

EXHIBIT B



BOARD OF TRUSTEES

Bylaw, Policy, and Curriculum Committee Agenda Items

To: Board of Trustees
From: Office of the President
Date: August 17, 2026

The following Bylaw, Policy, and Curriculum Committee items are recommended to the Ocean County College Board of Trustees for approval at its meeting on **Thursday, August 27, 2026:**

1. Recommend approval of the following revised 2026-27 Advisory Committees:
 - a) Environmental Management Advisory Committee (**Exhibit B-1**)
 - b) Law and Public Safety Advisory Committee (**Exhibit B-2**)
2. Recommend approval of the following items as accepted by the College Senate at its meetings on July 16, and August 17, 2026:
 - a. Revised Program
 - 1) Associate in Applied Science Degree, Radiography Technology (**Exhibit B-3**)
 - b. New Courses
 - 1) CSIT 190, Artificial Intelligence Literacy (**Exhibit B-4**)
 - 2) RADT 201, Advanced Imaging and Quality Assurance (**Exhibit B-5**)
 - 3) RADT 209, Registry Review (**Exhibit B-6**)
 - c. Revised Courses
 - 1) ASLN 105, Deaf Culture and History (**Exhibit B-7**)
 - 2) ENVI 152L, Environmental Science Lab (**Exhibit B-8**)
 - 3) MATH 191, Precalculus 1 (**Exhibit B-9**)
 - 4) MATH 192, Precalculus II (**Exhibit B-10**)
 - 5) MATH 196, Precalculus (**Exhibit B-11**)

EXHIBIT B-1

ENVIRONMENTAL MANAGEMENT

Michelle I. Alexandra Quality Documentation Coordinator S.W. Electronics Manufacturing Company (EMAIL ADDRESS)	HENRY JACKSON, Ed.D., M.A., M.Ed. COLLEGE LECTURER II · STUDENT SUCCESS OCEAN COUNTY COLLEGE HJACKSON@OCEAN.EDU
BRENT A. ALTIMOSE, Ph.D., CIH, CSP ADJUNCT PROFESSOR · INDUSTRIAL HYGIENE & HAZARDOUS MATERIALS OCEAN COUNTY COLLEGE BALTIMOSE@OCEAN.EDU	SHUTING LIU, Ph.D. ASSISTANT PROFESSOR · ENVIRONMENT AND SUSTAINABILITY SERVICES KEAN UNIVERSITY SHUTING.LIU@KEAN.EDU
ALYSSA ANTONELLI STUDENT OCEAN COUNTY COLLEGE ALYSSA_ANTONELLI@STUDENTS.OCEAN.EDU	TODD MENADIER, M.S. DIRECTOR OF PROPOSALS SOLAR LANDSCAPE TODD.MENADIER@GMAIL.COM
JAMES CAMPBELL, Ed.D., M.S., LAC DIRECTOR OF STUDENT SUCCESS AND RETENTION OCEAN COUNTY COLLEGE JCAMPBELL@OCEAN.EDU	JIM NUCCIO DIRECTOR OF BUSINESS DEVELOPMENT WESTINGHOUSE JNUCCIO@WESTINGHOUSE.COM
JAMES CAMPBELL, Ed.D., M.S., LAC DIRECTOR OF STUDENT SUCCESS AND RETENTION OCEAN COUNTY COLLEGE JCAMPBELL@OCEAN.EDU	VANDANA SAINI, Ph.D. DEAN · SCHOOL OF STEM OCEAN COUNTY COLLEGE VSAINI@OCEAN.EDU
DANA CHRISTENSEN, Ph.D., M.S. INSTRUCTOR · ENVIRONMENTAL SCIENCE JACKSON MEMORIAL HIGH SCHOOL DCHRISTENSEN@JACKSONSD.ORG	LUKE M. SEYFERT SENIOR TALENT ACQUISITION SPECIALIST COLLIERS ENGINEERING & DESIGN LSEYFERT7@GMAIL.COM
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CARRIE FERRARO, Ph.D. ACTING DIRECTOR · MATH & SCIENCE LEARNING CENTER RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY FERRARO@MARINE.RUTGERS.EDU	LINCOLN SIMMONS, M.S. – CHAIR COLLEGE LECTURER · BIOLOGY OCEAN COUNTY COLLEGE LSIMMONS@OCEAN.EDU
KAREN HERSHEY, Esq. FOUNDER AND PRINCIPAL CONSULTANT KLH ADVISORY LLC HERSHEY@KLHADVISORY.COM	LAURA WILLS, M.A., LPC DIRECTOR OF TRANSFER SERVICES & ARTICULATION OCEAN COUNTY COLLEGE LWILLS@OCEAN.EDU

CHAIR: LINCOLN SIMMONS, M.S.

ACADEMIC ADVISOR: LAURA WILLS, M.A., LPC

ALUMNI REPRESENTATIVE: Michelle I. Alexandra

BUSINESS, INDUSTRY, AND/OR LABOR ORGANIZATION: PHILIP I. BRILLIANT

CTE – FACULTY: BRENT A. ALTIMOSE, PH.D., CIH, CSP

CTE – STUDENT: ALYSSA ANTONELLI

DISTRICT REPRESENTATIVE FOR SPECIAL POPULATIONS: HENRY JACKSON, ED.D.

HIGH SCHOOL REPRESENTATIVE: DANA CHRISTENSEN, PH.D.

POSTSECONDARY INSTITUTION REPRESENTATIVE: SHUTING LIU, PH.D.

EXHIBIT B-2

LAW AND PUBLIC SAFETY

Stephen Agresti, Ph.D., M.S., M.S.Ed. College Lecturer II · Criminal Justice Ocean County College sagresti@ocean.edu	Stuart Martinsen, M.A. Adjunct Instructor Ocean County College smartinsen@ocean.edu
Patrick Beatty, Ed.D., Ed.S., M.S. – CHAIR College Lecturer II · Criminal Justice Ocean County College pbeatty@ocean.edu	Jeffrey J. McWeeney, Esq. Partner King, McWeeney & Wells, LLC jmcweeney@kmwlawfirm.com
Bradley D. Bilheimer, Esq. Prosecutor Ocean County Prosecutor's Office nmoncrief@co.ocean.nj.us	Frederic A. Milani Detective Corporal Ocean County Sheriff's Office fmilani@co.ocean.nj.us
Nicholas Capriglione, MAS Deputy Chief of Police · Commanding Officer, Administration New Jersey Transit Police Department NCapriglione@njtransit.com	Philip M. Miller, Esq. Judge Law Offices of Philip M. Miller, LLC pmmlegal@aol.com
Sabrina Estefan-Maldonado, M.A. Court Executive, Assistant Criminal Division Manager Superior Court of New Jersey · Vicinages #13 & #15 sabrina.estefanmaldo@njcourts.gov	J. Mark Mutter, Esq. Adjunct Professor Ocean County College mmutter@ocean.edu
Julie A. Kennedy, Esq. Associate Bercik Law julie.a.kennedy.esq@gmail.com	Amy Nadybal, M.A. Transfer Advising Coordinator Ocean County College anadybal@ocean.edu
Fernando E. Linhares, D.Min, J.D., LL.M., M.A., M.Div Criminal Justice Coordinator Kean University flinhare@kean.edu	

CHAIR: Patrick Beatty, Ed.D., Ed.S., M.S.

ACADEMIC ADVISOR: Amy Nadybal, M.A.

ALUMNI REPRESENTATIVE: N/A

BUSINESS, INDUSTRY, AND/OR LABOR ORGANIZATION: Bradley D. Bilheimer, Esq.

CTE – FACULTY: Stephen Agresti, Ph.D., M.S., M.Ed.

CTE – STUDENT: N/A

DISTRICT REPRESENTATIVE FOR SPECIAL POPULATIONS: N/A

HIGH SCHOOL REPRESENTATIVE: N/A

POSTSECONDARY INSTITUTION REPRESENTATIVE: Fernando E. Linhares, D.Min, J.D., LL.M, M.A., M.Div

EXHIBIT B-3

Program Change Request

Date Submitted: 08/11/26 10:34 am

Viewing: **AAS.RADT : Radiography Technology,
Associate in Applied Science**

Last approved: 08/11/26 8:38 am

Last edit: 08/11/26 10:54 am

Changes proposed by: James Marshall (jmarshall)

Program Type	Associate of Applied Science (AAS)
Program Title	Radiography Technology, Associate in Applied Science
Academic School	Nursing and Health Sciences
Effective Catalog Year	2026-2027
Program Code	AAS.RADT
CIP Code	51.0911 - 51.0911

In Workflow

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

Program Description

Approval Path

1. 08/11/26 10:35 am
James Marshall (jmarshall):
Approved for NH Academic Administrator
2. 08/11/26 11:45 am
James Marshall (jmarshall):
Approved for NH Dean
3. 08/11/26 11:49 am
James Marshall (jmarshall):

EXHIBIT B-3

Approved for
Executive Director
of Curriculum and
Program
Development

4. 08/11/26 11:58 am
Catherine Mancuso
(cmancuso):
Approved for Vice
President of
Academic Affairs
5. 08/13/26 3:50 pm
Katherine Toy
(ktoy): Approved for
Curriculum
Committee Chair

History

1. Aug 11, 2026 by
Mary Gibson
(mgibson)

The A.A.S. in Radiography Technology degree is designed to equip students with the essential clinical and technical skills required for a career in medical imaging. Students will develop proficiency in patient care, image acquisition, and the use of advanced imaging technologies. The program emphasizes the importance of safety, ethics, and effective communication within healthcare settings. Instructors will guide students in performing radiographic procedures, evaluating diagnostic images, and understanding the principles behind various imaging modalities.

