KEAN UNIVERSITY
COLLEGE OF NATURAL, APPLIED AND HEALTH SCIENCES
SCHOOL OF ENVIROMENTAL AND LIFE SCIENCES
(70302) B. S. IN BIOLOGY, CELL AND MOLECULAR BIOLOGY OPTION (124 S.H)
(EFFECTIVE 09/13)

NAME			TRANSFER INSTITUTIONS	CREDITS
STUDENT I.D. #				
START TERM				

GENERAL EDUCATION		35 S.H.
FOUNDATION REQUIREMENTS[1]		13 S.H
GE 1000	Transition to Kean[2]	1
***ENG 1030	Composition	3
MATH 1000	College Algebra	3
COMM 1402	Speech Communication as Critical Citizenship	3
GE 2024	Research & Technology	3
DISCIPLINARY & INTERDISCIPLINARY REQUIREMENTS		
HUMANITES		6 S.H.
*ENG 2403	World Literature	3
Select One Course Below		
	Fine Arts or Art History	3
	Philosophy or Religion	3
	Foreign Languages (Must take I and II for credit)	3
	Music or Theater	3
	Interdisciplinary	3
SOCIAL SCIENCES		6 S.H.
*HIST 1000 or HIST 1062	History of Civil Society in America or Worlds of History	3
Select one course from below		
	Economics or Geography	3
	Political Science	3
	Psychology	3
	Sociology or Anthropology	3
	Interdisciplinary	3
SCIENCE AND MATHEMATICS		7 S.H.
MATH 1054	Precalculus[3]	3
***CHEM 1083	Chemistry I	4
***MAJOR/GE CAPSTONE		3 S.H.
**BIO 4970	Seminar Int. Bio.	3
ADDITIONAL REQUIREMENTS		26 S.H.
***CHEM 1084	Chemistry II	4
***CHEM 2581	Organic Chem. Lec. I	3
***CHEM 2582	Organic Chem. Lec II	3
***CHEM 2583	Organic Chem. Lab. I	2
***CHEM 2584	Organic Chem. Lab II	2
MATH 2415	Calculus I	4
PHYS 2091	General Physics I	4
PHSY 2092	General Physics II	4

[1] See prerequisites and equivalencies.
[2] Required of all Freshmen and Transfers with fewer than 10 credits.
[3] A student whose qualifying score on the placement test makes them eligible to take either Math 1054 or Math 2415 may take that course instead. In that case, either Math 1054 or 2415 will count as the General Ed requirement and the student may take another 3 or 6 credits in free electives to total 124 S.H.

**MAJOR REQUIREMENTS		52 S.H.
***REQUIRED COURSES IN BIOLOGY		32 S.H
BIOS 1200	Introduction to Biology	4
BIOS 2201	Diversity & Interactions	4
BIOS 2202	Molecular and Cellular Processes	4
ALL OF THE FOLLOWING COURSES MUST BE TAKEN AS SELS BS BIOLOGY SECTIONS		
BIO 3305	Principles of Microbiology	4
BIO 3704	Principles of Genetics	3
BIO 3705	Principles of Genetics Lab	2
BIO 4105	Biochemistry	4
BIO 4225	Cell Physiology	4
BIOS 4704	Molecular Biology of Genes	3
***GUIDED PROGRAM RELATED ELECTIVES —(ALL ELECTIVES MUST BE SELS BS BIOLOGY SECTIONS)		20 S.H.
BIO 3303	Anatomy and Physiology	4
BIO 3304	Anatomy and Physiology	4
BIO 3815	Microtechniques	4
BIO 3820	Basic Tissue Culture	4
BIOS 4310	Virology	4
BIOS 4315	Immunology	4
BIOS 4455	Developmental Biology	4
BIOS 3575	Plant Physiology	4
BIO 4961	Independent Research	1
BIO 4962	Independent Research	2
BIO 4963	Independent Research	3
	Other courses to be developed	
FREE ELECTIVES		11 S.H.
50% at the 3000-4000 level		

*G.E. required course
**Course required by Major
***Eng 1030, CHEM, and all Major courses require a grade of C or better
Note: Must take foreign language I and II for credit