which the media, political, economic, educational and other institutions create challenges for social justice. It explores efforts that challenge existing structural and institutional arrangements, such as sources of power, social identities, and how social processes interact and intersect. Its objective is to increase students awareness, knowledge, and critical thinking skills related to social justice.

4. Requisites

Prerequisites
None

Corequisites
None

5. Course Type

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

6. Justification

Describe the need for this course
The course is important because it will prepare students to face the complex social challenges that impact our communities, social institutions, global health and environment, and to advocate for those who are underrepresented and vulnerable. This course can be used to fulfill general education requirements in the categories of social science or diversity (pending NJCCC approval), a concentration requirement for the A.S. in General Studies Social Science, or as an elective.

7. General Education

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

Yes

General Education Category
Diversity
Social Science

General Education Status
Proposed

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
Bergen CC

Course Title
Ethics in Criminal Justice

Course Number
CRJ201

Number of Credits
3

Comments

Institution

Union County College

Course Title

Social Justice

Course Number

PHI209

Number of Credits

3

Comments

Institution

County College of Morris

Course Title

Victimology

Course Number

CRJ230

Number of Credits

3

Comments

Institution

Raritan Valley CC

Course Title

Social Policy and Politics

Course Number

HMNS207

Number of Credits

3

Comments

Transferability of Course

Georgian Court University

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

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
RS236 Social Justice, 3	Gen Ed	

Kean University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
SOC 2000, Introduction to Social Justice, 3	Gen Ed	

Monmouth University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
PS/SO-107 PS/SO 107 Introduction to Social Justice 3 cr	Gen Ed	

Rowan University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
SOC 08488 Social Justice Inclusion and Conflict Resolution, 3 cr	Gen Ed	

Rutgers - New Brunswick, Mason Gross School of the Arts

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
204:467 Topics in Justice Studies , 3 cr	Gen Ed	

Stockton University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
GPC 5039 Transitional Justice, 4 cr	Gen Ed	

If not transferable to any institution, explain:

10. Course Learning Outcomes

Learning Outcomes

	Students who successfully complete this course will be able to:
CLO1	Demonstrate a basic understanding of social injustices and inequities, and proposed approaches to their remediation and/or resolution, drawn from a variety of historical, cultural, and geographic settings.
CLO2	Explain how racial, gender, and class concerns intersect with environmental risks and how they are distributed unequally.
CLO3	Engage in common issues faced by people with underrepresented and marginalized identities and the impact of injustice on underprivileged and privileged individuals and our communities.
CLO4	Discuss existing structural and institutional arrangements, such as sources of power, social identities, and how social processes interact and intersect.
CLO5	Develop social empathy by perceiving or experiencing people's life situations and as a result gain insight into structural inequalities and disparities and support social and economic justice for all people.
CLO6	Analyze marginalized and oppressed groups: historical and contemporary, local and global, and implications of globalization.

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	Concepts/frameworks and theories/research relevant to social justice, oppression, and injustice	Reading assignment, class discussions, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO1, CLO3
TO2	Defining, recognizing and analyzing social justice from historical to contemporary contexts	Reading assignment, class discussions, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO1, CLO3, CLO4, CLO5, CLO6
TO3	Diversity and complexity of social justice issues	Reading assignment, class discussions, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO2, CLO4, CLO5 and CLO6
TO4	Addressing injustices in in structural and institutional	Reading assignment, class discussions, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO3, CLO4, CLO5, CLO6

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	arrangements			
TO5	Contexts of social justice and social movements: local and global justice	Reading assignment, class discussions, or writing component	Quiz, exam, activity, assignment, project, paper, or presentation	CLO3, CLO2, CLO6

12. Methods of Instruction

In the structuring of this course, what major methods of instruction will be utilized?
Lecture and discussion, supplemented by videos and in-class assignments.