Program Objectives

Program Goals

	Program goals
PG1	Prepare students for entry-level clinical practice

	Program goals
PG2	Support the development of professionalism and effective communication skills required in clinical and collaborative settings.
PG3	Cultivate critical thinking and problem-solving skills needed to adapt and respond in diverse clinical situations.

Program Learning

Outcomes

	Students who successfully complete this program will be able to:
PLO1	Demonstrate clinical competency as an entry-level radiographer through application of positioning skills and selection of technical factors.
PLO2	Employ radiation protection principles to provide a safe medical imaging environment.
PLO3	Demonstrate effective communication skills, problem-solving and critical thinking as part of a healthcare team.
PLO4	Apply ethical and moral reasoning to ensure patients are treated with compassion and dignity
PLO5	Participate in professional activities as described in the ASRT Code of Ethics to promote professional growth as a radiographer and support lifelong learning

Learning Outcomes Display (show only)

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
ENGL 151 					
COMM 154 					
PSYC 172 					
MATH 151 					
BIOL 130 					
BIOL 130L 					
BIOL 131 					
BIOL 131L 					
BIOL130L					

Course Code	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
BIOL131L					
FallOne					
SpringOne					
SummerOne					
FallTwo					
SpringTwo					

Required Qualifications

Pre-Professional Phase

<u>ENGL 151</u>	<u>English I</u>	<u>3</u>
<u>COMM 154</u>	<u>Fundamentals of Public Speaking</u>	<u>3</u>
<u>PSYC 172</u>	<u>General Psychology</u>	<u>3</u>
<u>MATH 151</u>	<u>A Survey of Mathematics (or Higher)</u>	<u>3</u>
<u>BIOL 130</u> <u>& 130L</u>	<u>Human Anatomy and Physiology I Lecture</u> <u>and Human Anatomy and Physiology I Lab</u>	<u>4</u>
<u>BIOL 131</u> <u>& 131L</u>	<u>Human Anatomy & Physiology II Lecture</u> <u>and Human Anatomy and Physiology II Lab</u>	<u>4</u>
<u>Total Credit Hours</u>		<u>20</u>

Plan of Study Grid

Fall One Credit Hours

<u>RADT 101 Introduction to Radiography</u>	<u>1</u>
<u>RADT 105 Radiation Physics</u>	<u>3</u>
<u>RADT 109 Methods of Patient Care</u>	<u>1</u>
<u>RADT 110 Radiographic Procedures I and Lab</u>	<u>3</u>
<u>RADT 113 Clinical I</u>	<u>4</u>
Credit Hours	12

Spring One

<u>RADT 108 Image Acquisition and Evaluation</u>	<u>3</u>
<u>RADT 111 Radiographic Procedures II & Lab</u>	<u>2</u>
<u>RADT 103 Principles of Radiation Biology</u>	<u>2</u>
<u>RADT 114 Clinical II</u>	<u>4</u>
Credit Hours	11

Summer One

<u>RADT 115 Clinical III</u>	<u>6</u>
<u>RADT 200 Contrast Media & Pharmacology</u>	<u>1</u>
Credit Hours	7
Fall Two	
<u>RADT 201 Advanced Imaging I</u>	<u>3</u>
<u>RADT 210 Radiographic Procedures III & Lab</u>	<u>2</u>
<u>RADT 213 Clinical IV</u>	<u>6</u>
Credit Hours	11
Spring Two	
<u>RADT 207 Radiographic Pathology</u>	<u>2</u>
<u>RADT 202 Advanced Imaging II</u>	<u>2</u>
<u>RADT 209 Registry Review</u>	<u>1</u>
<u>RADT 214 Clinical V</u>	<u>6</u>
Credit Hours	11
Total Credit Hours	52

~~First Semester~~

RADT 105—Radiation Physics	3
RADT 109—Methods of Patient Care	1
RADT 110—Radiographic Procedures I & Lab	3
RADT 101—Introduction to Radiography	1
RADT 113—Clinical I	4
Total Credit Hours	0

~~Second Semester~~

RADT 107—Medical Law & Ethics	1
RADT 108—Image Acquisition & Evaluation	3
RADT 111—Radiographic Procedures II & Lab	2
RADT 103—Principles of Radiation Biology	2
RADT 114—Clinical II	4
Total Credit Hours	0

~~Summer Term~~

RADT 200—Contrast Media & Pharmacology	1
RADT 115—Clinical III	6

~~Fourth Semester~~

RADT 201—Advanced Imaging I	2
RADT 205—Quality Assurance	2
RADT 210—Radiographic Procedures III & Lab	2
RADT 213—Clinical IV	6
Total Credit Hours	0
Fifth Semester	
RADT 207—Radiographic Pathology	2
RADT 202—Advanced Imaging II	2
RADT 209—Registry Review	2
RADT 214—Clinical V	6
Total Credit Hours	0

Degree Requirements Breakdown

GCOM

Course Code & Title	Credits
<u>ENGL 151, English I</u> ENGL 151	3
<u>COMM 154, Fundamentals of Public Speaking</u> COMM 154	3

GSOC/ GHUM

Course Code & Title	Credits
<u>PSYC 172, General Psychology</u> PSYC 172	3

GMAT/ GSCI/ GTEC

Course Code & Title	Credits
MATH 151 (or Higher)	3
<u>BIOL 130/130L Anatomy and Physiology I Lecture and Lab</u> BIOL 130	4
<u>BIOL 131/131L Anatomy and Physiology II Lecture and Lab</u> BIOL 131	4

General Education

Course Code & Title	Credits
not needed	0

Concentration

Courses

Course Code & Title	Credits
RADT 101 Introduction of Radiography	1
RADT 103 Principles of Radiation Biology	2
RADT 105 Radiation Physics	3
RADT 107 Medical Law & Ethics	1
RADT 108 Image Acquisition and Evaluation	3
RADT 109 Methods of Patient Care	1
RADT 110 Radiographic Procedures I & Lab	3
RADT 111 Radiographic Procedures II & Lab	2
RADT 113 Clinical I	4
RADT 114 Clinical II	4
RADT 200 Contrast Media & Pharmacology	1
RADT 201 Advanced Imaging <u>and Quality Assurance</u> †	<u>3</u> 2
RADT 202 Advanced Imaging II	2
RADT 205 Quality Assurance	2
RADT 207 Radiographic Pathology	2
RADT 209 Registry Review	<u>1</u> 2
RADT 210 Radiographic Procedures III & Lab	2
RADT 115 Clinical III	6
RADT 213 Clinical IV	6
RADT 214 Clinical V	6

Board Approval

History of Board
approval dates

Board of Trustees Approval: June 30, 2025

Reviewer

Comments

EXHIBIT B-4

Course Change Request

New Course Proposal

Date Submitted: 07/27/26 1:44 pm

Viewing: **CSIT 190 : Artificial Intelligence Literacy**

Last edit: 07/28/26 9:24 am

Changes proposed by: Vandana Saini (vsaini)

Learning Outcomes

Display (show only)

In Workflow

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

Approval Path

1. 07/27/26 1:44 pm
Connor Sampson (csampson):
Approved for STEM Academic Administrator
2. 07/27/26 1:46 pm
Vandana Saini (vsaini): Approved for STEM Dean
3. 07/28/26 9:24 am
James Marshall (jmarshall):

EXHIBIT B-4

Approved for
Executive Director
of Curriculum and
Program
Development

4. 08/11/26 10:00 am
Catherine Mancuso
(cmancuso):

Approved for Vice
President of
Academic Affairs

5. 08/13/26 3:50 pm
Katherine Toy
(ktoy): Approved for
Curriculum
Committee Chair

1. Course Information

Subject	CSIT - Computer Science/ Information Technology
School	Science, Technology, Engineering, Mathematics
Course Title	Artificial Intelligence Literacy

2. Hours

Semester Hours	3
Lecture	3
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

This course introduces students to the fundamental concepts, applications, opportunities, and challenges of Artificial Intelligence (AI). Students will explore how AI technologies, such as

machine learning, natural language processing, computer vision, and generative AI, are transforming education, business, healthcare, cybersecurity, government, and everyday life. Emphasis is placed on responsible and ethical AI use, prompt engineering, privacy and security concerns, misinformation and deepfakes, and the societal impact of AI. Through hands-on activities using modern AI tools, students will develop practical AI literacy skills needed for academic, personal, and professional success. No prior programming experience is required.

