Five-Year Biology Education

Sample Pathway to Graduation

125 S.H. – non-RFI Track
129 S.H. – RFI Track

Freshman Year: Summer Semester			
GE 1000: Transition to Kean	1		
Freshman Year: Fall Semester		**Freshman Year: Spring Semester**	
ENG 1030: Composition	3	COMM 1402: Speech Communication	3
STME 2601: Living Systems I	4	STME 2602: Living Systems II	4
STME 1403: Math & Computational Methods I	4	STME 1603: Math & Computational Methods II	4
STME: 1401: Chemical Systems I	4	STME 1601: Chemical Systems II	4
STME 1903: Research Methods	1	STME 2903: Research Experience (RFI track)	2
	16		15 – 17
Sophomore Year: Fall Semester		**Sophomore Year: Spring Semester**	
HIST 1062: Worlds of History (non-RFI track)	3	HIST 1062: Worlds of History (RFI track)	3
GE 2024: Research and Technology	3	ID 1225: Critical Issues & Values of Cont. Health	3
ES 1000: Observing the Earth	3	EMSE 2801: Intro Field Experience	3
BIO 2500: Principles of Botany	4	STME 2603: Probabilistic Methods of Science	4
PSY 1000: General Psychology	3	PSY 2110: Psychology of Adolescence	3
STME 3903 Advanced Research Experience (RFI track)	3		
	16		13 – 16
Junior Year: Fall Semester		**Junior Year: Spring Semester**	
BIO 3400: Zoology Form & Function	4	ENG 2403: World Literature	3
STME 2681: Organic Chemistry I	3	BIO 3403: Anatomy & Physiology I	4
STME 2683: Organic Chemistry I Lab	2	BIO 3709: Genetics	4
BIO 3614: Principles of Ecology	4	STME 2682: Organic Chemistry II	3
STME 2401: Physical Systems I	4	GE Approved Humanities Requirement	3
		STME 3610: Current Issues in Sci & Tech (non-RFI track)*	1
	17		17 – 18
Senior Year: Fall Semester		**Senior Year: Spring Semester**	
EMSE 3230: Science Education K-12	3	STME 4610: Science & Technology Seminar (Capstone)	3
EMSE 5315: Language Arts & Reading in Teaching Content Areas	3	STME 3401: Biochemistry OR BIO 4105: Essentials of Biochemistry	4
BIO 3305: Principles of Microbiology	4	EMSE 3903: Teaching English Language Learners	1
EMSE 3801: Field Experience	2	EDUC 3000: Curriculum, Evaluation & the Learner	3
EMSE 5320: Computers in the School Curriculum	3	Free Elective	3
	15		14

**STME 3610 to be taken by students who did not complete <u>both</u> STME 2903 & 3903 (RFI Research Experience)*

5th Year Courses

Summer prior to start of 5th Year			
Graduate Education Elective	3	SPED 5024 Differentiating Instruction in the Inclusive Classroom	3
5th Year: Fall Semester		**5th Year: Spring Semester**	
STME 5330: Science Teaching Methods & Practice	3	EMSE 5564: Professional Internship	6
STME 5032: Research Methods for Science Education	3	EMSE 5031: Action Research Integrative Seminar	3
EMSE 5561: Foundations of Education	3	STME 5610: Advanced Science & Technology Seminar	3
Graduate Education Elective	3		
	12		12