

KEAN UNIVERSITY – COLLEGE OF NATURAL APPLIED AND HEALTH SCIENCE SCHOOL OF ENVIRONMENTAL AND SUSTAINABILITY SCIENCE (70301) B.S. IN BIOLOGY, ENVIRONMENTAL BIOLOGY OPTION: 120 SEMESTER HOURS (S.H.)



For students graduating from Ocean County College with an A.S. in Environmental Studies and transferring to Kean University Kean University Courses are in Blue (49-54 S. H.) Ocean County College courses are in green (66-71 S. H.)

EFFECTIVE DATE: Fall 2019

KEAN GRADUATING GPA REQUIREMENT: 2.5

GENERAL EDUCATION REQU	REMENTS: 35 S.H.	ACADEMIC MAJOR: 1/28-29 S.H.			
Foundation Requirements: 13 S.H.			ENV 1000 Intro to Env. Sci.	ENVI 152 Environmental Science	3
GE 3000 Transfer Transitions			ENV 2000 Evolution & Biodiversity		4
ENG 1030 English Comp ¹	ENGL 151 English I ¹¹	3	ENV 2100 Ecosystem Science	BIOL 261 Ecology	4
MATH 1054 Precalculus ^{1,2}	MATH 192 Pre-Calculus II ^{1,2}	3	ENV 3051 or ENV 4605		4
COMM 1402 Speech Comm	MATH 191 Pre-Calculus I ^{2,3}	3	ENV 3100 Principles of Environmental Soil Science		4
GE 2024 Research/Tech	ENGL 152 English II	3			4
·			ENV 4210 Conservation Biology		4
DISCIPLINARY & INTERDISCIPLINARY DISTRIBUTION COURSES			ENV 4961 (1 credit) or ENV 4962 (2 credits)		1-2
Humanities: 6 S.H.			` ′	,	
ENG 2403 World Literature	Any course from the GHUM list ³	3	PROGRAM FOCUS-RELATED ELECTIVES: 16-19 S.H.		
Select One course from below			To be selected with advisement from approved program list maintained		
Fine Arts/Art History			in the School of Environmental and Sustainability Sciences and in consultation with the Program Coordinator.		
Philosophy or Religion	Any unused college level (non- developmental) MATH course or the required technology course ³				
Foreign Languages			At least 50% of these classes must be at the 3000-4000 level. A maximum of 12 S.H. of ENV courses will count towards the degree.		
Music or Theatre					
Interdisciplinary				Choose one course from: BIOL101,	T
. ,	•		Major Elective	265, ENVI 154, 232, 259, or CHEM 284 plus 1 credit from ENVI 152	4-5
Social Sciences: 6 S.H.			Major Elective		
HIST 1062 Worlds of History	Select any course Ocean County College GSOC/GHUM list of courses.3		Major Elective		3-4
		3	Major Elective		3-4
Select One course from below			Major Elective 3		3-4
Psychology					
Geography	hy Select any course Ocean County College GSOC/GHUM list of courses.3		FREE ELECTIVES (at least 50	0% must be 3000/4000 level): 5-9 S. H.	
Political Science					T
Sociology or Anthropology			Any Kean University 1000-2000	0 level course	3
Colomba and Mathematica, 7 C II			Any Kean University 3000-4000 level classes (except ENV) ⁴		3-6
Science and Mathematics: 7 S. MATH 1016 Statistics	MATH 156 Introduction to Statistics	3			
CHEM 1083 Chemistry I ¹	CHEM 181 General Chemistry I ¹	4	TOTAL CREDITS 120 S		СП
CHEW 1003 Chemistry I	CHEW 161 General Chemistry I	4	TOTAL CREDITS	120	Э. П.
G.E. and Major Capstone ^{1, 6} : 3 S					
SUST 4300 Independent Practicum in Sustainability		3	¹Requires a grade of C or better.		
			² Students whose score on the placement test makes them eligible to take MATH 1054 (MATH 192 at OCC) or MATH 2415 (MATH 265 at OCC) can start with that course, and will have an additional 3 or 6 credits of free		
Additional Required Courses ¹ : 32 S. H.					
BIO 1300 Biology I	BIOL 161 General Biology I	4			ake
BIO 1400 Biology II	BIOL 162 General Biology II	4	electives to total 120 degree credits. Students whose score does not make them eligible to take MATH 191 will need to take the appropriate pre-requi-		
CHEM 1084 Chemistry II ¹	CHEM 182 Chemistry II ¹	4	courses.		7=.010
CHEM 2180 Prin of Org Chem ¹	CHEM 283 Organic Chemistry I ¹	4	³ Substitution in accordance with the N.J. Transfer Law, where General		
MATH 2415 Calculus I	MATH 265 Calculus I ²	4	Education requirements are completed with the corresponding A.S. degree		
PHYS 2091 Physics I	PHYS 171 Physics I	4	⁴ Can also be one 1000-2000 level 1 credit Kean University class plus one		
Take any two (2) of the below four (4) courses			3000-4000 level 3 credit Kean University class.		
BIO 2500 Principles of Botany					
BIO 3400 Zoology: Form & Function		4			
BIO 3709 Genetics					
PHYS 2092 Physics II	PHYS 172 Physics II (optional)	4			
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Program-focus Related Electives should be chosen from the following list:

(at least half being at 3000 level and above)

BIO

BIO 2500: Principles of Botany

BIO 3305: Principles of Microbiology

BIO 3400: Zoology: Form and Function

BIO 3403-3404: Anatomy and Physiology I & II

BIO 3535: Field Botany

BIO 3614: Principles of Ecology

BIO 4105: Biochemistry

BIO 4575: Plant Physiology

BIO 4615: Applied Ecology

ENV

ENV 3201 Biodiversity Assessment

ENV 3250 Medicinal Botany

ENV 3230 Urban Ecology

ENV 4210 Conservation Biology

ENV 4435 Behavioral Ecology

ENV 3720 Entomology

ENV 4600 Plant-Animal Interactions

ENV 4710 Physiological Ecology

ENV 4971,2,3,4 Independent Research

ES

ES 3000 Global Climate Change and Society

ES 3010 Data Analysis and Modeling in Earth Science

ES 3020 Aerial Photography and Digital Image Interpretation

ES 3200 GIS in Geoscience

ES 3801-3802 Special Topics in Earth Science

ES 4200 Remote Sensing

ES 4901-4902 Special Topics in Earth Science

OCEN

OCEN 3400 Global Change and the Ocean

OCEN 3463 Marine Science

OCEN 3600 Coral Reefs and Coastal Systems

OCEN 4470 Physical Oceanography

OCEN 4600 Marine Conservation

OCEN 4601 Field Methods in Marine Research

OCEN 4602 Marine Resource Management

SUST

SUST 1000 Introduction to Sustainability

SUST 2008 Introduction to Composting

SUST 2200 Introduction to Laws and Sustainability

SUST 3200 Environmental Health and Safety for Sustainability

SUST 4000 Technologies for Sustainability