4. Requisites

Prerequisites

NONE

Corequisites

NONE

5. Course Type

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need
for this course

Artificial Intelligence is rapidly transforming education, business, healthcare, government, cybersecurity, and everyday life. As AI technologies become increasingly integrated into workplace and personal environments, students across all disciplines need a foundational understanding of how AI systems work, their capabilities and limitations, and the ethical, legal, and societal implications of their use.

This course provides students with the knowledge and skills necessary to evaluate, use, and interact responsibly with modern AI technologies. It is designed to promote digital literacy, critical thinking, and responsible technology use while preparing students to navigate an increasingly AI-driven world.

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

Technology

General Education Proposed

Status

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

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

	Add item
1	Demonstrating the college's commitment to offer comprehensive educational programs that develop intentional learners of all ages. (Mission Statement)
2	Seeking to ensure that students will thrive in an increasingly diverse and complex world. (Vision Statement)
3	Preparing students for successful transfer to other educational institutions and/or for entrance into the workforce. (Academic Master Plan)
4	Seeking to empower students through the mastery of Intellectual and Practical Skills. (Academic Master Plan)
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	Middlesex County College
Course Title	Artificial Intelligence Literacy
Course Number	CSC 119
Number of Credits	3

Comments

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:
unable to determine

10. Course Learning Outcomes

Learning Outcomes

	Students who successfully complete this course will be able to:
CLO1	Define AI concepts, terminology, ML, NLP, CV, and Generative AI
CLO2	Identify AI applications across industries
CLO3	Use Generative AI tools and prompt engineering
CLO4	Analyze, verify, and evaluate AI-generated content for accuracy, bias, misinformation, authenticity, reliability, and ethical implications.

	Students who successfully complete this course will be able to:
CLO5	Discuss societal, ethical, legal, privacy, and security impacts of AI
CLO6	Evaluate emerging AI technologies and future effects
CLO7	Apply ethical reasoning and critical thinking
CLO8	Evaluate the impact of AI on careers, industries, and the workforce, and demonstrate responsible AI use through the research and presentation of an AI application relevant to an academic discipline, career field, or societal issue.

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	Foundations of Artificial Intelligence • History of AI • AI Terminology and Concepts • Types of AI • AI in Everyday Life • Capabilities and limitations of AI	AI in Daily Life Reflection AI Timeline Activity Discussion Board	Quiz Discussion Participation	CLO1

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO2	Foundations of Applied Machine Learning, Applied Deep Learning and Generative AI & LLM • Supervised Learning • Unsupervised Learning Hybrid approaches • Applied deep learning and neural networks • Generative AI and large language models • Natural language processing applications • Computer vision applications	Teachable Machine Activity Orange AI Lab AI Tool Exploration	Quiz Lab Assignment	CLO1, CLO2, CLO3, CLO4, CLO6

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO3	Applied AI Tools and AI Output Evaluation • ChatGPT, Claude, Gemini, Microsoft Copilot • Prompt engineering • AI-assisted writing and research • AI image, audio, and video tools • Evaluating AI outputs • Hallucinations and verification • Fact-checking AI responses	Prompt Engineering Exercises AI Productivity Workflow Assignment AI Tool Comparison Activity	Hands-On Lab Project Submission Written report	CLO2, CLO3, CLO4
TO4	AI, Misinformation, Deepfakes, and Cybersecurity • Deepfake technology • Voice cloning • AI-generated images and video • Phishing and social engineering • Misinformation	Deepfake Analysis AI Scam Case Study Misinformation Investigation	Written Report Presentation Quiz	CLO4, CLO5, CLO6

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	detection • Bias in AI systems • Recognizing AI limitations			
TO5	Ethical, Legal, Privacy, and Responsible AI • Bias and fairness • Responsible AI use • Transparency and accountability • Ethical decision making • Data privacy • Intellectual property and copyright • AI regulation • Security risks • AI governance	Ethics Case Study AI Ethics Reflection Privacy Impact Exercise Policy Analysis	Reflection Paper Written Assignment Discussion	CLO4, CLO5, CLO6, CLO7
TO6	Current and Future Trends of AI in Society and the Workforce • AI in business, healthcare, education, and government • Workforce	Career Impact Research Project Industry Case Study Future of AI Project Research Presentation	Final Project Final Presentation Research Paper	CLO5, CLO6, CLO7, CLO8

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	transformation • Future careers • Emerging AI technologies • Autonomous systems and robotics • Human-AI collaboration • Future trends and societal impacts			

12. Methods of Instruction

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

Class lecture

o Discussion

o Demonstrations

o Labs and online

o Presentations

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

Information

Communication-Written and Oral

Quantitative Knowledge and Skills

Scientific Knowledge and Reasoning

Technological Competency Yes

Related Course CLO1-CLO8

Learning Outcome

Related Outline TO1-TO9 - T06

Component

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

Hands-on in-class activities

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course CLO1, CLO4, CLO5, CLO6, CLO7,

Learning Outcome CLO8

Related Outline TO1-TO9

Component

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

- Quizzes and examinations
- Hands-on AI tool activities and labs
- Prompt engineering exercises
- Discussion board participation
- Ethics and case study analyses
- Written reflections and research assignments
- Oral presentations
- Final project demonstrating the application of AI concepts to a real-world problem, academic discipline, or career field

14. Needs

Instructional

Materials (text
etc.):

Artificial Intelligence Basics: A Non-Technical Introduction by Tom Taulli, COMPTIA instructional materials.

Technology Needs:

- Internet-connected computer lab
- Modern web browser
- Access to generative AI platforms (e.g., ChatGPT, Gemini, Claude, Microsoft Copilot)
- Access to no-code AI tools such as Teachable Machine and Orange Data Mining

Human Resource

Needs (Presently
Employed vs. New
Faculty):

Presently Employed

Facility Needs:

- Standard computer classroom with Internet access
- Multimedia projection capability

Library needs:

Access to current books, journals, databases, and electronic resources related to Artificial Intelligence, ethics, cybersecurity, privacy, workforce development, and emerging technologies.

15. Grade Determinants

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

A: Excellent

B+: Very Good

B: Good

C+: Above Average

C: Average

D: Below Average

F: Failure

I: Incomplete

R: Audit

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

Reviewer

Comments

Key: 2418

EXHIBIT B-5

Course Change Request

New Course Proposal

Date Submitted: 06/05/25 1:42 pm

Viewing: **RADT 201 : Advanced Imaging and Quality Assurance**

Last edit: 08/11/26 11:46 am

Changes proposed by: Mary Gibson (mgibson)

Programs
referencing this
course

[AAS.RADT: Radiography Technology, Associate in Applied Science](#)

Learning Outcomes
Display (show only)

In Workflow

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

Approval Path

1. 06/05/25 1:53 pm
Mary Gibson (mgibson):
Approved for NH Academic Administrator
2. 06/05/25 2:50 pm
Teresa Walsh (twalsh): Approved for NH Dean
3. 06/09/25 11:37 am
James Marshall (jmarshall):

EXHIBIT B-5

Approved for
Executive Director
of Curriculum and
Program
Development

4. 06/13/25 12:19 pm
Caroline Brittain
(cbrittain):
Approved for
Curriculum
Committee Chair
5. 06/24/25 3:23 pm
Donna Rosinski-
Kauz (drosinski-
kauz): Approved for
Senate Chair
6. 06/24/25 9:02 pm
Eileen Garcia
(egarcia): Approved
for Vice President of
Academic Affairs
7. 06/25/25 9:15 am
Connie Bello
(cbello): Approved
for Cabinet
8. 06/25/25 9:25 am
Connie Bello
(cbello): Approved
for President
9. 07/03/25 2:54 pm
Connie Bello
(cbello): Approved
for Board of
Trustees Chair
10. 08/11/26 10:37 am
James Marshall
(jmarshall): Rollback
to Curriculum
Committee Chair for
NH Academic

Administrator
11. 08/13/26 3:51 pm
Katherine Toy
(ktoy): Approved for
Curriculum
Committee Chair

1. Course Information

Subject	RADT - Radiography Technology
School	Nursing and Health Sciences
Course Title	Advanced Imaging and Quality Assurance

2. Hours

Semester Hours	3
Lecture	1
Lab	4
Practicum	0

3. Catalog Description

For display in the
online catalog

Content imparts an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving and retrieval are discussed. Principles of digital system quality assurance and maintenance are presented.

