# KEAN UNIVERSITY College of Natural, Applied and Health Sciences (Major Code 70304) B.S. in Biology: Health Professions Option: 120 Semester Hours (S.H.) (Pre-PT, PA or OT) [ver. 3.17.17; effective 09/17]

Name:		TRANSFER INSTITUTION(S)	
Student ID # GENERAL EDUCATION: 35 SH		Start term at Kean:	
		ACADEMIC MAJOR COURSES: 40-41	
Foundation Requirements <sup>1</sup>	13 SH	Major Required Courses <sup>3</sup>	37 SH
GE 1000 Transition to Kean <sup>2</sup> OR GE 3000	1	BIO 1300 <sup>5</sup> General Biology I	4
Transfer Transitions <sup>2</sup>			
ENG 1030 <sup>3</sup> College Composition	3	BIO 1400 <sup>5</sup> General Biology II	4
MATH 1054 Precalculus	3	BIO 3305 Microbiology	4
COMM 1402 Speech Communication	3	BIO 3403 Anatomy and Physiology I	4
GE 2024 Research & Technology	3	BIO 3404 Anatomy and Physiology II	4
DISCIPLINARY & INTERDISCIPLINARY DISTRIBUTION REQUIREMENTS:		BIO 3406 Neuroscience	4
		BIO 3450 Biological Aspects of Aging	3
Humanities (GEHU)	6 SH	BIO 3709 Principles of Genetics	4
ENG 2403 World Literature	3	BIO 4315 Immunology	4
One GE-Approved Humanities Course	3	BIO 3317 Infectious Pathogens	2
		Major Elective Courses (select from list below) <sup>3</sup>	3-4 SH
		BIO 4310 Virology	4
		BIO 4105 Essentials of Biochemistry (prePT or preOT only)	4
		ENV 3250 Medicinal Botany	3
		BIO 4397 Cooperative or BIO 496X Independent Research	1-3
Social Sciences (GESS)	6 SH	Required Courses- Special Options (choose one option)	
HIST 1062 Worlds of History	3	Physician Assistant Concentration Courses	17 SH
PSY 1000 General Psychology	3	BIO 3400 Zoology	4
		BIO 4105 Essentials of Biochemistry	4
Science and Mathematics (GESM)	7 SH	BIO 3000 Medical Terminology	3
MATH 1016 Statistics	3	HED 3600 Nutrition or BIO 3200 Bio Food Health/Disease	3
CHEM 1083 <sup>4</sup> General Chemistry 1	4	HED 3515 Wellness	3
		Physical Therapy Concentration Courses	16 SH
Major/GE Capstone <sup>3</sup>	3 SH	PED 3505 Kinesiology	3
BIO 4970 Seminar in Integrative Biology ADDITIONAL REQUIRED COURSES:	3	PED 3510 Physiology of Exercise	3
		HED 3600 Nutrition or BIO3200 BioFoodHealth/Disease	3
	22 SH	PHYS 2092 General Physics II	4
CHEM 1084 <sup>4</sup> General Chemistry II	4	PSY 3540 Abn Psych or PSY 3110 Lifespan-Dev. Psych	3
CHEM 2581 <sup>4</sup> Organic Chemistry Lecture I	3	Occupational Therapy Concentration Courses	15 SH
CHEM 2583 <sup>4</sup> Organic Chemistry Lab I	2	PSY 3200 Psychological Statistics	3
CHEM 2582 Organic Chemistry Lecture II	3	PSY 3540 Abnormal Psychology	3
CHEM 2584 Organic Chemistry Lab II	2	PSY 3110 Lifespan-Developmental Psychology	3
PHYS 2091 General Physics I	4	ANTH 1800 Cult Anthrplgy OR SOC 1000 Intro Sociology	3
MATH 2415 Calculus I	4	OT 2400 Introduction to Occupational Therapy	3
	1 .		
		Free Electives (50% at 3000-4000 level) <sup>6</sup>	5-8 SH

Minimum cumulative GPA of 2.5 at time of application for acceptance as declared major

Minimum cumulative GPA of 2.5 to remain in BS BIO preHealth major; Graduate Schools likely require a 3.0 minimum for eligibility;

Completion of the Health Professions option does not ensure admission to any graduate program and students are advised to keep informed of relevant admissions requirements.

<sup>1</sup>See prerequisites & equivalencies

<sup>2</sup>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 GE 3000 (transfers entering with 30 credits or more)

<sup>3</sup>ENG 1030, Capstone & Major Courses require C or higher

<sup>4</sup>C or higher needed to progress to next course

<sup>5</sup>If enrolled before 9/14, substitute BIO2200/2400

<sup>6</sup>By advisement (prePT, prePA take HED 3231)

### **GENERAL EDUCATION INFO & REQUIREMENTS**

<u>Testing and Placement:</u> 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

PSY 1000 & 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 BIO 3000: 16 credits of biology or instructor permission BIO 3200: BIO 1300 and GE 2024 or instructor permission BIO 3400: BIO 1400 BIO 3403: BIO 1400, CHEM 2180 (Principals of Organic Chem) or CHEM 2581 (Organic Chemistry I), or instructor permission. BIO 3404: BIO 3403 BIO 3305: BIO 1400 BIO 3317: CHEM 1084 and GE 2024 BIO 3406: BIO 2409 or BIO 3403 BIO 3450: BIO 1300 BIO 3709: BIO 2400 or 1400 BIO 4315: BIO 1400 and BIO 3305 BIO 4397: Junior status in the major and approval of department head BIO 4105: CHEM 2582 BIO 4970: 20 credits of biology plus senior biology major status (requires approved petition) CHEM 1083: Prerequisite MATH 1000 (College Algebra); Corequisite MATH 1054 (Precalc) CHEM 1084: MATH 1054, & CHEM 1083 with grade of C or better CHEM 2581: CHEM 1084 with grade of C or better; CHEM 2583: Corequisite of CHEM 2581 CHEM 2582: CHEM 2581 with grade of C or better ; CHEM 2584: Prereq of CHEM 2583 grade of C or better & corequisite of CHEM 2582 MATH 1016: MATH 0901 or placement testing MATH 2415: MATH 1054 (Precalc) PHYS 2091: MATH 1054 (Precalc) or equivalent; PHYS 2092: PHYS 2091 PED 3505: Anatomy/Physiology PED 3510: PED 2500 Intro Biomechanics or Anatomy/Physiology PED 3515: ID 1225 or instructor permission PSY: 3110: PSY 1000 PSY: 3200: PSY 1000 PSY: 3540: PSY 1000