KEAN UNIVERSITY – COLLEGE OF NATURAL, APPLIED & HEALTH SCIENCES
(77100) B.S. IN SUSTAINABILITY SCIENCE
120 S.H.
2.50 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: 34 S.H.*** **	
Foundation Requirements[1] 13 S.H.		ENV 1000 Introduction to Environmental Science	3
GE 1000 Transition to Kean[2] or GE 3000 Transfer Transitions[2]	1	ENV 2100 Ecosystem Science	4
		GEOS 1100 Introduction to Earth and Geog Systems	4
ENG 1030 Composition***	3	GEOS 2101 Geo-hydro Systems	4
MATH 1054 Precalculus** [3]	3	ES 3000 Global Climate Change and Society	4
COMM 1402 Speech Communication*	3	SUST 1000 Introduction to Sustainability	3
GE 2024 Research & Technology*	3	SUST 2200 Laws for Environ. Sustainability	3
		SUST 3110 Renewable Energy	3
Disciplinary & Interdisciplinary Distribution Requirements		SUST 3200 Environmental Health and Safety	3
Humanities: 6 S.H. (from different areas)		SUST 4110 Life Cycle Assessment	3
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	**PROGRAM FOCUS-RELATED ELECTIVES 12-15 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 Coordinator with at least half of the credits at the 3000-4000 level** **Maximum of 8 S.H. of SUST courses count toward degree.** **If the course is taken as a Major Elective, it cannot be counted as a General Education course.**	
Interdisciplinary	3		
Music or Theatre	3		
Philosophy or Religion	3		
Social Sciences: 6 S.H. (from different areas)			
HIST 1062 Worlds of History*	3		
Select one course with advisement from areas below:			
Economics or Geography	3		
Interdisciplinary	3		
Political Science	3		
Psychology	3		
Sociology or Anthropology	3		
Science and Mathematics: 7 S.H.		**FREE ELECTIVES: 5-8 S.H.**	
MATH 1016 Statistics**	3		
CHEM 1083 Chemistry I ***			
G.E. and Major Capstone: 3 S.H., *****			
SUST 4300 Independent Practicum in Sustainability Science	3		
ADDITIONAL REQUIREMENTS: 31 S.H.			
BIO 1300 Introduction to Biology I	4		
BIO 1400 Introduction to Biology II	4		
CHEM 1084 Chemistry II	4		
MATH 2415 Calculus I	4		
PHYS 2091 General Physics I	4		
PHYS 2092 General Physics II	4		
CPS 1231 Fundamentals of Computer Science	4		
DSN 2200 Sustainable Designing II	3		
*G.E. required course			
**Course required by SESS			
***Must earn a grade of C or better			

[1] See prerequisites and equivalencies.
[2] University Requirement for Graduation for all undergraduate students that must be satisfied in one of two ways: Complete GE 1000 (all freshmen and transfers entering with 0-29 credits) OR complete GE 3000 (transfers entering with 30 credits or more)
[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

TOTAL CREDITS:
Advisor:
Advisor Signature:

B.S. IN SUSTAINBILITY SCIENCE APPROVED FOCUS-RELATED ELECTIVES*

***Subject to change as new courses are approved and old courses are eliminated. Independent Research, Independent Study, and/or Special Topics courses not listed, but will be approved on an individual basis if appropriate. Any combination of 12-15 semester hours may be selected to fulfill graduation requirements; however, students are strongly encouraged to select courses only after consultation with and approval of their advisor. Failure to do so may result in result in a less than optimal program experience.**