4. Requisites

Prerequisites

Corequisites

5. Course Type

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need
for this course

Required course for Radiography Technology A.A.S.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a general education 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	The course aligns with Ocean County College's institutional mission and strategic goals, demonstrating our commitment to achieving broader institutional aims while preparing students for a successful career in radiology technology.

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution Bergen CC

Course Title	Radiography IV
Course Number	RAD 288
Number of Credits	3
Comments	

Institution	Middlesex County College
Course Title	Radiographic Seminar I
Course Number	RAD 256
Number of Credits	2
Comments	

Institution	Rowan College at Burlington County
Course Title	Radiography Clinical Procedures V
Course Number	RAD 250
Number of Credits	2
Comments	

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:

Not a transferable course

10. Course Learning Outcomes

Learning Outcomes

	Students who successfully complete this course will be able to:
CLO1	Describe digital fluoroscopic formation;
CLO2	Identify fluoroscopic equipment;
CLO3	Describe the function of each component of the image receptor;
CLO4	Define digital imaging and communication in medicine;
CLO5	Describe electronic imaging equipment used in radiography and fluoroscopy and flat panel detectors used in digital electronic x-ray equipment;

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	Characteristics of image receptors	see attached	see attached	CLO3
TO2	Types a. Photostimulable phosphors b. Thin Film Transistor Flat-Panel Array	see attached	see attached	CLO5

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO3	Definition, influence, and application of image receptor properties a. Contrast b. Speed/sensitivity c. Latitude d. Spatial Resolution	see attached	see attached	CLO3
TO4	Image receptor holders	see attached	see attached	CLO3
TO5	Image Receptors	see attached	see attached	CLO3
TO6	Electronic Imaging	see attached	see attached	CLO4,CLO5
TO7	Basics to computers	see attached	see attached	CLO4
TO8	Computer applications	see attached	see attached	CLO4
TO9	Viewing and recording systems	see attached	see attached	CLO2,CLO5
TO10	Digital fluoroscopy	see attached	see attached	CLO1,CLO2
TO11	Conventional tomography	see attached	see attached	CLO2,CLO3

12. Methods of Instruction

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

Lecture

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

Information

Communication-Written and Oral

Quantitative Knowledge and Skills

Scientific Knowledge and Reasoning

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking

14. Needs

Instructional
Materials (text
etc.):

x

Technology Needs:

x

Human Resource
Needs (Presently
Employed vs. New

Faculty):

x

Facility Needs:

x

Library needs:

x

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

James Marshall (jmarshall) (08/11/26 10:37 am): Rollback: Consultant Recommendation: Advanced Imaging I already contains digital system quality assurance and maintenance. Combine 201 and 205 into one 3 credit course.

Key: 2357

EXHIBIT B-6

Course Change Request

New Course Proposal

Date Submitted: 06/05/25 1:48 pm

Viewing: **RADT 209 : Registry Review**

Last edit: 08/11/26 10:43 am

Changes proposed by: Mary Gibson (mgibson)

Programs
referencing this
course

[AAS.RADT: Radiography Technology, Associate in Applied Science](#)

Learning Outcomes
Display (show only)

In Workflow

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

Approval Path

1. 06/05/25 1:53 pm
Mary Gibson
(mgibson):
Approved for NH Academic Administrator
2. 06/05/25 2:50 pm
Teresa Walsh
(twalsh): Approved for NH Dean
3. 06/09/25 11:38 am
James Marshall
(jmarshall):

Approved for
Executive Director
of Curriculum and
Program
Development

4. 06/13/25 12:19 pm
Caroline Brittain
(cbrittain):
Approved for
Curriculum
Committee Chair
5. 06/24/25 3:23 pm
Donna Rosinski-
Kauz (drosinski-
kauz): Approved for
Senate Chair
6. 06/24/25 9:02 pm
Eileen Garcia
(egarcia): Approved
for Vice President of
Academic Affairs
7. 06/25/25 9:15 am
Connie Bello
(cbello): Approved
for Cabinet
8. 06/25/25 9:26 am
Connie Bello
(cbello): Approved
for President
9. 07/03/25 2:55 pm
Connie Bello
(cbello): Approved
for Board of
Trustees Chair
10. 08/11/26 10:42 am
James Marshall
(jmarshall): Rollback
to Curriculum
Committee Chair for
NH Academic

Administrator
11. 08/13/26 3:51 pm
Katherine Toy
(ktoy): Approved for
Curriculum
Committee Chair

1. Course Information

Subject	RADT - Radiography Technology
School	Nursing and Health Sciences
Course Title	Registry Review

2. Hours

Semester Hours	1
Lecture	1
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

This course is designed to prepare students to write the national board exam administered by the American Registry of Radiologic Technologists (ARRT). A review of all coursework presented in the program, with an emphasis on the ARRT exam specifications, will be presented.

4. Requisites

Prerequisites

Corequisites

5. Course Type

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need
for this course

Required course for Radiography Technology A.A.S.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a general education 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	The course aligns with Ocean County College's institutional mission and strategic goals, demonstrating our commitment to achieving broader institutional aims while preparing students for a successful career in radiology technology.

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution Bergen CC

Course Title	Essential Skills for Radiographic Practice
Course Number	RAD 291
Number of Credits	1
Comments	
Institution	Middlesex County College
Course Title	Radiographic Seminar II
Course Number	RAD 299
Number of Credits	1
Comments	
Institution	Rowan College at Burlington County
Course Title	Essential Skills for Practice
Course Number	RAD 291
Number of Credits	1
Comments	

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:

Not transferable

10. Course Learning Outcomes

Learning Outcomes

	Students who successfully complete this course will be able to:
CLO1	Demonstrate knowledge of previously acquired subject material;
CLO2	Discuss important topics in radiation protection, equipment operation, image production, radiographic procedures and patient care;
CLO3	Demonstrate ability to be seated for the registry examination;

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	Preparation for review	see attached	see attached	CLO1,CLO3
TO2	Radiation protection and biology	see attached	see attached	CLO1,CLO2,CLO3
TO3	Equipment operation and maintenance	see attached	see attached	CLO1,CLO2,CLO3
TO4	Image production and evaluation	see attached	see attached	CLO1,CLO2,CLO3
TO5	Radiographic procedures: anatomy, positioning,	see attached	see attached	CLO1,CLO2,CLO3

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	procedures, pathology			
TO6	Patient care and management	see attached	see attached	CLO1,CLO2,CLO3

12. Methods of Instruction

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

Lecture

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

Information

Communication-Written and Oral

Quantitative Knowledge and Skills

Scientific Knowledge and Reasoning

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking

14. Needs

Instructional
Materials (text
etc.):

x

Technology Needs:

x

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

x

Facility Needs:

x

Library needs:

x

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

James Marshall (jmarshall) (08/11/26 10:42 am): Rollback: Consultant Recommendation: Comparable programs do not include a 2 credit review. Reduction in credits in Response to AIC comments.

Key: 2362

EXHIBIT B-7

Course Change Request

Date Submitted: 06/08/26 3:17 pm

Viewing: **ASLN 105 : Deaf Culture and History**

Last approved: 04/27/21 1:39 pm

Last edit: 06/08/26 3:17 pm

Changes proposed by: James Marshall (jmarshall)

Catalog Pages
referencing this
course

[American Sign Language \(ASLN\)](#)

Programs
referencing this
course

[AAS.IT: American Sign Language - English Interpreting, Associate in Applied Science](#)

Learning Outcomes
Display (show only)

In Workflow

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

Approval Path

1. 04/29/26 1:18 pm
Kathryn Deblasi (kdeblasi): Rollback to Initiator
2. 06/10/26 10:47 am
Kathryn Deblasi (kdeblasi):
Approved for AH Academic Administrator
3. 06/11/26 3:15 pm
Jonathan Molinaro (jmolinaro):

EXHIBIT B-7

Approved for AH

Dean

4. 06/15/26 8:57 am

James Marshall

(jmarshall):

Approved for

Executive Director

of Curriculum and

Program

Development

5. 06/15/26 8:58 am

Catherine Mancuso

(cmancuso):

Approved for Vice

President of

Academic Affairs

6. 07/09/26 3:59 pm

James Marshall

(jmarshall):

Approved for

Curriculum

Committee Chair

History

1. Apr 27, 2021 by

soconnor

1. Course Information

Subject	ASLN - American Sign Language
School	Arts and Humanities
Course Title	Deaf Culture and History

2. Hours

Semester Hours	3.00000
Lecture	3

Lab	0
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Practicum	0
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3. Catalog Description

For display in the
online catalog

This course introduces the history and culture of the deaf. Discussion will include the values, norms, identities, traditions, and subcultures within the larger culture of the deaf community. Questions such as the nature of sign language, the education of deaf individuals, and historical treatment of deafness will be explored.