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
Yes

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

Related Outline Component
TO1, TO2, TO3

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

Including, but not limited to, a quiz, exam, activity, assignment project, paper, or presentation

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Ethical Reasoning and Action

Independent/Critical Thinking
Yes

Related Course Learning Outcome
CLO1, CLO2, CLO5 and CLO6

Related Outline Component
TO1-TO5

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

Including, but not limited to, a quiz, exam, activity, assignment project, paper, or presentation

14. Needs

Instructional Materials (text etc.):
An appropriate textbook will be selected. Selected articles from academic journals.

Technology Needs:
N/A

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

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.

Reviewer Comments
Maureen Alexander (malexander) (Wed, 24 Feb 2021 18:20:26 GMT): Rollback: Not sure if comments in 9 is nec. Transferability shows GenEd only. TO needs CLOXX
Susan O'Connor (soconnor) (Sun, 09 May 2021 19:11:45 GMT): Rollback: I removed Gen ed communication status, as this is only eligible for engl 1 and 2 and public speaking. I am not sure this woudl count as a survey history course, which is the requirement for Gen ed history - please reference definitions of each category. The four-year transfer section needs to be completed with the titles of the gen ed equivalents at each school.

EXHIBIT B-10

Viewing: ENVI 241 : Environmental Sustainability

Last approved: Thu, 13 May 2021 19:24:34 GMT

Last edit: Thu, 13 May 2021 19:36:05 GMT

Changes proposed by: Cynthia Fallon (cfallon)

Learning Outcomes Display (show only)

1. Course Information

Subject
ENVI - Environmental Science

School
Science, Technology, Engineering, Mathematics

Course Title
Environmental Sustainability

2. Hours

Semester Hours
3.00000

Lecture

Lab

Practicum

3. Catalog Description

For display in the online catalog
This course will introduce students to global environmental sustainability. Students will develop an awareness and understanding of global, environmental, and sustainability

concerns. Biodiversity, renewable energy, and resource management are some of the topics that students will explore in a sustainable and socially equitable context.

4. Requisites

Prerequisites

Corequisites

5. Course Type

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

6. Justification

Describe the need for this course
There is a need for additional environmental courses in the Environmental Studies degree program. This is demonstrated in the fact that most environmental courses are seasonally specific. This course can be offered year-round.

Sustainability is about reducing our ecological footprint while simultaneously improving the quality of life. Education for sustainability is about learning to design and implement actions for the present, in the knowledge that the impact of these actions will be experienced in the future. In this way it leads to students developing an overall capacity to contribute to "a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations." In an era marked by concerns about the future of the planet, education for sustainability can be empowering and an antidote to a sense of helplessness.

This course will equip students to act, individually and collectively, in ways that can contribute to sustainability. It provides the opportunity for students to explore and evaluate contested and emerging issues, gather evidence, and create solutions for a sustainable future.
Education for sustainability can enable students to become effective citizens and active change agents by helping them to deal with complexity and uncertainty. It can also help them to understand that there is rarely a single solution, because new knowledge is continuously generated, and diverse viewpoints exist in society.

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	Providing student-centered, high quality educational experiences that prepare and empower diverse learners (Mission Statement)
2	Cultivating a technologically progressive spirit (Mission Statement)
3	Providing and supporting the delivery of high quality, relevant, and emerging STEM courses (Academic Master Plan)

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution
Brookdale CC

Course Title
Principles of Sustainability

Course Number
ENVR 108

Number of Credits
3

Comments

Transferability of Course

Georgian Court University

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

Kean University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
SUST 1000: Introduction to Sustainability (3 credit - no lab)	Major	

Monmouth University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
BY-221/PS-223 Intro Global Sustainability (3 cr)	Natural Sciences	

Rowan University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
ENST 94.075 Environmental Studies Elective (3 cr)	Environmental Studies Elective	

Rutgers - New Brunswick, Mason Gross School of the Arts

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
11375101 Intro to Environmental Science (3 cr)	Science	

Stockton University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
ENST 94.075 Environmental Studies Elective (3 cr)	Sustainability 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	Analyze the fundamental environmental, social, and economic issues underlying sustainability.
CLO2	Identify principles of good practice in research for sustainability and sustainable development.
CLO3	Apply sustainable principles into all aspects of life: identify opportunities and challenges for more sustainable planning in a workplace and community.
CLO4	Critically evaluate the effectiveness of strategies from managing and developing sustainable practices.

