

#### KEAN UNIVERSITY FOUR YEAR ACADEMIC PLAN

# **BACHELOR OF SCIENCE IN BIOLOGY, CELL & MOLECULAR OPTION (70302)**

Program Notes:

- All options in the B.S biology major require a minimal cumulative GPA of 3.0 to remain in the major as well as for graduation.
- Actual course sequence will vary by student/program and is based upon course availability
- Some advanced courses in the major are offered only on a rotating basis and may vary by term offered.
- Major elective & free electives and their availability vary according to registration demand and faculty availability. Selections are approved thru the advisement process.
- Individual time to student's completion of graduation requirements will vary according to successful completion of prerequisites and other courses. This four year plan is for guidance purposes only.
- The semesters shown are Fall/Spring only. Some students may opt for intersession coursework (summer, etc.).

Name: \_\_\_\_\_

Student ID:

## FRESHMAN YEAR 1

Fall Semester Yr-1		Spring Semester Yr-1	
ENG 1030 College Composition	3	COMM 1402 Speech Communication	3
MATH 1054 Precalculus	3	MATH 1016 Statistics (BIO Sections)	3
GE 1000 Transition to Kean	1	MATH 2415 Calculus I	4
BIO 1300 General Biology I <sup>1</sup>	4	BIO 1400 General Biology II	4
CHEM 1083 General Chemistry I	4	CHEM 1084 General Chemistry II	4
HIST 1062 Worlds of History	3		
Total Credits	18	Total Credits	18

### **SOPHOMORE YEAR 2**

Fall Semester Yr-2		Spring Semester Yr-2	
PHYS 2091 General Physics I	4	PHYS 2092 General Physics II	4
GE 2024 Research & Technology	3	ENG 2403 World Literature	3
CHEM 2581 Organic Chemistry I Lecture	3	CHEM 2582 Organic Chemistry II Lecture	3
CHEM 2583 Organic Chemistry I Lab	2	CHEM 2584 Organic Chemistry II Lab	2
BIO 3305 Microbiology	4	BIO 3709 Genetics	4
Total Credits	16	Total Credits	16

JUNIOR YEAR 3				
Fall Semester Yr-3		Spring Semester Yr-3		
BIO 4015 Essentials of Biochemistry	4	BIO 3XXX or 4XXX Major Elective	3-4	
BIO 4315 Immunology	4	GE Approved Humanities	3	
BIO 3XXX or 4XXX Major Elective	4	Free elective	3	
Free elective	3	Free elective	3	
Total Credits	15	Total Credits	12-13	
Fall Semester Yr-4	SENIO	R YEAR 4		
Fail Semester 11-4		Spring Semester Yr-4		
GE Approved Social Science	3	BIO 4970 Seminar in Integrative Biology	3	
BIO 3XXX or 4XXX Major Elective	3-4	BIO 3XXX or 4XXX Major Elective	3-4	
BIO 3XXX or 4XXX Major Elective	3-4	BIO 3XXX or 4XXX Major Elective	3-4	
Free elective	3	BIO 3XXX or 4XXX Major Elective	3-4	

## TOTAL CREDITS REQUIRED FOR GRADUATION 124 S.H.

Footnote:

<sup>1</sup>If a student does not have the required co-requisite of MATH 1054, they are encouraged to substitute a <u>Free Elective</u> instead of BIO 1300 during their first semester.