KEAN UNIVERSITY
COLLEGE OF NATURAL, APPLIED & HEALTH SCIENCES
SCHOOL OF ENVIRONMENTAL AND SUSTAINBILITY SCIENCE
(70301) B.S. IN BIOLOGY, ENVIRONMENTAL BIOLOGY OPTION - 120 S.H.
2.5 G.P.A. Graduation Requirement

EFFECTIVE DATE: Fall 2015 **START TERM:**

NAME:		TRANSFER INSTITUTIONS (X) Credits:	
STUDENT ID#:		In Progress	
GENERAL EDUCATION: 35 Semester Hours (S.H.)		**ACADEMIC MAJOR REQUIREMENTS: 28-29 S.H.*** **	
Foundation Requirements 13 S.H.			
GE 1000 Transition to Kean[2]	1	ENV 1000 Introduction to Environmental Science	3
***ENG 1030 College Composition[1]	3	ENV 2000 Evolution and Biodiversity	4
**MATH 1054 Precalculus[3]	3	ENV 2100 Ecosystem Science	4
COMM 1402 Speech Communication*	3	ENV 3051 Field Biology: Terrestrial Systems ***or*** ENV 4605/OCEN 4601 Methods in Marine Research	4
GE 2024 Research & Technology*	3		
		ENV 3100 Principles of Environmental Soil Science	4
		ENV 3201 Biodiversity Assessment	4
Disciplinary & Interdisciplinary Distribution Requirements		ENV 4210 Conservation Biology	4
Humanities: 6 S.H. (from different areas)		ENV 4961 Independent Study in SESS (1 credit) ***or*** ENV 4962 Independent Study in SESS (2 credits)	1-2
ENG 2403 World Literature*	3		
Select one course with advisement from areas below:			
Fine Arts/Art History	3		
Foreign Languages (Must take I and II for credit)	3		
Interdisciplinary	3	**PROGRAM FOCUS-RELATED ELECTIVES 16-19 S.H.** **To be selected with advisement from approved program list maintained in the School of Environmental and Sustainability Sciences and in consultation with the Program Coordinator. At least 50% must be at the 3000-4000 level. Maximum of 12 S.H. of ENV courses count toward degree.**	
Music or Theatre	3		
Philosophy or Religion	3		
Social Sciences: 6 S.H. (from different areas)			
HIST 1000 Civil Society in America* ***or*** HIST 1062 Worlds of History: Traditions and Encounters*	3		
Select one course with advisement from areas below:			
Economics or Geography	3		
Interdisciplinary	3		
Political Science	3		
Psychology	3		
Sociology or Anthropology	3		
		FREE ELECTIVES: 5-9 S.H.	
Science and Mathematics: 7 S.H.			
MATH 1016 Statistics**	3		
***CHEM 1083	4		
G.E. and Major Capstone: 3 S.H.* **			
SUST 4300 Independent Practicum in Sustainability	3		
ADDITIONAL REQUIREMENTS: 32 S.H.			
BIO 1300 Biology I	4		
BIO 1400 Biology II	4		
BIO 3709 Genetics	4		
***CHEM 1084 Chemistry II	4		
***CHEM 2180 Principles of Organic Chemistry	4		
MATH 2415 Calculus I	4		
PHYS 2091 Physics I	4		
PHYS 2092 Physics II	4		
*G.E. required course		**Other Transfer:**	
**Course required by SESS.		**TOTAL CREDITS:**	
***Must earn a grade of C or better		**Advisor Signature:**	
[1]See prerequisites and equivalencies.			
[2] Required of all Freshmen and Transfer students with fewer than 10 credits.			
[3] A student whose qualifying score on the placement test makes them eligible to take MATH 2415 may start with that course instead. In that case, the student may take 3 additional credits of free electives instead of MATH 1054 to total 120 credits.			

Program-focus Related Electives should be chosen from the following list
(at least half being at 3000 level and above)

ATMS
ATMS 3380 Meteorological Instrumentation
ATMS 4101 Physical Climatology

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

CHEM
CHEM 2581: Organic Chemistry I
CHEM 2582: Organic Chemistry II
CHEM 2583: Organic Chemistry Laboratory and Recitation I
CHEM 2584: Organic Chemistry Laboratory and Recitation II
CHEM 3581: Biochemistry

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

GEOG
GEOG 2020 Conservation of Natural Resources
GEOG 3110 Practical Geographic Skills
GEOG 3410 Urban Geography
GEOG 3420 The Resource Base and the Urban Pattern

GEOL
GEOL 1201 Geologic Hazards
GEOL 1202 Geologic Hazards Laboratory
GEOL 1205 Mineral and Fossil Fuel Resources
GEOL 1210 Geology of the National Parks
GEOL 2262 Geology and the Environment

GEOS
GEOS 1100: Introduction to Earth and Geographic Systems
GEOS 2100: Geo-Hydro Systems
GEOS 4103 Environmental Hazards
GEOS 4201 Urban Geographic Systems
METR 2300 Climatology
METR 2301 Climatology Lab
METR 3360 Air Pollution
METR 2310 General Meteorology
METR 2360 Weather Analysis METR 5300 Atmospheric Storms

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