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	CLO1-The evolution of thinking and practice of sustainability CLO2-Sustainability culture, ethics, and history			CLO 1,2,3
TO2	Environmental policy as it relates to: CLO1- resource conservation CLO1- protection CLO2- economics			CLO 2,4
TO3	CLO1- Climate change is a global phenomenon CLO2- Our Biosphere CLO3- Physical resources, pollution			CLO 1,4

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	and mineral extraction			
TO4	CLO1- Modern environmental management CLO2- Sustainable environmental resource CLO3- Sustainable resources			CLO, 2,3,4

12. Methods of Instruction

In the structuring of this course, what major methods of instruction will be utilized?
o Lecture
o Video and discussion
o Case studies
o Hands-on/modeling

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 Learning Outcome
All

Related Outline Component
TO 3

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

Exam, Research paper

_____

Technological Competency

_____

Information Literacy

_____

Society and Human Behavior

_____

Humanistic Perspective

_____

Historical Perspective

_____

Global and Cultural Awareness

_____

Ethical Reasoning and Action
Yes

Related Course Learning Outcome
All

Related Outline Component
TO2, TO4

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

Paper, Presentation

_____

Independent/Critical Thinking

14. Needs

Instructional Materials (text etc.):
Textbook and/or open educational resource materials chosen by department.

Technology Needs:
None

Human Resource Needs (Presently Employed vs. New Faculty):
None

Facility Needs:
None

Library needs:
None

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: February 27, 2020

Reviewer Comments

Key: 762

EXHIBIT B-11

Viewing: SOWK 202 : Social Work Seminar and Practicum

Last approved: Fri, 16 Apr 2021 19:54:11 GMT

Last edit: Wed, 12 May 2021 18:16:54 GMT

Changes proposed by: Susan O'Connor (soconnor)

Learning Outcomes Display (show only)

1. Course Information

Subject
SOWK - Social Work

School
Business and Social Sciences

Course Title
Social Work Seminar and Practicum

2. Hours

Semester Hours
3.00000

Lecture
2.00

Lab
0.00

Practicum
4.00

3. Catalog Description

For display in the online catalog

This course is a capstone course in the social work curriculum. It should be taken as the last course in the social work curriculum. It provides students with professionally supervised opportunities to gain practical, hands-on, direct, and indirect practice experience within real world human service agencies. As a requirement, students will be placed at off-site community-based settings for a total of 60 hours per semester. In addition, students will attend a field practicum seminar class on campus that connects lecture and discussions with their field work experiences.

4. Requisites

Prerequisites
SOWK 101, SOWK 194, and SOWK 207 or PSYC 271

Corequisites
SOWK 201 or PSYC 278

5. Course Type

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

6. Justification

Describe the need for this course
This course is an applied course for students at the end of the social work curriculum. This course is for students wishing to pursue a career in human services, social work, counseling, psychology, psychological rehabilitation or other social or behavioral health disciplines. The course is designed to provide students with practical experience needed to advance in the helping professions. Many employers and four year university settings prefer students to possess professionally supervised direct service experience. This course will also better position the student to obtain entry-level employment in human service settings following graduation.

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	Demonstrate the college's commitment to offer comprehensive educational programs that develop intentional learners at 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	Challenging students to transfer information into knowledge and knowledge into action.