4. Requisites

Prerequisites

Students must complete the following courses with a minimum grade of C;

ASLN ~~104~~, ASLN 112, ASLN 115, ASLN 125

Corequisites

ASLN 121 and ~~121~~, ASLN 201 ~~157~~

5. Course Type

Course Type for vocational (approved for Perkins funding)

Perkins Reporting

6. Justification

Describe the need
for this course

This course introduces the history and culture of the deaf. Discussions will include the values, norms, identities, traditions, and subcultures within the larger culture of the deaf community. Questions such as the nature of sign language, the education of deaf individuals, and historical treatment of deafness will be explored.

7. General Education

Will the college submit this course to the statewide General Education Coordinating Committee for approval as a general education 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	Provide a challenging, coherent, and integrated curriculum, including high quality instructional and cultural programs for a diverse population of students
2	Establish a shared commitment to high and meaningful educational and ethical standards.
3	Prepare students for successful transfer to other educational institutions.
4	Prepare students for a rewarding life of personal growth and life-long learning.

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Union County College
Course Title	American Deaf Culture and History
Course Number	ASL 208
Number of Credits	3
Comments	

Institution	Camden County College
Course Title	American Deaf Culture and History
Course Number	SLS 202
Number of Credits	3
Comments	

Transferability of Course

Georgian Court
University

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

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CDD4101 Deafness and Society – 3 cr	Deafness and Society	

Monmouth
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
CO001(100 Level Comm Elective) – 3 cr	Elective	

Rowan University

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

Rutgers - New
Brunswick, Mason
Gross School of the
Arts

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

Stockton University

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

If not transferable
to any institution,
explain:

10. Course Learning Outcomes

Learning Outcomes

	Students who successfully complete this course will be able to:
CLO1	Describe the education of the deaf
CLO2	Describe the historical treatment of the deaf
CLO3	Describe the values, norms, and identities of the deaf
CLO4	Discuss the evolution of the deaf community
CLO5	Describe how historical treatment of the deaf led to sign language becoming forbidden
CLO6	Discuss deaf role models

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)

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO1	1. Discuss historical treatment of the Deaf	1. reading 2. class discussion 3. group project	Quiz on reading, graded oral presentation of project	CLO2,3,4,5
TO2	2. Discuss the relevance of Thomas Gallaudet as a hearing individual who decided to travel to Europe to learn American Sign Language	1. reading 2. class discussion 3. group project	Quiz on reading, graded oral presentation of project	CLO1,2,3,4,5,6
TO3	3. Discuss how Alexander Graham Bell was a driving force in trying to eradicate the deaf community and why	1. reading 2. class discussion 3. group project	Quiz on reading, graded oral presentation of project	CLO3,5
TO4	4. Discuss the impact cochlear implants have on the deaf community	1. reading 2. class discussion 3. group project	Quiz on reading, graded oral presentation of project	CLO1,2,3,5
TO5	5. Discuss the ramification that Dr. Itard had on the deaf community and why he is still regarded as the 'Father of the ear, nose, and throat' – even though he maimed and killed many innocent young deaf individuals	1. reading 2. class discussion 3. group project	Quiz on reading, graded oral presentation of project	CLO2,3,4
TO6	6. Mainstreaming vs. Schools for the Deaf	1. reading 2. class discussion 3. group project	Quiz on reading, graded oral presentation of project	CLO1,2,3,4,5,6
TO7	Discuss the importance of deaf jokes	1. reading 2. class discussion 3. group project	Quiz on reading, graded oral presentation of project	CLO2,3
TO8	Discuss how important Laurent Clerc was to the	1. reading 2. class discussion	Quiz on reading, graded oral presentation of	CLO1,3,4,6

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	deaf community and how he served as a role model	3. group project	project	

12. Methods of Instruction

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

- o Lecture
- o Demonstration
- o Visual aids
- o Games
- o Group activities
- o Group projects
- o Supplementary resource materials

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 Yes

Related Course CLO1,2,3,4,5,6

Learning Outcome

Related Outline TO1,2,3,4,5,6,7,8

Component

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

Quiz on reading

Graded oral presentation of project

Global and Cultural Awareness Yes

Related Course CLO1,2,3,4,5,6

Learning Outcome

Related Outline TO1,2,3,4,5,6,7,8

Component

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

Quiz on reading

Class discussion

Group presentations

Ethical Reasoning and Action Yes

Related Course CLO2,5

Learning Outcome

Related Outline TO1,3,5,6

Component

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

Quiz on reading
Class discussion
Group presentations

Independent/Critical Thinking

14. Needs

Instructional
Materials (text
etc.):

An appropriate text will be selected. Contact the department for current adoptions.

Technology Needs:

Use of lab with ASL software, recording functions, and computers.

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

Presently, two full-time faculty members and one adjunct faculty teach in the Interpreter
Training Program. Additional adjunct faculty needed. _____

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: November 03, 2016

Board of Trustees Approval Date: March 28, 2019

Reviewer

Comments

Kathryn Deblasi (kdeblasi) (04/29/26 1:18 pm): Rollback: We need to remove the ASLN 104 Prerequisite.

Key: 124

EXHIBIT B-8

Course Change Request

Date Submitted: 06/08/26 1:41 pm

Viewing: **ENVI 152L : Environmental Science Lab**

Last approved: 03/04/26 4:04 am

Last edit: 07/09/26 3:43 pm

Changes proposed by: James Marshall (jmarshall)

Catalog Pages
referencing this
course

[Approved General Education Courses](#)
[Environmental Science \(ENVI\)](#)

Programs
referencing this
course

[CONC.BSPS.POLI: Political Science and Public Administration
Concentration](#)
[CONC.BSPS.SOSC: Sociology Anthropology Concentration](#)
[CONC.HUMN.HIST: History Concentration](#)
[CONC.SCI.BEDA: Biology Education Concentration, Algebra Track](#)
[CONC.SCI.BEDP: Biology Education Concentration, Precalculus Track](#)
[CONC.SCI.BEDC: Biology Education Concentration, Calculus Track](#)
[CONC.SCI.ENVA: Environmental Science Concentration, Algebra Track](#)
[CONC.SCI.ENVP: Environmental Science Concentration, Precalculus
Track](#)
[CONC.SCI.ENVC: Environmental Science Concentration, Calculus Track](#)

Learning Outcomes
Display (show only)

In Workflow

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

Approval Path

1. 06/08/26 3:20 pm
Connor Sampson (csampson):
Approved for STEM Academic Administrator
2. 07/01/26 3:40 pm
Vandana Saini (vsaini): Approved for STEM Dean
3. 07/02/26 8:34 am
James Marshall (jmarshall):

Approved for
Executive Director
of Curriculum and
Program
Development

4. 07/02/26 8:35 am
Catherine Mancuso
(cmancuso):

Approved for Vice
President of
Academic Affairs

5. 07/09/26 3:59 pm
James Marshall
(jmarshall):

Approved for
Curriculum
Committee Chair

History

1. Mar 4, 2026 by
James Marshall
(jmarshall)

1. Course Information

Subject	ENVI - Environmental Science
School	Science, Technology, Engineering, Mathematics
Course Title	Environmental Science Lab

2. Hours

Semester Hours	1.0
Lecture	0
Lab	2
Practicum	0

3. Catalog Description

For display in the
online catalog

This laboratory course explores the complex interactions that define ecosystems. It analyzes how human and ecological systems interact and how human activities influence natural processes and environmental health. ~~Face to face students will be required to travel to offsite laboratory locations.~~

4. Requisites

Prerequisites

Corequisites

For the first attempt ENVI 152 is considered a corequisite. If the student should fail either lecture or lab after the first attempt then they may take the individual failed section.

5. Course Type

Course Type for NVOC
Perkins Reporting

6. Justification

Describe the need
for this course

This course is a corequisite for ENVI-152. It is also required for bachelor level degree programs in Environmental Science and several other science and engineering disciplines.

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

Lab Science

General Education Proposed

Status

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

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

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

Transferability of Course

Georgian Court

University

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

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
ESX1001 Earth Science with Lab 4-credits	Major (linked course must complete both lecture & lab or only elective credit is granted)	

Monmouth

University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
BY 220 Environmental Biology 4-credits	Major (linked course must complete both lecture & lab or only elective credit is granted)	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
BIOL 01076 GE Biology Lan Science 1-credits	Elective	

Rutgers - New

Brunswick, Mason

Gross School of the

Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
1119160 Biology, Society, & Ecological Issues 4-credits	Major (linked course must complete both lecture & lab or only elective credit is granted)	

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
ENVL 1100 Intro to Environmental Studies 4-credits	Major (linked course must complete both lecture & lab or only elective credit is granted)	

If not transferable
to any institution,

explain:

10. Course Learning Outcomes

Learning Outcomes

	Students who successfully complete this course will be able to:
CLO1	Describe what ecosystems are and how nature works.
CLO2	Analyze the environment's use and abuse: Non-point source pollution, wastewater treatment, recycling, landfills, environmental degradation, etc.
CLO3	Illustrate the use of the scientific method of inquiry and analysis to better understand nature, our impact on it and how applied science, technology and public policies may foster sustainable global development.
CLO4	Explore the diversity of various ecosystems such as: oceans, estuaries, wetlands, pinelands, etc.

