KEAN UNIVERSITY – COLLEGE OF NATURAL, APPLIED & HEALTH SCIENCES B.S. IN SUSTAINABILITY SCIENCE 124 S.H.

3.25 G.P.A. Graduation Requirement 1

EFFECTIVE DATE: Fall 2013 START TERM: TRANSFER INSTITUTIONS (X) NAME: Credits: STUDENT ID#: In Progress GENERAL EDUCATION: 35 Semester Hours (S.H.) **ACADEMIC MAJOR REQUIREMENTS: 37 S.H.***** Foundation Requirements 13 S.H. SUST 1000 Introduction to Sustainability 3 G.E. 1000 Transition to Kean* SUST 1004 First Year Seminar on Sustainability 1 1 ENG 1030 Composition* 3 SUST 2000 Mathematical Principles for Sustainability 3 MATH 1054 Precalculus** 3 SUST 2004 Second Year Seminar on Sustainability 1 3 COMM 1402 Speech Communication* 3 SUST 2006 Mathematica Applications for Sustainability GE 2024 Research & Technology* SUST 2009 Applied Physics for Sustainability 3 4 SUST 2200 Introduction to Laws and Sustainability 3 Disciplinary & Interdisciplinary Distribution Req: SUST 2203 Intercultural Communication for Sustainability 3 Humanities: 6 S.H. (from different areas) SUST 3000 Climate Science and Sustainability 4 ENG 2403 World Literature* 3 SUST 3001 Applied Statistics for Sustainability 4 Select one course with advisement from areas below: SUST 3003 Third Year Seminar on Sustainability 1 Fine Arts/Art History 3 SUST 4000 Technologies for Sustainability 3 Foreign Languages (Must take I and II for credit) 3 SUST 4001 Essential Readings in Sustainability 3 SUST 4003 Fourth Year Seminar on Sustainability Interdisciplinary 3 1 3 Music or Theatre PROGRAM FOCUS-RELATED ELECTIVES 19 S.H. 3 Philosophy or Religion To be selected with advisement from approved program list Social Sciences: 6 S.H. (from different areas) maintained in the Center for Sustainability Studies. HIST 1000 Civil Society in America* or Maximum of 3 S.H. of SUST courses count toward degree. HIST 1062 Worlds of History: Traditions and Encounters* 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. MATH 1016 Statistics** 3 CHEM 1083 Chemistry I**** 4 G.E. and Major Capstone: 3 S.H.**, *** SUST 4300 Independent Practicum in Sustainability Science 3 ADDITIONAL REQUIREMENTS: 30 S.H. **BIOS 1200 Introduction to Biology** 4 BIOS 2201 Diversity & Interactions 4 CHEM 1084 Chemistry II 4 DSN 2200 Design for Sustainability II 3 GEOS 1100 Introduction to Earth and Geographical Systems 4 FREE ELECTIVES: 3 S.H. GEOS 2101 Geo-hydro Systems 4 MATH 2415 Calculus I 4 Other Transfer: SOC 3420 Environment and Society 3 Special Notes: 1 2.50 for students admitted prior to autumn 2013 *G.E. required course **Course required by Major

***All Major courses require a grade of B or better

TOTAL CREDITS: Advisor:

Advisor Signature:

****Must earn a grade of C or better to advance to CHEM 1084

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 19 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 12		HUMAN SYSTEMS FOCUS 12	
Atmosphere	S.H.	Communication	S.H.
CHEM 2180: Principles of Organic Chemistry ¹	4	COMM 2920: Introductory Journalism	3
CHEM 2283: Quantitative Analysis	4	COMM 3216: International Business Communication	3
CHEM 2581: Organic Chemistry I ²	3	COMM 3510: Persuasive Communication	3
CHEM 2582: Organic Chemistry II ²	3	COMM 3590: Business and Professional Communication	3
CHEM 2583: Organic Chemistry Laboratory and Recitation I ²	2	COMM 3660: Public Relations	3
CHEM 2584: Organic Chemistry Laboratory and Recitation II ²	2	COMM 3675: Media Advertising	3
CHEM 3581: Biochemistry	3	COMM 3690: Health Communication	3
ES 3000: Global Climate Change and Society 3	4	COMM 3700: Community Building and Advocacy	3
ES 3200: Geographic Information Systems in Geoscience	4	COMM 3910: Advanced Journalism	3
ES 3320: The Atmosphere in the Earth System	4	COMM 3915: Feature Writing	3
METR 1300: Introduction to Meteorology	4	COMM 4620: Public Relations Writing	3
METR 2300: Climatology	3	ENG 2005: Advanced Composition	3
METR 2301: Climatology Laboratory	1	ENG 2010: Creative Writing	3
METR 2310: General Meteorology	4	ENG 2020: Writing	3
METR 3360: Air Pollution	3	ENG 2101: Structure and Origins of the English Language	3
METR 3369: Planetary Atmospheres	4	ENG 3030: Writing Arguments	3
PHYS 1050: Energy, Physics & the Environment 4	3	ENG 3915: Feature Writing	3
PHYS 2095: Physics I ⁵	4	ENG 3041: Writing in the Social Sciences	3
SUST 2008: Introduction to Composting ⁶	4	y	
SUST 2100: Systems Modeling for Sustainability 7	3	Business	
g		ACCT 2200: Principles of Accounting	3
Hydrosphere		ACCT 3700: Accounting for Sustainability	3
BIO 2650: Introduction to Marine Biology	4	ECO 1020: Principles of Economics I	3
BIO 3000: Marine Biology	4	ECO 1021: Principles of Economics II	3
BIO 3305: Principles of Microbiology 8	4	ECO 3730: Economic Geography	3
BIO 4415: Ichthyology	4	ECO 3840: Population Economics	3
BIOS 3050: Field Biology: Marine Systems	4	MGS 1030: Principles of Management	3
CHEM 2180: Principles of Organic Chemistry ¹	4	MKT 2500: Principles of Marketing	3
CHEM 2581: Organic Chemistry I ²	3	MKT 3510: Consumer Behavior	3
CHEM 2582: Organic Chemistry II ²	3	MKT 4240: Contemporary Issues in Marketing	3
CHEM 2583: Organic Chemistry Laboratory and Recitation I ²	2	SUST 2201: Economics for Sustainability	3
CHEM 2584: Organic Chemistry Laboratory and Recitation II ²	2	SUST 3202: Accounting for Sustainability	3
ES 3000: Global Climate Change and Society ³	4	SUST 3203: Finance for Sustainability	3
ES 3330: The Hydrosphere in the Earth System	4	COOT 0200. I mande for oddamasmy	—
GEOL 3266: Hydrology	4	Infrastructure	
OCEN 2400: Introduction to Oceanography	4	DSN 2100: Design for Sustainability I	3
OCEN 3400: Global Change and the Ocean	3	GEOS 3200: Intro to Geographic Information Systems	4
OCEN 3463: Marine Science	4	GEOS 4201: Urban Geographic Systems	4
OCEN 3600: Coral Reefs and Coastal Systems	4	HED 3635: Introduction to Public Health	3
OCEN 4454: Marine Geology	4	HIST 4361: The American City	3
OCEN 4455: Chemical Oceanography	4	PA 2000: Introduction to Public Administration	3
OCEN 4470: Physical Oceanography	4	REC 3500: Commercial Recreation and Tourism	3
OCEN 4600: Marine Conservation	4	REC 3800: Environmental Recognizance	3
OCEN 4601: Field Methods in Marine Research	4	REC 3810: Recreation and the Environment	3
OCEN 4601: Held Methods in Manife Research OCEN 4602: Marine Resource Management	3	SUST 2008: Introduction to Composting	4
PHYS 1050: Energy, Physics & the Environment ⁴	3	SUST 3200: Environmental Health and Safety for Sustainability	3
PHYS 2095: Physics I ⁵	4	5001 0200. Environmental ricaltif and odicty for oustainability	- 3
SUST 2008: Introduction to Composting ⁶	4		
SUST 2100: Systems Modeling for Sustainability 7	3		
