## 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)

		(E	FFECTIVE 09/13)		Т -
NAME				TRANSFER INSTITUTIONS	CREDITS
STUDENT I.D. #					1
START TERM		, ,			52 S.H.
GENERAL EDUCATION		35 S.H.		**MAJOR REQUIREMENTS	
FOUNDATION R	EQUIREMENTS <sup>1</sup>	13 S.H	***REQUIRED	COURSES IN BIOLOGY	32 S.H
		,			1
GE 1000	Transition to Kean <sup>2</sup>	1	BIOS 1200	Introduction to Biology	4
**ENG 1030	Composition	3	BIOS 2201	Diversity & Interactions	4
MATH 1000	College Algebra	3	BIOS 2202	Molecular and Cellular Processes	4
				OLLOWING COURSES MUST BE TAKEN AS SELS	<u>BS</u>
			BIOLOGY SEC		
COMM 1402	Speech Communication as Critical Citizenship	3	BIO 3305	Principles of Microbiology	4
GE 2024	Research & Technology	3	BIO 3704	Principles of Genetics	3
			BIO 3705	Principles of Genetics Lab	2
DISCIPLINARY & INTERDISCIPLINARY			BIO 4105	Biochemistry	4
REQUIREMENTS			1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
HUMANITES		6 S.H.	BIO 4225	Cell Physiology	4
*ENG 2403	World Literature	3	BIOS 4704	Molecular Biology of Genes	3
Select One Cours		<del> </del>	5100 1704	1sicodial biology of Golies	<u> </u>
Scient One cours	Fine Arts or Art History	3		***GUIDED PROGRAM RELATED ELECTIVES —(ALL ELECTIVES MUST BE SELS BS BIOLOGY SECTIONS)	
	Philosophy or Religion	3	BIO 3303	Anatomy and Physiology	4
	Foreign Languages (Must take I and II	3	BIO 3304	Anatomy and Physiology  Anatomy and Physiology	4
	for credit)			3 3 3	<u> </u>
	Music or Theater	3	BIO 3815	Microtechniques	4
	Interdisciplinary	3	BIO 3820	Basic Tissue Culture	4
			BIOS 4310	Virology	4
SOCIAL SCIENCES		6 S.H.	BIOS 4315	Immunology	4
*HIST 1000 or HIST 1062	History of Civil Society in America or Worlds of History	3	BIOS 4455	Developmental Biology	4
Select one course	e from below		BIOS 3575	Plant Physiology	4
	Economics or Geography	3	BIO 4961	Independent Research	1
	Political Science	3	BIO 4962	Independent Research	2
	Psychology	3	BIO 4963	Independent Research	3
	Sociology or Anthropology	3			
	Interdisciplinary	3		Other courses to be developed	
	interdisciplinary			Other courses to be developed	
SCIENCE AND N	ΛΑΤΗΕΜΑΤΙΟς	7 S.H.			
MATH 1054	Precalculus <sup>3</sup>	3			
***CHEM 1083	Chemistry I	4			1
CHEW 1003	Chemistry	1 4			
***MAJOR/GE C	ΔΡΥΤΩΝΕ	3 S.H.			1
**BIO 4970	Seminar Int. Bio.	3 3.п.			1
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ADDITIONAL REQUIREMENTS		26 S.H.	EDEE ELECTIV	FREE ELECTIVES	
		+		50% at the 3000-4000 level	
	Chemistry II	4	50% at the 300	U-4000 IEVEI	-
***CHEM 2581	Organic Chem. Lec. I	3			1
***CHEM 2582	Organic Chem. Lec II	3			1
***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			
<ul> <li>See prerequisites and equivalencies.</li> <li>Required of all Freshmen and Transfers with fewer than 10 credits.</li> <li>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</li> </ul>			**Course require ***Eng 1030, CF	*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	
	ral Ed requirement and the student may take				
another 3 or 6 cred	dits in free electives to total 124 S.H.				1