

KEAN UNIVERSITY
College of Natural, Applied and Health Sciences
(Major Code 72105) B.S. in Chemistry: Forensic Science Option - 120 Semester Hours (S.H.)
Effective Fall 2019
Minimum 2.5 Cumulative and Major GPA Requirement

GENERAL EDUCATION: 35 SH		ACADEMIC MAJOR COURSES: 65 SH	
Foundation Requirements¹	13 SH	Major Required Courses³	26 SH
GE 1000 Transition to Kean ² OR GE 3000 Transfer Transitions ²	1	CHEM 1084 Chemistry II	4
ENG 1030 ³ College Composition	3	CHEM 2283 Quantitative Analysis	4
MATH 1054 Precalculus	3	CHEM 2491 Inorganic Chemistry	3
COMM 1402 Speech Communication	3	CHEM 2581 Organic Chemistry Lecture I	3
GE 2024 Research & Technology	3	CHEM 2582 Organic Chemistry Lecture II	3
DISCIPLINARY & INTERDISCIPLINARY DISTRIBUTION REQUIREMENTS:		CHEM 2581L Organic Chemistry Lab I	1
Humanities (GEHU)	6 SH	CHEM 2582L Organic Chemistry Lab II	1
ENG 2403 World Literature	3	CHEM 3284 Instrumental Methods of Analysis	4
PHIL 2300 Introduction to Ethics	3	CHEM 3381 Physical Chemistry I	3
Social Sciences (GESS)	6 SH	Major Required Courses: Biology	8 SH
HIST 1062 Worlds of History	3	BIO 1300 General Biology I	4
Select <u>one</u> courses from the following		BIO 1400 General Biology II	4
Economics/Geography	3	Criminal Justice	9 SH
Political Science	3	CJ 2600 Criminal Justice in America	3
Psychology	3	CJ 3700 Proof and Verification	3
Sociology/Anthropology	3	CJ 4100 Trial Advocacy	3
Interdisciplinary	3	Major Required Courses: Forensic Science	18 SH
Science and Mathematics (GESM)	7 SH	FSC 1000 Introduction to Forensic Science	3
MATH 1016 Statistics	3	FSC 2000 Forensic Science Fundamentals	3
CHEM 1083 Chemistry I	4	FSC 3000 Crime Scene Investigation	4
Major/GE Capstone³	3 SH	FSC 4010 Criminalistics: Trace and Impression Evidence	4
CHEM 4908 Seminar in Chemistry	3	FSC 4030 Forensic Chemistry	4
ADDITIONAL REQUIRED COURSES	20 SH	Free Electives	4 SH
MATH 2415 Calculus I	4	CHEM 1996 Applied Research in Chemistry ⁵	1
MATH 2416 Calculus II	4	CHEM 3291, 2, 3 Internship ⁵	1-3
MATH 3415 Calculus III	4	BCHM 4115 Biochemistry	3
PHYS 2095 Physics I	4	BCHM 4115L Biochemistry Lab	1
PHYS 2197 Physics III	4		
Advisor's Signature:			

Minimum cumulative GPA of 2.5 at time of application for acceptance as declared major
 Minimum 2.5 cumulative and major GPA requirement. Graduate Schools likely require a 3.0 minimum for eligibility

¹See prerequisites & equivalencies

²University Requirement for Graduation for all undergraduate students that must be satisfied in one of two ways: Complete GE 1000 (all freshmen and transfers entering with 0-29 credits) OR complete GE 3000 (transfers entering with 30 credits or more)

³ENG 1030, Capstone & Major Courses require C or higher

⁴C or higher needed to progress to next course

⁵Student may use optional Internship or Applied Research courses to fulfill Free Elective.

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 1054 Precalc Prereq: 3 yrs secondary school math including 2 yrs algebra + 1 yr geometry or equivalent & qualifying score on placement exam or equivalent

COMM 1402 Prereq: CS 0411 or 0412 if required by testing; ENG1031/32;1033/34Maybe taken concurrently w/ENG1030;Equiv:COMM1400

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.

General Education Distribution Courses

All courses under GE Disciplinary/Interdisciplinary Distribution requirements must be selected from the Approved GE Distribution Course List. (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. Prereq: ENG 1030 or equivalent

HIST 1062 is a required Social Sciences Distribution course with an emphasis on diversity.

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.

Course Prerequisites (Pre/Corequisites may change, consult Keanwise; Some course may require approved petitions)

BIO 1300: Math 1000 (College Algebra) or the University's math placement exam score to qualify & Corequisite: MATH 1054 (precalculus) or instructor permission

BIO 1400: Prerequisite BIO 1300 and Corequisite CHEM 1083 General Chemistry I

BCHM 4115: BIO 1400, BIO 3315, and BIO 3315L

BCHM 4115L: BIO 1400, BIO 3315, and BIO 3315L

FSC 2000: FSC 1000 & CJ 2600

FSC 3000: CJ 3700 & FSC 2000

FSC 4010: CJ 3700 & FSC 2000

FSC 4030: CHEM 2581, CHEM 2583 & BIO 4105

CJ 3700: CJ 2600 or permission of instructor

CJ 4100: CJ 3685, 9 SH of CJ courses or permission of the instructor

CHEM 1083: Prerequisite MATH 1000 (College Algebra); Corequisite MATH 1054 (Precalc)

CHEM 1084: MATH 1054, & CHEM 1083 with grade of C or better

CHEM 2283: CHEM 1084 with grade of C or better

CHEM 2491: Math 2415, C or better in CHEM 1084 or permission of instructor

CHEM 2581: CHEM 1084 with grade of C or better

CHEM 2582: CHEM 2581 with grade of C or better

CHEM 2581L: Corequisite of CHEM 2581 with grade of C or better

CHEM 2582L: CHEM 2583 with grade of C or better & Corequisite of CHEM 2582

CHEM 3284: CHEM 2283, MATH 2415, PHYS 2097, or permission of the instructor

CHEM 4908: All GELAP requirements & permission of instructor

MATH 2415: MATH 1054 (Precalc)

MATH 2416: MATH 2415

PHYS 2095: Prerequisite of Math 2415; Corequisite of MATH 2416

PHYS 2197: Prerequisite of PHYS 2095 & MATH 2416