0001 2100. Oystems wouldning for Sustainability	-		
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Geosphere		Social	
BIO 3305: Principles of Microbiology 8	4	ANTH 1800: Cultural Anthropology	3
CHEM 2180: Principles of Organic Chemistry 1	4	ANTH 2820: Urban Anthropology	3
CHEM 2491: Inorganic Chemistry	3	ANTH 3830: Anthropology of North American Indian Cultures	3
CHEM 2581: Organic Chemistry I ²	3	HIST 3852: History of Science	3
CHEM 2582: Organic Chemistry II ²	3	HIST 3853: Charles Darwin: A Life and Times	3
CHEM 2583: Organic Chemistry Laboratory and Recitation I ²	2	PHIL 2300: Introduction to Ethics	3
CHEM 2584: Organic Chemistry Laboratory and Recitation II ²	2	PHIL 2505: Critical Thinking	3
ES 3310: The Geosphere in the Earth System	4	PHIL 3800: Environmental Philosophy	3
GEOL 1200: Introduction to Geology	4	PS 1010: Introduction to Politics: Elements of Politics	3
GEOL 1201: Geologic Hazards	3	PSY 1000: General Psychology	3
GEOL 1202: Geologic Hazards Laboratory	1	PSY 3420: Environmental Psychology	3
GEOL 1205: Mineral and Fossil Fuel Resources	3	SOC 1000: Introduction to Sociology	3
GEOL 1210: Geology of the National Parks	3	SOC 2000: Introduction to Social Justice	3
GEOL 2262: Geology and the Environment	3	SOC 2500: Introduction to Global Studies	3
GEOL 2263: Geology and the Environment Lab	1	SOC 3150: Urban Sociology	3
GEOL 3261: Mineralogy	4	SOC 3410: Social Movements	3
GEOL 3263: Structural Geology	4	SOC 4401: Social Change	3
GEOL 3265: Geomorphology	4	SUST 2202: Religion and Sustainability	3
GEOL 3281: Field Geology	2	SUST 3201: Policies and Sustainability	3
PHYS 2095: Physics I ⁵	4	,	
SUST 2008: Introduction to Composting ⁶	4		
SUST 2100: Systems Modeling for Sustainability 7	3		
Biosphere			
BIO 2400: Genes, Organisms, Populations	4		
BIO 2500: Principles of Botany	4		
BIO 3305: Principles of Microbiology ⁸	4		
BIO 3400: Zoology: Form and Function	4		
BIO 3434: Animal Behavior	4		
BIO 3513: Morphology and Evolution of the Plant Kingdom	4		
BIO 3535: Field Botany	3		
BIO 3614: Principles of Ecology	4		
BIO 4575: Plant Physiology	4		
BIO 4615: Applied Ecology ²	4		
BIOS 3051: Field Biology: Terrestrial Systems	4		
BIOS 3201: Biodiversity 9	3		
BIOS 3230: Urban Ecology 10	4		
BIOS 3250: Medicinal Botany	3		
BIOS 3720: Entomology	4		
BIOS 4210: Conservation Biology ¹¹	4		
BIOS 4435: Behavioral Ecology	3		
BIOS 4433. Deliavioral Ecology BIOS 4575: Plant Physiology	4		
BIOS 4670: Plant-Physiology BIOS 4600: Plant-Animal Interactions	4		
BIOS 4600: Frant-Aritinal Interactions BIOS 4615: Applied Ecology ²	4		
CHEM 2581: Organic Chemistry I ²	3		
CHEM 2582: Organic Chemistry II ²	3	¹ Students may not receive credit for CHEM 2180 and	
,	2	'Students may not receive credit for CHEM 2180 and CHEM [2581, 2582, 2583, and 2584]	
CHEM 2583: Organic Chemistry Laboratory and Recitation I 2	2		-
CHEM 2584: Organic Chemistry Laboratory and Recitation II ²	3	² Credit for these courses awarded once only	
GEOG 2020: Conservation of Natural Resources		Credit for this course awarded once only. Credit for this course awarded once only.	
GEOS 4103: Environmental Hazards	4	Credit for this course awarded once only. Credit for this course awarded once only.	
PHYS 1050: Energy, Physics & the Environment ⁴	3	5 Credit for this course awarded once only.	
SELS 3101: Atmospheric Systems	4	6 Credit for this course awarded once only.	
SUST 2008: Introduction to Composting 6	4	7 Credit for this course awarded once only.	
SUST 3100: Urban Ecology and Sustainability 10	3	8 Credit for this course awarded once only.	
SUST 3102: Biodiversity and Sustainability 9	3	Courses are equivalent; credit awarded once only.	
SUST 4100: Conservation Biology and Sustainability 11	3	10 Courses are equivalent; credit awarded once only.	
SUST 4101: Natural Resource Management and Sustainability	3	11 Courses are equivalent; credit awarded once only.	+
	1	¹² Credit awarded once only for GE courses.	+