

**KEAN UNIVERSITY**  
**COLLEGE OF NATURAL APPLIED AND HEALTH SCIENCES**  
 (78299) **B.A. IN MATHEMATICAL SCIENCES (Teacher Certification)** 132 S.H.  
 (EFFECTIVE: 9/02)

NAME \_\_\_\_\_  
 STUDENT I.D.# \_\_\_\_\_  
 START TERM \_\_\_\_\_

TRANSFER INSTITUTIONS (X)  
<sup>1</sup> Required of all Freshmen and Transfers with fewer than 10 credits.  
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 \_\_\_\_\_  
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ID 1001 Freshman Seminar<sup>1</sup> \_\_\_\_\_ 1 \_\_\_\_\_

**In Progress** ( ) \_\_\_\_\_  
**Kean University**( ) \_\_\_\_\_

**GENERAL EDUCATION AND ADDITIONAL LIBERAL ARTS REQUIREMENTS: 60-61 S.H.**

**GENERAL EDUCATION REQUIREMENT: 43-44 S.H.**  
**FOUNDATIONS REQUIREMENTS<sup>2</sup>: 12 S.H.**

ENG 1030 College Composition<sup>3</sup> \_\_\_\_\_ 3 \_\_\_\_\_  
 MATH 1000 Algebra for Coll. Students<sup>4</sup> 3 \_\_\_\_\_  
 COMM 1402 Speech Comm. As Crit.Cit.<sup>3</sup> \_\_\_\_\_ 3 \_\_\_\_\_  
 GE 2024 Research & Technology \_\_\_\_\_ 3 \_\_\_\_\_

**MAJOR REQUIREMENTS<sup>6</sup> 39 S.H.**

**REQUIRED COURSES 27 S.H.**  
 Math 2110 Discrete Structures \_\_\_\_\_ 3  
 Math 2411 Calculus I \_\_\_\_\_ 3  
 Math 2412 Calculus II \_\_\_\_\_ 3  
 Math 2995 Matrix & Linear Algebra \_\_\_\_\_ 3  
 Math 3342 Eucl. & Non-Eucl. Geom. \_\_\_\_\_ 3  
 Math 3451 Calculus III \_\_\_\_\_ 3  
 Math 3452 Calculus IV \_\_\_\_\_ 3  
 Math 3455 Differential Equations \_\_\_\_\_ 3  
 Math 3544 Probability & Math. Stat. \_\_\_\_\_ 3

**DISCIPLINARY/INTERDISCIPLINARY**

**DISTRIBUTION REQUIREMENTS:**

**HUMANITIES 9 S.H.**

\*ENG 2403 World Literature \_\_\_\_\_ 3 \_\_\_\_\_  
 Select two courses from different areas  
 Fine Arts or Art History \_\_\_\_\_ 3 \_\_\_\_\_  
 Philosophy or Religion \_\_\_\_\_ 3 \_\_\_\_\_  
 Foreign Languages<sup>5</sup> \_\_\_\_\_ 3 \_\_\_\_\_  
 Music or Theatre \_\_\_\_\_ 3 \_\_\_\_\_  
 Interdisciplinary \_\_\_\_\_ 3 \_\_\_\_\_

**MAJOR ELECTIVES 9 S.H.**

(With advisement from 3000-4000 level)  
 Math \_\_\_\_\_ 3  
 Math \_\_\_\_\_ 3  
 Math \_\_\_\_\_ 3

**SOCIAL SCIENCES 9 S.H.**

\*HIST 1000 Hist of Civil Soc. in Amer. 3 \_\_\_\_\_  
 PSY 1000 Gen Psychology \_\_\_\_\_ 3 \_\_\_\_\_  
 SOC 1000 Intro to Soc OR ANTHRO 1800 \_\_\_\_\_ 3 \_\_\_\_\_

**MAJOR/GE CAPSTONE COURSE<sup>6</sup>**

Math 4890 Senior Seminar in Math \_\_\_\_\_ 3 \_\_\_\_\_

**SCIENCE & MATHEMATICS 10-11 S.H.**

\*MATH 1054 Precalculus<sup>3&4</sup> \_\_\_\_\_ 3 \_\_\_\_\_  
 Physics 2095 Physics I<sup>3</sup> or  
 Physics 2091 General Physics I<sup>3</sup> \_\_\_\_\_ 4 \_\_\_\_\_  
 (Select one course from the following)  
 BIO, CHEM, AST, ES, GEOL, MET, PHYS, or IDS \_\_\_\_\_ 3, 4 \_\_\_\_\_

**PROFESSIONAL EDUCATION 30 S.H.**

Grades of (B-) or better in professional education courses (and "Satisfactory" grades in IEL 3801 & IEL 4801) required for students accepted to Kean University as of January 1996.