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	Solid Waste and Waste Water Management	Tour of Ocean County Recycling Center; Ocean County Landfill; Ocean County Utilities Authority Wastewater Treatment Plant	Lab practical questions.	CLO2; CLO3
TO2	Non-Point Source Pollution, Ocean County Watershed	Tour and presentation at non-profit organization Save Barnegat Bay.	Lab Practical questions	CLO2; CLO3
TO3	Local Species Diversity	Field work at Cattus Island County Park; Double Trouble State Park; Jake's Branch County Park; Island Beach State Park;	Lab practical questions; Power Point assignment	CLO1; CLO3; CLO4

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
		Ocean County College Arboretum		
TO4	Local Ecosystem Diversity	Field work at Cattus Island County Park; Double Trouble State Park; Jake's Branch County Park; Island Beach State Park; Ocean County College Arboretum	Lab practical questions; Power Point assignment	CLO1; CLO3; CLO4
TO5	Effects of climate change; sea level rise; forest fires; population growth	Field work at Cattus Island County Park; Double Trouble State Park; Jake's Branch County Park; Island Beach State Par	Lab practical questions; Power Point assignment	CLO2; CLO3

12. Methods of Instruction

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

Lecture, discussion, lab experiments, and demonstrations. ~~Instruction and tours at off-campus locations.~~

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

Information

Communication-Written and Oral Yes

Related Course All
Learning Outcome

Related Outline All
Component

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

Lab Practical questions; Power Point assignment

Quantitative Knowledge and Skills Yes

Related Course CLO2

Learning Outcome

Related Outline TO1, TO2

Component

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

Lab Practical questions

Scientific Knowledge and Reasoning Yes

Related Course All

Learning Outcome

Related Outline All

Component

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

Lab Practical questions

Technological Competency

Information Literacy

Society and Human Behavior Yes

Related Course CLO2, CLO3

Learning Outcome

Related Outline TO1, TO2, TO5

Component

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

Lab Practical questions

Humanistic Perspective Yes

Related Course CLO2, CLO3

Learning Outcome

Related Outline TO1, TO2, TO5

Component

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

Lab Practical questions

Historical Perspective Yes

Related Course CLO2

Learning Outcome

Related Outline TO1, TO2, TO5

Component

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

Lab Practical questions; Power Point assignment

Global and Cultural Awareness Yes

Related Course CLO2, CLO#

Learning Outcome

Related Outline TO1, TO5

Component

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

Lab Practical questions

Ethical Reasoning and Action Yes

Related Course CLO2

Learning Outcome

Related Outline TO2, TO5

Component

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

Lab Practical questions

Independent/Critical Thinking Yes

Related Course CLO2

Learning Outcome

Related Outline TO1, TO2, TO5

Component

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

Lab Practical questions

14. Needs

Instructional

Materials (text
etc.):

None

Technology Needs:

None

Human Resource

Needs (Presently
Employed vs. New
Faculty):

Presently employed full-time and adjunct faculty.

Facility Needs:

Coordination with off campus locations: state and county parks, municipal utilities locations.

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

BOT Approved

Reviewer

Comments

Key: 2389

EXHIBIT B-9

Course Change Request

Date Submitted: 06/18/26 3:00 pm

Viewing: **MATH 191 : Precalculus I**

Last approved: 06/04/24 9:00 am

Last edit: 07/09/26 3:58 pm

Changes proposed by: James Marshall (jmarshall)

Catalog Pages
referencing this
course

[Approved General Education Courses](#)
[Mathematics \(MATH\)](#)

Programs
referencing this
course

[AS.BA.ACCT: Business Administration - Option in Accounting, Associate in Science](#)
[CONC.BA.ACCT: Accounting Concentration](#)
[CONC.BA.FINA: Finance Concentration](#)
[CONC.BA.MRKT: Marketing Concentration](#)
[CONC.BA.MGMT: Management Concentration](#)
[CONC.BA.ADMN: Business Administration Concentration](#)
[CONC.BA.SCMT: Supply Chain Management Concentration](#)
[CONC.BA.HLTH: Health Administration Concentration](#)
[CONC.BA.SPRT: Sports Management Concentration](#)
[CONC.BA.DATA: Business Analytics Concentration](#)
[CT.FS: Fire Science, Certificate of Proficiency](#)
[AS.BA: Business Administration, Associate in Science](#)
[AS.BA.DA: Business Administration - Option in Data Analytics, Associate in Science](#)
[CC.DATA: Data Analytics, Certificate of Completion](#)
[AS.ACCT: Accounting, Associate in Science](#)
[AS.BA.HR: Business Administration, Associate in Science](#)

Other Courses
referencing this

In Workflow

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

Approval Path

1. 06/18/26 3:10 pm
Connor Sampson (csampson):
Approved for STEM Academic Administrator
2. 06/22/26 9:41 am
Vandana Saini (vsaini): Approved for STEM Dean
3. 06/23/26 11:17 am
James Marshall (jmarshall):

course

In The Catalog Description:

- MATH 161 : College Algebra
- MATH 165 : College Algebra (Accelerated)
- MATH 192 : Precalculus II

Learning Outcomes
Display (show only)

- Approved for Executive Director of Curriculum and Program Development
- 4. 06/23/26 12:00 pm Catherine Mancuso (cmancuso): Approved for Vice President of Academic Affairs
- 5. 07/09/26 3:59 pm James Marshall (jmarshall): Approved for Curriculum Committee Chair

History

- 1. Jul 19, 2021 by soconnor
- 2. May 25, 2024 by soconnor
- 3. Jun 4, 2024 by James Marshall (jmarshall)

1. Course Information

Subject	MATH - Mathematics
School	Science, Technology, Engineering, Mathematics
Course Title	Precalculus I

2. Hours

Semester Hours	3.00000
Lecture	3

Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

Polynomial, rational, exponential and logarithmic functions are studied from an algebraic, analytic and graphical perspective. Functions, the Fundamental Theorem of Algebra, complex numbers, mathematical modeling and other algebraic concepts are studied. Students may ~~who~~ receive credit for only one of the following Pre-calculus options: ~~Math 191 and/or Math 192~~ cannot also receive credit for Math 195. Math 191 and MATH 192; or one of MATH 195, MATH 196, MATH 201.

4. Requisites

Prerequisites

MATH 161, 165, 166, or appropriate placement score.

Corequisites

None

5. Course Type

Course Type for NVOC

Perkins Reporting

6. Justification

Describe the need
for this course

This course is the first of a two-course sequence which prepares a student for the study of calculus. It is designed to provide students with the mathematical knowledge needed to successfully integrate mathematics into their chosen area of study or career path.

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

Mathematics

General Education Approved

Status

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

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

	Add item
1	This course helps to prepare students to become intentional learners who will be able to understand and employ quantitative analysis to solve problems, and demonstrate intellectual agility in mathematics.

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution Atlantic Cape CC

Course Title College Algebra

Course Number MATH 122

Number of Credits 3

Comments

Institution Middlesex County College

Course Title College Algebra

Course Number MATH 116

Number of Credits 3

Comments

Institution Salem CC

Course Title College Algebra

Course Number MATH 137

Number of Credits 3

Comments

Transferability of Course

Georgian Court

University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MA 109 College Algebra, 3	GE	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MATH 1000, Algebra for College Students, 3	GE	

Monmouth

University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MA101 College Algebra, 3	Not Specified	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MAT01123, College Algebra, 3	Elective	

Rutgers - New
Brunswick, Mason
Gross School of the
Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
01640115, MATH191 & 192	GE	

Stockton University

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

If not transferable
to any institution,
explain:

10. Course Learning Outcomes

Learning Outcomes

	Students who successfully complete this course will be able to:
CLO1	Apply critical thinking skill to more advanced algebraic problems
CLO2	Critique different types of graphs
CLO3	Apply the function concept, including operations, graphing, inverses and applications.
CLO4	Analyze polynomial, rational, exponential and logarithmic functions.
CLO5	Display proficiency in the use of a graphing utility and/or computer software.