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution
Atlantic Cape CC

Course Title
Internship in Human Services

Course Number
HSRV215

Number of Credits
4

Comments

Institution

Brookdale CC

Course Title

Human Services Practicum

Course Number

PSYC285

Number of Credits

3

Comments

Institution

Rowan College of South Jersey

Course Title

Social Service Field Work

Course Number

SO221

Number of Credits

3

Comments

Formerly Cumberland CC

Institution

Middlesex County College

Course Title

Supervised Field Placement

Course Number

HUS153

Number of Credits

4

Comments

Transferability of Course

Georgian Court University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
EXPINT Experiential Learning Internship 3-credits	Experiential Learning Requirement	

Kean University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
FEX 1000 Free Elective 3 credits	Elective	

Monmouth University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
SW001 100 Level Social Work Elective 3-credits	Major	

Rowan University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
INTR99081 Free Elective 3-credits	Elective	

Rutgers - New Brunswick, Mason Gross School of the Arts

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

Stockton University

Course Code, Title, and Credits	Transfer Catagory	If non-transferable; select status
SOWKEC Social Work Elective 3-credit	Major	

If not transferable to any institution, explain:

10. Course Learning Outcomes

Learning Outcomes

	Students who successfully complete this course will be able to:
CLO1	Identify and demonstrate social work and other professional behaviors.
CLO2	Analyze case examples and interpret how social welfare policies impact practice.
CLO3	Apply ethical principles to real world, practical experiences from field placements.
CLO4	Engage and document diversity in practice settings.
CLO5	Practice engagement and assessment skills with consumers of services.

	Students who successfully complete this course will be able to:
CLO6	Identify where and how research-informed practice is utilized in practice settings.
CLO7	Apply self-awareness and self-regulation to manage the influence of personal biases and values in working with diverse clients.
CLO8	Create an action plan addressing human rights and social/economic justice issues.

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 and Course Overview a. Field education/internships b. Competency-based practice c. Supervision d. Agency review e. Grading rubric	Readings Discussion/Reflection Reflective Essays Process Recordings	Graded Process Recordings Graded Oral Presentation Graded Reflective Essay Agency Attendance and Satisfactory Performance	CLO1, CLO3
TO2	Conducting Self-Assessments a. Review of process recordings b. Theoretical applications c. Personal Biases and Cultural Intentionality d. Ethical Knowledge and Behaviors	Readings Discussion/Reflection Reflective Essays Process Recordings	Graded Process Recordings Graded Oral Presentation Graded Reflective Essay Agency Attendance and Satisfactory Performance	CLO3, CLO4, CLO7
TO3	Engagement, Assessment and Intervention Skill-Building a. Engagement skill practice b. Assessment skill practice c. Intervention review	Readings Discussion/Reflection Reflective Essays Process Recordings	Graded Process Recordings Graded Oral Presentation Graded Reflective Essay Agency Attendance and Satisfactory Performance	CLO5, CLO6
TO4	Macro-level Approaches to Care	Readings Discussion/Reflection	Graded Process Recordings	CLO2, CLO8

Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
a. Organizational Assessment b. Social Policy c. Research-informed practice and Practice-informed research	Reflective Essays Process Recordings	Graded Oral Presentation Graded Reflective Essay Agency Attendance and Satisfactory Performance	

12. Methods of Instruction

In the structuring of this course, what major methods of instruction will be utilized?
Lectures
Process recordings
Readings
Discussions
Essays (question of the day format)
Papers
Experiential learning through field experience

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
Yes

Related Course Learning Outcome
CLO2, CLO3, CLO5

Related Outline Component
TO1, TO2, TO3, TO4

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

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

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Humanistic Perspective

Historical Perspective

Global and Cultural Awareness
Yes

Related Course Learning Outcome
CLO4, CLO7, CLO8

Related Outline Component
TO1, TO2

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

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

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Ethical Reasoning and Action

Independent/Critical Thinking
Yes

Related Course Learning Outcome
CLO1, CLO2, CLO3, CLO4, CLO5, CLO6, CLO7, CLO8

Related Outline Component
TO1, TO2, TO3, TO4

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 for current adoptions.

Technology Needs:

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

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: August 23, 2018
Board of Trustees Approval Date: December 6, 2018

Reviewer Comments
Susan O'Connor (soconnor) (Sun, 09 May 2021 19:05:55 GMT): Rollback: for the prerequisites is it SOWK 101 & 207 or PSYC 271 & SOWK 194, so you need to take one of the sets of courses?

Key: 2023