

KEAN UNIVERSITY - N.J. CENTER FOR SCIENCE, TECHNOLOGY & MATHEMATICS

(30105) B.S. IN SCIENCE & TECHNOLOGY (Molecular Biology Option)

124 – 125 S.H. (3.0 minimum GPA required for Graduation)

EFFECTIVE DATE: FALL 2016

START TERM: _____

NAME:			
STUDENT ID #:		Credits	
GENERAL EDUCATION: 37 Semester Hours (S.H.)			
Foundation Requirements: 14 S.H.			
GE 1000	Transition to Kean or GE 3000 Transfer Transiton ¹	1	
*ENG 1030	College Composition ²	3	
*STME 1403	Math. & Computational Methods of Science I ³	4	
*COMM 1402	Speech Communication As Critical Citizen ²	3	
GE 2024	Research & Technology ^{2, 7}	3	
DISCIPLINARY & INTERDISCIPLINARY REQUIREMENTS:			
Humanities: 6 S.H.			
*ENG 2403	World Literature	3	
<i>Select ONE course from below - see GE Distribution Course List</i>			
	Fine Arts/Art History		
	Philosophy or Religion		
	Foreign Languages ⁴		
	Music or Theater		
	Interdisciplinary		
Social Sciences: 6 S.H.			
*HIST 1062	Worlds of History	3	
<i>Select ONE course from below - see GE Distribution Course List</i>			
	Psychology		
	Economics or Geography		
	Political Science		
	Sociology or Anthropology		
	Interdisciplinary		
Science and Mathematics: 8 S.H.			
*STME 1603	Math. & Computational Methods of Science II	4	
*STME 1401	Chemical Systems I	4	
MAJOR / GE CAPSTONE COURSE⁵: 3 S.H.			
*STME 4610	Science & Technology Seminar (WE)	3	
ADDITIONAL REQUIRED COURSES²: 13 S.H.			
STME 2601	Living Systems I	4	
STME 2401	Physical Systems I	4	
STME 2603	Probabilistic Methods in Science	4	
STME 1903	Research Methods-RFI	1	

TRANSFER INSTITUTIONS (X)			
		Credits	
ACADEMIC MAJOR⁵: 62-63 S.H.			
Program Core Requirements⁵: 18 S.H.			
STME 1601	Chemical Systems II	4	
STME 2602	Living Systems II	4	
STME 2681	Organic Chemistry Honors Lecture I	3	
STME 2683	Organic Chemistry Honors Lab I	2	
STME 2682	Organic Chemistry Honors Lecture II	3	
STME 2684	Organic Chemistry Honors Lab II	2	
Program Option Requirements⁵: 41-45 S.H.			
CHEM 2283	Quantitative Analysis	4	
CHEM 3284	Instrumental Methods of Analysis (WE)	4	
BIO 3403	Anatomy and Physiology I	4	
BIO 3305	Principles of Microbiology	4	
BIO 3709	Genetics	4	
BIO 3820	Basic Tissue Culture	4	
BIO 4105	Essentials of Biochemistry ⁶ OR	4	
STME 3401	Biochemistry Honors I ⁷	4	
BIO 4700	Molecular Genetics	4	
STME 5020	Ethics in Biotechnology	1	
STME 5103	Scientific Writing and Presentation	3	
STME 1605	Intro to Programming	4	
STME 3610	Current Issues ⁶ OR	1	
STME 2903	Research Experience-RFI ⁷	2	
STME 3903	Advanced Research Experience-RFI ⁷	3	
MAJOR ELECTIVES⁵: 0-3 S.H. (Select major elective courses with advisement in STME, BIO or CHEM at the 3000 level or higher)			
FREE ELECTIVES: 12 S.H. (Select w/advisement, at least 50% must be at 3000-4000 level)			
TOTAL CREDITS:			

Special Notes:

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

^{*} (G.E.) General Education required course.

² Foundation & Additional Requirements require a grade of C or better, except ENG 1030 requires B or better.

³ Prerequisite of qualifying placement test score or the equivalent of MATH 1054.

⁴ Credit granted only upon completion of two semesters of elementary or intermediate foreign language.

⁵ A minimum grade of C in no more than two major courses, including capstone. A grade of B- or higher in remaining major courses.

⁶ Non-RFI students only.

⁷ Required for RFI students – must complete with RFI sponsor faculty.

WE: Writing Emphasis course.