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	Functions a. Notation and	Homework	Quizzes/Exams	CLO1, CLO2, CLO3, CLO5

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	operations b. Graphs c. Inverses d. Mathematical Models			
TO2	Polynomial Functions a. Graphs b. Complex Numbers c. Fundamental Theorem of Algebra	Homework	Quizzes/Exams	CLO1, CLO2, CLO3, CLO4, CLO5
TO3	Rational Functions a. Graphs b. Partial fraction decomposition	Homework	Quizzes/Exams	CLO1, CLO2, CLO3, CLO4, CLO5
TO4	Exponential and Logarithmic	Homework	Quizzes/Exams	CLO1, CLO2, CLO3, CLO4, CLO5

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
	functions a. Evaluating expressions b. Solving equations c. Graphs d. Applications, including growth and decay models			

12. Methods of Instruction

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

Lecture

o Class discussion

o Group discussion

o Computer applications

o Graphing calculator applications

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

Information

Communication-Written and Oral

Quantitative Knowledge and Skills Yes

Related Course All

Learning Outcome

Related Outline All

Component

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

Individual Student Exam

Scientific Knowledge and Reasoning

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking

14. Needs

Instructional

Materials (text
etc.):

Appropriate textbook and online resources

Technology Needs:

Access to graphing utilities and Internet for instruction

Human Resource

Needs (Presently

Employed vs. New

Faculty):

Presently Employed Faculty

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: January 26, 2016

Board of Trustees Approval Date: April 25, 2024

Reviewer

Comments

Key: 1692

EXHIBIT B-10

Course Change Request

Date Submitted: 06/18/26 3:00 pm

Viewing: **MATH 192 : Precalculus II**

Last approved: 06/04/24 9:00 am

Last edit: 07/09/26 3:58 pm

Changes proposed by: James Marshall (jmarshall)

Catalog Pages
referencing this
course

[Approved General Education Courses](#)
[Mathematics \(MATH\)](#)

Other Courses
referencing this
course

In The Catalog Description:

[MATH 165 : College Algebra \(Accelerated\)](#)
[MATH 191 : Precalculus I](#)
[MATH 195 : Precalculus \(Accelerated\)](#)

Learning Outcomes
Display (show only)

In Workflow

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

Approval Path

1. 06/18/26 3:10 pm
Connor Sampson (csampson):
Approved for STEM Academic Administrator
2. 06/22/26 9:42 am
Vandana Saini (vsaini): Approved for STEM Dean
3. 06/23/26 11:17 am
James Marshall (jmarshall):

EXHIBIT B-10

Approved for
Executive Director
of Curriculum and
Program
Development

4. 06/23/26 12:00 pm
Catherine Mancuso
(cmancuso):

Approved for Vice
President of
Academic Affairs

5. 07/09/26 3:59 pm
James Marshall
(jmarshall):

Approved for
Curriculum
Committee Chair

History

1. Oct 16, 2021 by
soconnor
2. May 25, 2024 by
soconnor
3. Jun 4, 2024 by
James Marshall
(jmarshall)

1. Course Information

Subject	MATH - Mathematics
School	Science, Technology, Engineering, Mathematics
Course Title	Precalculus II

2. Hours

Semester Hours 3.00000

Lecture 3

Lab	0
-----	---

Practicum	0
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3. Catalog Description

For display in the
online catalog

This course is a continuation of MATH 191. It includes the study of trigonometric functions and their inverses, trigonometric identities and equations and complex numbers from an algebraic, analytical, and graphical perspective. Additional topics include determinants sequences and series, analytic geometry and mathematical induction. Students may ~~who~~ receive credit for only one of the following Pre-calculus options: Math 191 and/or Math 192 cannot also receive credit for Math 195. Math 191 and MATH 192; or one of MATH 195, MATH 196, MATH 201.

4. Requisites

Prerequisites

MATH 191 or appropriate placement score

Corequisites

None

5. Course Type

Course Type for NVOC

Perkins Reporting

6. Justification

Describe the need
for this course

a. Describe the need for this course.

This course is the second of a two course sequence which prepares a student for the study of calculus. It designed to provide students with the mathematical knowledge needed to successfully integrate mathematics into their chosen area of study or career path.

b. Relationship to courses within the College:

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

Mathematics

General Education Approved

Status

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

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

	Add item
1	This course helps to prepare students to become intentional learners who will be able to understand and employ quantitative analysis to solve problems, and demonstrate intellectual agility in mathematics.

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution	Atlantic Cape CC
Course Title	Trigonometry
Course Number	MATH 128
Number of Credits	4
Comments	

Institution Brookdale CC

Course Title College Algebra & Trigonometry

Course Number MATH 152

Number of Credits 4

Comments

Transferability of Course

Georgian Court
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MA 110, Precalculus, credits not listed	GE	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MATH 1054, Pre-Calculus, credits not listed	GE	

Monmouth
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MA 101, College Algebra, credits not listed	not listed	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MATH 1075	GE/Elective	

Rutgers - New
Brunswick, Mason
Gross School of the

Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MATH 191 & MATH192 as Precalculus College Mthematics, credits not listed	GE	

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MATH 1100 Precalculus Mathematics, credits not listed	GE	

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 an understanding of trigonometric and inverse trigonometric functions.
CLO2	Distinguish trigonometric graphs
CLO3	Solve trigonometric applications.
CLO4	Apply the trigonometric form of complex numbers.
CLO5	Perform operations on complex numbers in trigonometric form.
CLO6	Demonstrate further proficiency in the use of a graphing utility and/or computer software.
CLO7	Demonstrate an understanding of advanced algebra topics.

11. Topical Outline

(include as many themes/skills as needed)

Major Themes/ Skills	Assignments (Recommended but not	Assessments (Recommended but not	Course Learning
----------------------	-------------------------------------	-------------------------------------	--------------------

		limited to)	limited to)	Outcome(s)
TO1	Trigonometric functions Trigonometric functions based on the unit circle and right triangle; applications	Textbook and/or online homework assignments	Quiz and/or exam	CLO1, CLO3
TO2	Graphs of trigonometric functions Graph the six trigonometric functions and applications	Textbook and/or online homework assignments	Quiz and/or exam	CLO2, CLO3, CLO6
TO3	Inverse trigonometric Definitions, graphs and evaluating the inverse functions and applications	Textbook and/or online homework assignments	Quiz and/or exam	CLO1, CLO3
TO4	Verifying trigonometric identities Use the fundamental trigonometric functions to simplify trigonometric expressions	Textbook and/or online homework assignments	Quiz and/or exam	CLO1
TO5	Solving trigonometric equations Methods for solving equations involving trigonometric functions and applications	Textbook and/or online homework assignments	Quiz and/or exam	CLO1, CLO3
TO6	The law of sines and law of cosines Solving oblique triangles and applications	Textbook and/or online homework assignments	Quiz and/or exam	CLO1, CLO3

TO7	. Complex numbers in trigonometric form Operations with trigonometric form of complex numbers, DeMoivre's Theorem	Textbook and/or online homework assignments	Quiz and/or exam	CLO4, CLO5
TO8	8.The Instructor will choose at least two of these advanced algebraic topics to include in the course: a. Systems of Equations and Inequalities: Use the substitution and graphical methods of solving systems of linear and non-linear systems; solve applications b. Determinants: Find the determinants of square matrices, find minors and cofactors of square matrices c. Sequences and Series: Notation for sequences, find sum of series, use sequences and series to model and solve problems. d. Mathematical Induction: Use mathematical induction to prove statements e. Analytic Geometry: Convert points and equations from rectangular to polar form and vice versa, graph polar equations; graph	Textbook and/or online homework assignments	Quiz and/or exam	CLO7

parametric equations

12. Methods of Instruction

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

- ☐ Lecture
- ☐ Class discussion
- ☐ Group discussion
- ☐ Computer applications
- ☐ Graphing calculator applications

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

Information

Communication-Written and Oral

Quantitative Knowledge and Skills Yes

Related Course All
Learning Outcome

Related Outline All
Component

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

Exams

Scientific Knowledge and Reasoning

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking Yes

Related Course All

Learning Outcome

Related Outline All

Component

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

Exams

14. Needs

Instructional

Materials (text
etc.):

See department for current adoptions

Technology Needs:

Converge; Graphing calculator and/or emulator; Internet resources

Human Resource

Needs (Presently

Employed vs. New

Faculty):

Presently Employed

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

Reviewed/Revised: December 1990; February 27, 1996; April 30, 1996; December 1998; April 2004; May 4, 2004; October 2004; November 2004; February 28, 2006; March 8, 2006; June 2006

Board of Trustees Approval Date: November 6, 2006

Board of Trustees Approval Date: August 24, 2009

Board of Trustees Approval Date: March 26, 2012

Board of Trustees Approval Date: January 26, 2016

Board of Trustees Approval Date: April 25, 2024

EXHIBIT B-11

Course Change Request

Date Submitted: 06/18/26 3:00 pm

Viewing: **MATH 196 : Precalculus**

Last approved: 06/04/24 8:42 am

Last edit: 07/09/26 3:58 pm

Changes proposed by: James Marshall (jmarshall)

Catalog Pages
referencing this
course

[Approved General Education Courses](#)
[Mathematics \(MATH\)](#)