EARTH SYSTEMS FOCUS			
Atmosphere	S.H.	*Geosphere*	S.H.
CHEM 2180: Principles of Organic Chemistry [1]	4	BIO 3305: Principles of Microbiology [2]	4
CHEM 2283: Quantitative Analysis	4	CHEM 2180: Principles of Organic Chemistry [1]	4
CHEM 2581: Organic Chemistry I [2,4]	3	CHEM 2491: Inorganic Chemistry	3
CHEM 2582: Organic Chemistry II [2]	3	CHEM 2581: Organic Chemistry I [2,4]	3
CHEM 2583: Organic Chemistry Laboratory and Recitation I [2]	2	CHEM 2582: Organic Chemistry II [2]	3
CHEM 2584: Organic Chemistry Laboratory and Recitation II [2]	2	CHEM 2583: Organic Chemistry Laboratory and Recitation I	2
CHEM 3581: Biochemistry	3	CHEM 2584: Organic Chemistry Laboratory and Recitation II	2
ES 3000: Global Climate Change and Society [2]	4	ES 3310: The Geosphere in the Earth System	4
ES 3200: Geographic Information Systems in Geoscience	4	GEOL 1200: Introduction to Geology	4
METR 1300: Introduction to Meteorology	4	GEOL 1205: Mineral and Fossil Fuel Resources	3
METR 2300: Climatology	3	GEOL 3261: Mineralogy	4
METR 3360: Air Pollution	3	GEOL 3265: Geomorphology	4
METR 3369: Planetary Atmospheres	4	GEOL 3281: Field Geology	2
PHYS 1050: Energy, Physics & the Environment [2]	3	SUST 2008: Introduction to Composting [2]	4
SUST 2008: Introduction to Composting [2]	4	SUST 4000: Technology for Sustainability[4]	3
SUST 2101: Applied Organic Chemical Systems for Sustainability[2]	4	*Biosphere*	
SUST 4000: Technology for Sustainability[4]	3	BIO 2400: Genes, Organisms, Populations	4
		BIO 2500: Principles of Botany	4
		BIO 3305: Principles of Microbiology [2]	4
		BIO 3400: Zoology: Form and Function	4
		BIO 3434: Animal Behavior	4
Hydrosphere		BIO 3513: Morphology and Evolution of the Plant Kingdom	4
BIO 2650: Introduction to Marine Biology	4	BIO 3535: Field Botany	3
BIO 3000: Marine Biology	4	BIO 3614: Principles of Ecology	4
BIO 3305: Principles of Microbiology [2]	4	BIO 4575: Plant Physiology	4
BIO 4415: Ichthyology	4	BIO 4615: Applied Ecology [2]	4
BIO 3050: Field Biology: Marine Systems	4	BIO 3051: Field Biology: Terrestrial Systems	4
CHEM 2180: Principles of Organic Chemistry [1]	4	BIO 3201: Biodiversity [3]	3
CHEM 2581: Organic Chemistry I [2,4]	3	BIO 3230: Urban Ecology [3]	4
CHEM 2582: Organic Chemistry II [2]	3	BIO 3250: Medicinal Botany	3
CHEM 2583: Organic Chemistry Laboratory and Recitation I [2]	2	BIO 3720: Entomology	4
CHEM 2584: Organic Chemistry Laboratory and Recitation II [2]	2	BIO 4210: Conservation Biology [3]	4
ES 3000: Global Climate Change and Society [2]	4	BIO 4435: Behavioral Ecology	3
ES 3330: The Hydrosphere in the Earth System	4	BIO 4575: Plant Physiology	4
GEOL 3266: Hydrology	4	BIO 4600: Plant-Animal Interactions	4
OCEN 2400: Introduction to Oceanography	4	BIO 4615: Applied Ecology [2]	4
OCEN 3400: Global Change and the Ocean	3	CHEM 2581: Organic Chemistry I [2,4]	3
OCEN 3600: Coral Reefs and Coastal Systems	4	CHEM 2582: Organic Chemistry II [2]	3
OCEN 4454: Marine Geology	4	CHEM 2583: Organic Chemistry Laboratory and Recitation	2
OCEN 4455: Chemical Oceanography	4	CHEM 2584: Organic Chemistry Laboratory and Recitation	2
OCEN 4600: Marine Conservation	4	GEOG 2020: Conservation of Natural Resources	3
OCEN 4601: Field Methods in Marine Research	4	GEOS 4103: Environmental Hazards	4
OCEN 4602: Marine Resource Management	3	PHYS 1050: Energy, Physics & the Environment [2]	3
PHYS 1050: Energy, Physics & the Environment [2]	3	SELS 3101: Atmospheric Systems	4
SUST 2008: Introduction to Composting [2]	4	SUST 2008: Introduction to Composting [2]	4
SUST 2101: Applied Organic Chemical Systems for Sustainability[2]	4	SUST 2101:Applied Organic Chemical Systems for Sustainability[2]	4
SUST 4000: Technology for Sustainability[4]	3	SUST 4000: Technology for Sustainability[4]	3

