

KEAN UNIVERSITY – The Dorothy and George Hennings College of Science, Mathematics and Technology

(72107) B.A. IN CHEMISTRY (PRE-PROFESSIONAL OPTION) 120 S.H.

Minimum GPA Required for Declaration: 2.00

Minimum GPA Required for Major: 2.00

Overall Minimum GPA Required for Graduation: 2.0

EFFECTIVE DATE: Fall 2024

GENERAL EDUCATION 42 Semester Hours (S.H.)		ACADEMIC MAJOR***	
Foundation Requirements:¹		13 S.H.	Major Required Courses:
GE 1000 Transition to Kean ² –or– GE 3000 Transfer Transitions ²	1	CHEM 1083 Chemistry I	4
ENG 1030 Composition ³	3	CHEM 1084 Chemistry II	4
MATH 1000 College Algebra	3	CHEM 2283 Quantitative Analysis	4
COMM 1402 Speech Communication	3	CHEM 2491-Inorganic Chemistry	3
GE 2024 Research & Technology	3	CHEM 2581 Organic Chemistry I	3
		CHEM 2582 Organic Chemistry II	3
Disciplinary & Interdisciplinary Distribution Requirements:¹		29 S.H.	CHEM 2581L Organic Chemistry Lab and Recitation I ^{WE}
Humanities 9 S.H. (from different areas)			CHEM 2582L Organic Chemistry Lab and Recitation II
*ENG 2403 World Literature	3	CHEM 3284 Instrumental Method of Analysis ^{WE}	4
Take two “GE Approved” courses from two areas below:			BCHM 4115 Biochemistry
Fine Arts/Art History	3		
Philosophy or Religion	3	**GE and Major Capstone Course***:	
Foreign Languages (Must take I and II for credit)	3	CHEM 4908 Seminar in Chemistry	3
Music or Theatre	3		
Interdisciplinary	3	BIO, BCHM, CHEM, MATH, ENV credits. 8 S.H.	
Social Sciences 9 S.H. (from different areas)		must be 3000/4000 level	
*HIST 1062 Worlds of History	3		
Take two “GE Approved” courses from two areas below:			
Psychology	3	FREE ELECTIVES 29 S.H.	
Economics or ES 1010	3	at least 50% must be 3000/4000 level	
Political Science	3	Science courses may be used as Free Electives	
Sociology or Anthropology	3		
Interdisciplinary	3		
Science and Mathematics 11 S.H.		Special Notes:	
MATH 1054 Precalculus	3	¹ See pre-requisites and equivalencies (on page 2)	
PHYS 2091 General Physics I	4	² University 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 GE3000 (transfers entering with 30 credits or more)	
PHYS 2092 General Physics II	4		
ADDITIONAL REQUIRED COURSES 8 S.H.		³ ENG 1030 requires grade of C or higher	
MATH 2415 Calculus I	4	*GE Distribution course required of all students	
MATH 2416 Calculus II	4	**Course required by Major	
		***All Major courses require a grade of C or better	

APPROVED GENERAL EDUCATION (GE) DISTRIBUTION COURSES

Effective March 2022, students entering Kean as Freshmen or Transfers, must select all their remaining GE distribution courses from the following list. This applies to all students entering as of Fall 2002 and in all subsequent semesters. The following codes identify the distribution area in which a course may be used: GEHU Humanities; GESS Social Sciences; GESM Science and Mathematics.