Programs
referencing this
course

[AS.CS: Computer Science, Associate in Science](#)
[CONC.SCI.BIOA: Biology Concentration, Algebra Track](#)
[CONC.SCI.BIOP: Biology Concentration, Precalculus Track](#)
[CONC.SCI.BCHA: BioChemistry Concentration, Algebra Track](#)
[CONC.SCI.BCHP: BioChemistry Concentration, Precalculus Track](#)
[CONC.SCI.BEDA: Biology Education Concentration, Algebra Track](#)
[CONC.SCI.BEDP: Biology Education Concentration, Precalculus Track](#)
[CONC.SCI.BPPA: Biology for Pre-Health Studies Concentration, Algebra Track](#)
[CONC.SCI.BPPP: Biology for Pre-Health Studies Concentration, Precalculus Track](#)
[CONC.SCI.CHMA: Chemistry Concentration, Algebra Track](#)
[CONC.SCI.CHMP: Chemistry Concentration, Precalculus Track](#)
[CONC.SCI.ENVA: Environmental Science Concentration, Algebra Track](#)
[CONC.SCI.ENVP: Environmental Science Concentration, Precalculus Track](#)
[CONC.MAE.MATA: Mathematics Concentration, Algebra Track](#)
[CONC.MAE.MATP: Mathematics Concentration, Precalculus Track](#)
[CONC.MAE.MEDA: Mathematics Education Concentration, Algebra Track](#)
[CONC.MAE.MEDP: Mathematics Education Concentration, Precalculus](#)

In Workflow

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

Approval Path

1. 06/18/26 3:10 pm
Connor Sampson (csampson):
Approved for STEM Academic Administrator
2. 06/22/26 9:42 am
Vandana Saini (vsaini): Approved for STEM Dean
3. 06/23/26 11:17 am
James Marshall (jmarshall):

Track

[CONC.CS.COMA: Computer Science Concentration, Algebra Track](#)

[CONC.CS.COMP: Computer Science Concentration, Precalculus Track](#)

[CONC.CS.CYBA: Cybersecurity Concentration, Algebra Track](#)

[CONC.CS.CYBP: Cybersecurity Concentration, Precalculus Track](#)

[CONC.CS.INTA: Information Technology Concentration, Algebra Track](#)

[CONC.CS.INTP: Information Technology Concentration, Precalculus Track](#)

[CONC.MAE.CVEA: Civil Engineering Concentration, Algebra Track](#)

[CONC.MAE.CVEP: Civil Engineering Concentration, Precalculus Track](#)

[AS.MAE: Math/Pre-Engineering, Associate in Science](#)

[CONC.MAE.MECA: Mechanical Engineering Concentration, Algebra Track](#)

[CONC.MAE.MECP: Mechanical Engineering Concentration, Precalculus Track](#)

[CONC.MAE.ELEA: Electrical Engineering Concentration, Algebra Track](#)

[CONC.MAE.ELEP: Electrical Engineering Concentration, Precalculus Track](#)

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

Other Courses
referencing this
course

[In The Catalog Description:](#)

[MATH 195 : Precalculus \(Accelerated\)](#)

Approved for
Executive Director
of Curriculum and
Program
Development
4. 06/23/26 12:00 pm
Catherine Mancuso
(cmancuso):
Approved for Vice
President of
Academic Affairs
5. 07/09/26 3:59 pm
James Marshall
(jmarshall):
Approved for
Curriculum
Committee Chair

History

- May 15, 2024 by
soconnor
- Jun 4, 2024 by
James Marshall
(jmarshall)

Learning Outcomes

Display (show only)

1. Course Information

Subject	MATH - Mathematics
School	Science, Technology, Engineering, Mathematics
Course Title	Precalculus

2. Hours

Semester Hours	4
Lecture	4
Lab	0
Practicum	0

3. Catalog Description

For display in the
online catalog

This course prepares students for the study of Calculus. Critical thinking skills will be developed by analyzing various topics from algebraic, analytic, and geometric perspectives. Precalculus includes equations and inequalities, relations and functions, polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, inverse trigonometric functions, trigonometric identities and equations, applications of trigonometry, systems of equations, and complex numbers. Additional topics include polar coordinates, parametric equations, sequences and series. Technology will be utilized throughout the course. [Students may receive credit for only one of the following Pre-calculus options: Math 191 and MATH 192; or one of MATH 195, MATH 196, MATH 201.](#)

4. Requisites

Prerequisites

Math 161 or higher or appropriate score on the Math Placement test.

Corequisites

5. Course Type

Course Type for NVOC
Perkins Reporting

6. Justification

Describe the need
for this course

This course is designed to provide students with the mathematical knowledge

needed to successfully integrate mathematics into their chosen area of study or career path.

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

Mathematics

General Education Approved

Status

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

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

	Add item
1	Demonstrating the college's commitment to offer comprehensive educational programs that develop 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 transform information into knowledge and knowledge into action. (Academic Master Plan).

9. Related Courses at Other Institutions

Comparable Courses at NJ Community Colleges

Institution Atlantic Cape CC

Course Title Precalculus

Course Number Math 150

Number of Credits 4

Comments

Institution Mercer County CC

Course Title Precalculus

Course Number MAT 146

Number of Credits 4

Comments

Institution Middlesex County College

Course Title Precalculus

Course Number MAT 129

Number of Credits 4

Comments

Institution Rowan College at Burlington County

Course Title Precalculus

Course Number MTH 130

Number of Credits 4

Comments

Transferability of Course

Georgian Court
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MA 110 Precalculus	General Ed. Mathematics	

Kean University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MATH1054 Pre-Calculus	General Ed. Mathematics	

Monmouth
University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
MA 109 Pre-Calculus Mathematics and MA 001 (100 LEVEL Math ELECT)	General Ed. Mathematics	

Rowan University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
Math01122 Pre-Calculus	General Ed. Mathematics	

Rutgers - New
Brunswick, Mason
Gross School of the
Arts

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
01640115 Precalculus College Mathematics	General Ed. Quantitative Information, Quantitative Reasoning	

Stockton University

Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
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Course Code, Title, and Credits	Transfer Category	If non-transferable; select status
Math1100 Precalculus Mathematics	General Ed. Mathematics, Quantitative Reasoning Intensive Course	

If not transferable
to any institution,
explain:

10. Course Learning Outcomes

Learning Outcomes

	Students who successfully complete this course will be able to:
CLO1	Perform operations with functions including composition and transformations.
CLO2	Generate and interpret the graphs of polynomial, inverse, rational, exponential, logarithmic, trigonometric, and inverse trigonometric functions.
CLO3	Perform operations in the complex number system
CLO4	Understand and apply right triangle trigonometry and the unit circle.
CLO5	Apply trigonometric identities to recognize equivalent statements and to solve equations.
CLO6	Solve systems of equations and application problems.
CLO7	Use trigonometric functions and right triangle trigonometry to solve application problems.
CLO8	Develop and apply parameteric equations and polar coordinates.

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	Polynomial and rational functions	Homework	Quizzes/Exams	CLO1, CLO2

	Major Themes/ Skills	Assignments (Recommended but not limited to)	Assessments (Recommended but not limited to)	Course Learning Outcome(s)
TO2	Complex number system	Homework	Quizzes/Exams	CLO3
TO3	Exponential and logarithmic functions, graphs and applications	Homework	Quizzes/Exams	CLO1, CLO2
TO4	Trigonometric functions, graphs and applications	Homework	Quizzes/Exams	CLO2, CLO4, CLO7
TO5	Inverse trigonometric functions and their graphs	Homework	Quizzes/Exams	CLO2
TO6	Analytic trigonometry including trigonometric identities and trigonometric equations	Homework	Quizzes/Exams	CLO4, CLO5, CLO7
TO7	Systems of equations and inequalities with applications	Homework	Quizzes/Exams	CLO6
TO8	Polar coordinates and graphs of polar equations	Homework	Quizzes/Exams	CLO4, CLO7, CLO8
TO9	Parametric equations	Homework	Quizzes/Exams	CLO8
TO10	Partial Fractions	Homework	Quizzes/Exams	CLO1, CLO6

12. Methods of Instruction

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

Lecture, Class Discussion, Group Discussion, Graphing technology applications

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

Information

Communication-Written and Oral

Quantitative Knowledge and Skills Yes

Related Course All

Learning Outcome

Related Outline All

Component

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

Student Exams

Scientific Knowledge and Reasoning

Technological Competency

Information Literacy

Society and Human Behavior

Humanistic Perspective

Historical Perspective

Global and Cultural Awareness

Ethical Reasoning and Action

Independent/Critical Thinking

14. Needs

Instructional

Materials (text

etc.):

Appropriate textbook and online resources selected by the department

Technology Needs:

Access to graphing utilities for instruction and student use

Human Resource

Needs (Presently

Employed vs. New

Faculty):

Presently Employed

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: January 25, 2024

Reviewer

Comments

Key: 2290