HUMAN SYSTEMS FOCUS			
Communication	S.H.	*Infrastructure*	
COMM 2920: Introductory Journalism	3	DSN 2100: Design for Sustainability I	3
COMM 3216: International Business Communication	3	ES 3200: Intro to Geographic Information Systems	4
COMM 3510: Persuasive Communication	3	GEOL 4201: Urban Geographic Systems	4
COMM 3590: Business and Professional Communication	3	HED 3635: Introduction to Public Health	3
COMM 3660: Public Relations	3	HIST 4361: The American City	3
COMM 3675: Media Advertising	3	PA 2000: Introduction to Public Administration	3
COMM 3690: Health Communication	3	REC 3500: Commercial Recreation and Tourism	3
COMM 3700: Community Building and Advocacy	3	REC 3800: Environmental Recognizance	3
COMM 3910: Advanced Journalism	3	REC 3810: Recreation and the Environment	3
COMM 3915: Feature Writing	3	SUST 2008: Introduction to Composting[2]	4
COMM 4620: Public Relations Writing	3	SUST 4001: Essential Readings in Sustainability[4]	3
ENG 2005: Advanced Composition	3	SUST 4000: Technology for Sustainability[4]	3
ENG 2010: Creative Writing	3		
ENG 2020: Writing	3	*Social*	
ENG 2101: Structure and Origins of the English Language	3	ANTH 1800: Cultural Anthropology	3
ENG 3030: Writing Arguments	3	ANTH 2820: Urban Anthropology	3
ENG 3915: Feature Writing	3	ANTH 3830: Anthropology of North American Indian Cultures	3
ENG 3041: Writing in the Social Sciences	3	HIST 3852: History of Science	3
SUST 2203: Intercultural Communication for sustainability[2]	3	HIST 3853: Charles Darwin: A Life and Times	3
SUST 4001: Essential Readings in Sustainability[4]	3	PHIL 2300: Introduction to Ethics	3
		PHIL 2505: Critical Thinking	3
Business		PHIL 3800: Environmental Philosophy	3
ACCT 2200: Principles of Accounting	3	PS 1010: Introduction to Politics: Elements of Politics	3
ACCT 3700: Accounting for Sustainability	3	PSY 1000: General Psychology	3
ECO 1020: Principles of Economics I	3	PSY 3420: Environmental Psychology	3
ECO 1021: Principles of Economics II	3	SOC 1000: Introduction to Sociology	3
ECO 3730: Economic Geography	3	SOC 2000: Introduction to Social Justice	3
ECO 3840: Population Economics	3	SOC 2500: Introduction to Global Studies	3
ENV 3200 Environmental Economics	3	SOC 3150: Urban Sociology	3
GBUS 4320: Global Business and Technology	3	SOC 3410: Social Movements	3
MGS 1030: Principles of Management	3	SOC 3420: Environment and society	3
MKT 2500: Principles of Marketing	3	SOC 4401: Social Change	3
MKT 3510: Consumer Behavior	3	SUST 2202: Religion and Sustainability[2]	3
MKT 4240: Contemporary Issues in Marketing	3	SUST 4001: Essential Readings in Sustainability[4]	3
SUST 2201: Economics for Sustainability[2]	3		
SUST 4000: Technology for Sustainability[4]	3		
		[1] Students may not receive credit for CHEM 2180 and CHEM [2581, 2582, 2583, and 2584]	
		[2] Credit for these courses awarded once only	
		[3] Courses are equivalent; credit awarded once only.	
		4 Course need to get C or better	