KEAN UNIVERSITY – COLLEGE OF NATURAL, APPLIED & HEALTH SCIENCES
(76205) B.S. IN Earth Science (ENVIRONMENTAL SCIENCE Option): 125 S.H.
EFFECTIVE DATE: Fall 2014

EFFECTIVE DATE: Fall 2014		**START TERM:**	
NAME:		TRANSFER INSTITUTIONS (X) Credits:	
STUDENT ID#:		In Progress	
GENERAL EDUCATION: 32 Semester Hours (S.H.)		**ACADEMIC MAJOR REQUIREMENTS: 38 S.H.*** **	
Foundation Requirements[1] 13 S.H.		GEOS 1100 Intro to Earth and Geog. Sys.	4
G.E. 1000 Transition to Kean[2]	1	SUST 1000 Intro to Sustainability Science	3
ENG 1030 Composition[3]	3	GEOS 2101 Geo-Hydro Systems	4
MATH 1054 Precalculus**	3	ES 2200 Methods in Geoscience	4
COMM 1402 Speech Communication*	3	OCEN 2400 Intro Oceanography	4
GE 2024 Research & Technology*	3	ATMS 3101 Atmo System	4
		ES 3200 GIS in Geoscience	4
Disciplinary & Interdisciplinary Distribution Requirements		BIO 3614 Principles of Ecology	4
Humanities: 6 S.H. (from different areas)		ENV 3050 Field Biology: Marine Systems or ENV 3051 Field Biology: Terrestrial Systems	4
ENG 2403 World Literature*	3		
Select one course from below approved GE humanities courses			
Fine Arts/Art History	3		
Foreign Languages (Must take I and II for credit)	3	**Major Capstone: 3 S.H. *** **	
Interdisciplinary	3	ES 4981 Environmental Issues Seminar (WE)	3
Music or Theatre	3		
Philosophy or Religion	3		
Social Sciences: 6 S.H. (from different areas)		**PROGRAM FOCUS-RELATED ELECTIVES 15 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 Coordinators and advisors toward their degree.**	
HIST 1000 Civil Society in America* ***or*** HIST 1062 Worlds of History: Traditions and Encounters*	3		
Select one course from below approved GE Social Science courses			
Economics or Geography	3		
Interdisciplinary	3	Students will be advised to take appropriate courses that match their career interests and preparation. These courses will be pulled from ENV, BIO, ES, GEOS, ATMS, GEOL, METR, OCEN as well as related programs at KU (at least 50% must be 3000/4000 level)	
Political Science	3		
Psychology	3		
Sociology or Anthropology	3		
Science and Mathematics: 7 S.H.			
MATH 1016 Statistics	3		
CHEM 1083 Chemistry I ****	4		
ADDITIONAL REQUIREMENTS: 31 S.H.		**FREE ELECTIVES: 9 S.H.**	
BIO 1300 General Biology I	4		
BIO 1400 General Biology II	4		
CPS 1231 Fundamentals of Computer Science	4	**Other Transfer:**	
CHEM 1084 Chemistry II	4	**Special Notes:** *G.E. required course **Required by SESS; pre-req is MATH 1000 which may be used as a free elective by students needing to take MATH 1000 first ***All Major courses require a grade of B or better ****Must earn a grade of C or better to advance to CHEM 1084	
ENV 1000 Intro to Environmental Science	3		
MATH 2415 Calculus I	4		
PHYS 2091 Physics I	4		
PHYS 2092 Physics II	4		
[1] See prerequisites and equivalencies. [2] Required of all Freshmen and Transfers with fewer than 10 credits. [3] Eng 1030 requires a grade of C or better Note: See foreign language requirements		**TOTAL CREDITS:**	
		Advisor:	
		Advisor Signature:	

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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 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 3801-3802 Special Topics in Earth Science
ES 4200 Remote Sensing
ES 4901-4902 Special Topics in Earth Science
ES 4980 Environmental Internship

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
GEOL 2263 Geology and the Environment Lab
GEOL 3265 Geomorphology
GEOL 3266 Hydrology

GEOS
GEOS 4103 Environmental Hazards
GEOS 4201 Urban Geographic Systems

METR
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