

KEAN UNIVERSITY
NATHAN WEISS GRADUATE COLLEGE
NJ CENTER FOR SCIENCE, TECHNOLOGY & MATHEMATICS EDUCATION (STME)
(30105) B.S. in Science and Technology (Molecular Biology Option): 126 - 129 S.H.
(EFFECTIVE: Fall/2009)

START TERM: _____

STUDENT NAME:	Credits	TRANSFER INSTITUTIONS (X)	Credits
STUDENT ID#			
GENERAL EDUCATION: 34 Semester Hours (S.H.)		ACADEMIC MAJOR REQUIREMENTS⁵: 69 – 72 S.H.	
Foundation Requirements: 14 S.H.		STME 2601 Living Systems	4
GE 1000 Transition to Kean ¹	1	STME 2610 Current Issues in Science & Technology I	1
ENG 1030 College Composition ²	3	STME 3610 Current Issues in Science & Technology II	1
STME 1403 Math. & Computational Methods of Science I ³	4	CHEM 2283 Quantitative Analysis	4
COMM 1402 Speech Communication As Critical Citizenship ²	3	CHEM 2581 Organic Chemistry I	3
GE 2024 Research & Technology ²	3	CHEM 2583 Organic Chemistry Lab I	2
DISCIPLINARY / INTERDISCIPLINARY DISTRIBUTION REQUIREMENTS: 20 S.H.		CHEM 2582 Organic Chemistry II	3
Humanities: 6 S.H.		CHEM 2584 Organic Chemistry Lab II	2
*ENG 2403 World Literature	3	CHEM 3284 Instrumental Methods of Analysis WE	4
(Select one course from below)		BIO 3403 Anatomy / Physiology I	4
Fine Arts or Art History	3		
Music or Theater	3	BIO 3404 Anatomy / Physiology II	4
Philosophy or Religion	3	BIO 3305 Principles of Microbiology	4
Foreign Language ⁴ (Must take I and II for credit)	3	BIO 3704 Principles of Genetics	3
Interdisciplinary	3	BIO 3705 Principles Genetics Lab	2
Social Sciences: 6 S.H.		BIO 3820 Basic Tissue Culture	4
*HIST 1000 History of Civil Society in America	3	BIO 4105 Essentials of Biochemistry	4
(Select one course from below)		BIO 4700 Molecular Genetics	4
PSY 1000 General Psychology	3		
SOC 1000 or ANTH 1800	3	STME 5020 Ethics in Biotechnology	1
Economics or Geography	3	STME 5103 Scientific Writing and Presentation	3
Interdisciplinary	3		
Science and Mathematics: 8 S.H.		MAJOR / GE CAPSTONE COURSE: 3 S.H.	
STME 1603 Math & Computational Methods of Science II	4	STME 4610 Science & Technology Seminar WE	3
STME 1401 Chemical Systems I	4		
ADDITIONAL REQUIREMENTS²: 20 S. H.		MAJOR ELECTIVES: 9-12 S.H.	
		(Select with advisement courses in STME, BIO or CHEM at the 3000 level or higher)	
STME 2403 Math. & Computational Methods of Science III	4		3-4
STME 2603 Probabilistic Methods in Science	4		3-4
STME 1601 Chemical Systems II	4		3-4
STME 2401 Physical Systems	4		
PHYS 2096 Physics II	4	FREE ELECTIVE: 3 S.H.	
			3
		TOTAL CREDITS:	
¹ Required of all Freshmen and Transfers with fewer than 10 credits. *(G.E) General Education required course.		⁴ Credit granted only upon completion of two semesters of elementary or intermediate foreign language.	
² Foundations & Additional Requirements require 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.		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. WE: Writing Emphasis course.	

GENERAL EDUCATION INFO & REQUIREMENTS

Testing and Placement

Incoming freshmen and transfer students may be placed in specific GE Foundations, Developmental or ESL courses as a result of testing prior to registration. Students may be exempt from testing due to SAT scores or prior college work.

Prerequisites and Equivalencies for GE Foundations Courses

ENG 1030

Prereq: Placement testing
Equiv: ENG 1031/32; 1033/34; 1430;
ENG 1020; 1400

MATH 1000

Prereq: Placement testing
Equiv: MATH 1001/02; 1003/04; 1051

COMM 1402

Prereq: CS 0411 or 0412 if required
by placement testing
ENG 1031/32; 1033/34
May be taken concurrently
with ENG 1030
Equiv: COMM 1400

GE 2021-2024 Research & Technology is offered as college-based course

GE 2021 College of BPA

GE 2022 College of ED

GE 2023 College of AHSS

GE 2024 College of NAHS

Prereq: ENG 1030 or equivalent
MATH 1000 or equivalent

Equiv: GE 2020

Course Paired with Reading

Must be taken concurrently with CS 0412 if required by placement testing.

GE Distribution Courses

All courses under the General Education Disciplinary/Interdisciplinary Distribution requirements must be selected from the Approved General Education Distribution Course List, printed in Registration Bulletin. These courses are designated as GEHU, GESS, GESM, GEHPE or GECF.

GEHU Humanities

GESS Social Sciences

GESM Science and Mathematics

GEHPE Health and Physical Education

Required GE Distribution Courses

ENG 2403 is a required Humanities Distribution course with an emphasis on diversity.

HIST 1000 is a required Social Sciences Distribution course with an emphasis on diversity.

Foreign Language Credit

The three credits for a foreign language that may satisfy the GE Disciplinary/Interdisciplinary Distribution Requirement are awarded only upon successful completion of two semesters of study at the introductory or intermediate level.

Major/GE Capstone Course

A Capstone course is a major course that satisfies three credits of GE requirements. Each major guide sheet will count three credits for the Capstone as either GE credits or major credits, but not both.

UNIVERSITY REQUIREMENT

Writing-Emphasis Requirement

All students are required to complete one "Writing-Emphasis" course. The "W-E" course must be within the major portion of your program. Consult your major program advisor for specific information.

Course Prerequisites

ENG 2403: ENG 1030 (or equivalent) & completion of any freshmen placement requirements in reading.

CHEM 2283: CHEM 1084 or equivalent with minimum grade of C.

CHEM 2181: CHEM 1084 or instructor permission.

CHEM 2183: CHEM 2181

CHEM 2182: CHEM 2181, CHEM 2183 with minimum grade of C.

CHEM 2184: CHEM 2183 with minimum grade of C.

CHEM 3284: CHEM 2283, MATH 2411 (Calculus I), PHYS 3097 or instructor permission.

BIO 3403: BIO 2400, CHEM 2180 or CHEM 3181 or instructor permission.

BIO 3404: BIO 3403

BIO 3305: BIO 2400 or instructor permission

BIO 3404: BIO 3403

BIO 3704: BIO 2400, CHEM 1084

BIO 3705: BIO 3704

BIO 3820: 16 credits biology or instructor permission

BIO 4105: One semester of organic chemistry, BIO 2400 or instructor permission.

BIO 4700: BIO 3704, BIO 4105

PHYS 2096: PHYS 2095 (Physics I), MATH 2412 (Calculus II).

STME 1403: Qualifying testing placement or equivalent Math 1054 (Precalculus).

STME 1601: STME 1401

STME 1603: STME 1403

STME 2401: STME 1603

STME 2403: STME 1603

STME 2601: STME 1601

STME 2603: STME 1603

STME 2610: GE 2024

STME 3610: STME 2610, STME 2603, STME 2601

STME 4610: Senior standing in the five year science, technology & math education program.

Evaluator's
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