GEHU HUMANITIES

AH 1700	Art-Prehistoric to Middle Ages
AH 1701	Art-Renaissance to Modern World
ASL 1102*	American Sign Language II
CHIN 1102*	Basic Chinese II
CHIN 2102*	Intermediate Chinese II
ENG 2403**	World Literature
FA 1000	Introduction to Art
FA 2950	Creative Concepts in Arts & Crafts
FREN 1102*	Basic French II
FREN 2102*	Intermediate French II
GE 1855	First Year Seminar
GERM 1102*	Basic German II
GERM 2102*	Intermediate German II
HEBR 1102*	Elementary Hebrew II
HEBR 2102*	Intermediate Hebrew II
ID 1300	Introduction to Women's Studies
ID 1451	College Reading Study Skills
ID 1500	Critical Reading and Community
ID 3230	Understanding Images
ITAL 1102*	Basic Italian II
ITAL 2102*	Intermediate Italian II
MUS 1000	Music Survey
MUS 1050	Music Fundamentals
MUS 1051	Music in the P- 5 Classroom
MUS 2201	Music History I
MUS 2202	Music History II
MUS 2220	Music and World Culture
MUS 2950	Intro. to Music Therapy
PHIL 1100	Introduction to Philosophy
PHIL 2300	Introduction to Ethics
PHIL 2505	Critical Thinking
PORT 1102*	Basic Portuguese II
PORT 2102*	Intermediate Portuguese II
REL 1700	Intro to Religions of the World
REL 2700	Eastern Religions
REL 2702	Western Religions
SPAN 1102*	Basic Spanish II
SPAN 2102*	Intermediate Spanish II
THE 1100	Acting I
THE 1000	Introduction to Theatre

***Note on GE credit for Foreign Languages:**

GE Humanities credit in the Foreign Language area is awarded only upon successful completion of the second semester of a two-semester sequence at the Elementary (Basic) or Intermediate level. A student who completes the specified two-semester sequence (for example, SPAN 1101 and SPAN 1102) may use the three credits from the first semester (SPAN 1101) to fulfill a lower-level elective requirement (depending on the major) and the three credits from the second semester (SPAN 1102) to fulfill a GE Humanities requirement in the Foreign Language area (depending on the major).

****GE Required Course**

GESS SOCIAL SCIENCES

ANTH 1800	Cultural Anthropology
ANTH 1900	Introduction to Archeology
ANTH 2805	Films of African World Experience
ECO 1000	Economics Issues
ECO 1020	Principles of Economics I
ECO 1021	Principles of Economics II
ES 1010	World Geography
GS 2500	Introduction to Global Studies
HIST 1062**	Worlds of History
ID 1350	Environmental Ethics
ID 2415	Group Communication
PA 1001	Civic Engagement and Public Service
PS 1010	Introduction to Politics
PS 2100	American Government and Politics
PS 2300	Intro to Comparative Politics
PS 2400	Intro to International Relations
PSY 1000	General Psychology
PSY 1005	Honors General Psychology
SOC 1000	Introduction to Sociology
SOC 1001	Introduction to Sociology Honors
SOC 2052	Methods of Social Research
SOC 2100	Sociology of the Family
SOC 2300	American Racial & Ethnic Groups
SOC 2500	Introduction to Global Studies

GESM MATH AND COMPUTER SCIENCE

CPS 1032	Microcomputer Applications
CPS 1231	Fundamentals of Computer Sci
MATH 1000	College Algebra
MATH 1010	Foundations of Mathematics
MATH 1016	Statistics
MATH 1030	Problem Solving
MATH 1044	Pre-calculus for Business
MATH 1054	Pre-calculus

GESM FOUR-CREDIT LABORATORY SCIENCE

BIO 1000	Principles of Biology
BIO 1300	General Biology
BIO 2402	Human Physiology and Anatomy
CHEM 1030	Essentials of Chemistry
CHEM 1010	Preparatory Chemistry
CHEM 1083	Chemistry I
CHEM 1084	Chemistry II
ENV 1100	Intro. to Environmental Science
ES 1100	Introduction to Astronomy
ES 1200	Introduction to Geology
ES 1300	Introduction to Meteorology
PHYS 2091	General Physics I
PHYS 2092	General Physics II
PHYS 2095	Physics I
PHYS 2096	Physics II

GESM THREE-CREDIT NON-LAB SCIENCE

BIO 1200	Biology and Society
CHEM 1200	Chemistry in Your World
ES 1000	Observing the Earth
FSC 1000	Intro. to Forensic Science
ID 1400	Computing in Modern Society
PHYS 1050	Energy, Physics, and the Environment
SUST 1000	Intro. to Sustainability Science

