#### KEAN UNIVERSITY

# College of Natural, Applied, and Health Sciences (70100) B.A. in Biology- General Option: 124 S.H.

EFFECTIVE DATE: Fall 2014 START TERM: TRANSFER INSTITUTIONS (X) Name: Student ID# In Progress Note: Minimum GPA of 2.5 Required For B.A. in Biology Degree ADDITIONAL REQUIRED COURSES: 25 SH **GENERAL EDUCATION: 47-48 Semester Hours** FOUNDATION REQUIREMENTS<sup>1</sup>: 13 SH CHEM 2581 Organic Chemistry Lect I<sup>3</sup> CHEM 2582 Organic Chemistry Lect II Transition to Kean<sup>2</sup> 3 GE 1000 1 College Composition<sup>3</sup> 3 CHEM 2583 Organic Chemistry Lab I<sup>3</sup> ENG 1030 2 Precalculus<sup>4</sup> 3 CHEM 2584 Organic Chemistry Lab II 2 MATH 1054 ENV 1000 Introduction to Environ Sci. **COMM 1402 Speech Communication** 3 3 GE 2024 Research & Technology 3 MATH 2415 Calculus I 4 DISCIPLINARY & INTERDISCIPLINARY DISTRIBUTION PHYS 2091 General Physics I 4 PHYS 2092 General Physics II 4 REQUIREMENTS **ACADEMIC MAJOR COURSES<sup>3</sup>: 32 SH** Humanities: 9 SH †ENG 2403 World Literature Required Courses in Biology: 24 3 Select two courses from different areas BIO 1300 General Biology I<sup>6</sup> BIO 1400 General Biology II<sup>7</sup> 4 Fine Arts/ Art History 3 Philosophy or Religion 3 BIO 2500 Principles of Botany 4 Foreign Languages (must take I and II for credit) 3 BIO 3400 Zoology Form & Function 4 3 4 Music or Theatre BIO 3614 Principles of Ecology Interdisciplinary 3 **BIO 3709 Principles of Genetics** 4 Social Sciences: 9 SH **Major Electives: 8 SH** †HIST 1062 Worlds of History Selected with departmental advisement at 3000 or 4000 level 3 or HIST1000 1) Select two different courses from the following 2) Economics / Geography 3 FREE ELECTIVES 19-20 SH (50% at 3000-4000 level) Political Science 3 1) 3 Psychology 2) Sociology / Anthropology 3 3) Interdisciplinary 3 4) 5) Science and Mathematics: 11 SH 6) MATH 1016 Statistics (BIO Section) 3 CHEM 1083 General Chemistry I<sup>3</sup> 4 CHEM 1084 General Chemistry II<sup>3</sup> 4 Health & Physical Education: 2-3 SH ID 1225 Issues in Contemp Health **OR** 3 ID 1010 Leisure & Rec. in Mult Society 3 OR TWO one-credit P.E.D. courses 1,1 Major/GE Capstone Course: 3 SH BIO 4970 Seminar in Integrative Biology<sup>3</sup>

<sup>†</sup> GE required course

<sup>&</sup>lt;sup>4</sup> With qualifying placement test scores, this course may be substituted with an elective

<sup>&</sup>lt;sup>1</sup> See prerequisites and equivalencies

<sup>&</sup>lt;sup>5</sup> Both I & II must be completed giving credit as a foreign language plus one free elective

<sup>&</sup>lt;sup>2</sup> Required of all freshmen / transfers with < than 10 credits

<sup>&</sup>lt;sup>6</sup> Students enrolled before 9/2014 may substitute BIO 2200

<sup>&</sup>lt;sup>3</sup> ENG1030, major courses, and capstone (BIO 4970) all require a grade of C or better.

<sup>&</sup>lt;sup>7</sup> Students enrolled before 9/2014 may substitute BIO 2400

## YOUR MAJOR'S DEPARTMENT IS LOCATED IN THE SCIENCE BUILDING, ROOM C-124 ON MAIN CAMPUS (TELEPHONE 908-737-3650) YOU MUST BRING THIS GUIDESHEET AND YOUR KEANWISE PROGRAM EVALUATION TO ALL ADVISING / REGISTRATION SESSIONS.

#### Grade Point Average (GPA) Requirement for the Major

As of January 1, 2001, the Department of Biological Sciences has formally adopted the following standard for all options of the Biology major:

- 1. Minimum cumulative GPA of 2.5 at the time of application for acceptance as a declared major.
- 2. Minimum cumulative GPA of 2.5 must be maintained in order to remain in the Biology major.

Evaluator's Signature	Date

#### **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 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

Prereg: 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 (formerly 1000 was required) 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.

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

BIO 1300: Corequisite MATH 1000 or equivalent placement

BIO 1400: Prerequisite BIO 1300 and Corequisite MATH 1054 (Precalculus)

**BIO 2500:** BIO 2400 (Genes, Org, Pop) or 1400 (Gen Bio II) **BIO 3400:** BIO 2400 or 1400, CHEM 1084 (Gen Chem I)

BIO 3403: BIO 2400 or 1400, CHEM 2180 (Principles of Organic Chem) or CHEM 2581 (Organic Chemistry I), or instructor permission.

BIO 3404: BIO 3403

BIO 3614: BIO 2200 or 1300, or instructor permission

BIO 3709: BIO 2400 or 1400

BIO 4835: MATH 1054 (Precalculus) & 16 credits of biology

BIO 4970: 20 credits of biology plus senior biology major status (requires approved petition); GPA 2.5 required

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: Prerequisite of CHEM 2583 grade of C or better & corequisite of CHEM 2582

ENV 1000: Consult Keanwise Course Description for Prerequisites

MATH 2415: MATH 1054 (Precalc)

PHYS 2091: MATH 1054 (Precalc) or equivalent

PHYS 2092: PHYS 2091