**Sophomore Level**

IEL 2801 Intro to Fld Exp Subj.Area K-12<sup>3</sup> \_\_\_\_\_ 3 \_\_\_\_\_

**Junior Level**

EDUC 3000 Curr. Inst. Eval.& Learner \_\_\_\_\_ 3  
 EDUC 3401 Lang Arts/Reading K-12 \_\_\_\_\_ 3  
 IEL 3122 Computer in Ed. \_\_\_\_\_ 3  
 IEL 3220 Mathematics Ed. K-12 WE \_\_\_\_\_ 3  
 IEL 3801 Field Exp. Subj Area K-12 \_\_\_\_\_ 2

**HEALTH/PHYSICAL EDUCATION 3 S.H.**

ID 1225 Issues Contemporary Health \_\_\_\_\_ 3 \_\_\_\_\_

**Senior Level**

IEL 4801 Prof. Internship/Subj.Area K-12 \_\_\_\_\_ 10 \_\_\_\_\_

**ADDITIONAL REQUIREMENTS<sup>3</sup> 17 S.H.**

CPS 1231 Fund of Computer Science \_\_\_\_\_ 4 \_\_\_\_\_  
 CPS 2231 Comp Org and Prog \_\_\_\_\_ 4 \_\_\_\_\_  
 PSY 2100 Adolescent Psych \_\_\_\_\_ 3 \_\_\_\_\_  
 Two additional DIS/ID Courses (Physics, Computer Science or Economics recommended)  
 \_\_\_\_\_ 3 \_\_\_\_\_  
 \_\_\_\_\_ 3 \_\_\_\_\_

**Professional/GE Capstone**

EDUC 4000 Teacher and Classroom \_\_\_\_\_ 3 \_\_\_\_\_

**FREE ELECTIVES: 1-2 S.H.**

(50% of free electives must be taken at the 3000-4000 level)  
 \_\_\_\_\_  
 \_\_\_\_\_

(OVER)

<sup>2</sup> See prerequisites and equivalencies on page 3.

<sup>3</sup> Eng 1030 and IEL 2801 require a grade of B- or better. Comm 1402, Math and Laboratory Science, requirements require a grade of C or better. "Additional Requirements" require a grade of C or better.

<sup>4</sup> Students whose qualifying score on the placement test makes them eligible to take either Math 1054 or Math 2411 may take that course instead. In that case, Math 1054 or Math 2411 will count as the General Education requirement and the student may take another 3 or 6 credits of liberal arts courses as free electives to total 132 S.H.

<sup>5</sup> Credit granted only upon completion of both semesters of elementary or intermediate foreign language. Three credits may be applied to Humanities and three credits may be applied to Free Electives.

<sup>6</sup> A minimum grade of C in no more than two major courses. A grade of B- or higher in remaining major courses.

\*Required Distribution Course

(78299) MATHEMATICAL SCIENCES (Teacher Certification Option)

Comments:

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NEW JERSEY REQUIRES A PASSING SCORE ON THE MATHEMATICS CONTENT KNOWLEDGE AREA OF THE PRAXIS SERIES EXAM BEFORE CERTIFICATION. THE TEST SHOULD BE TAKEN IN THE SENIOR YEAR AND NOT MORE THAN (9) MONTHS PRIOR TO GRADUATION. REFER TO THE "N.J. PRAXIS SERIES: PROFESSIONAL ASSESSMENTS FOR BEGINNING TEACHERS" REGISTRATION BULLETIN AND YOUR MAJOR DEPARTMENT FOR MORE INFORMATION.

Criteria for acceptance into Teacher Education Programs:

- A. Minimum GPA of 2.75 (combined from all institutions of higher education attended).
- B. Completion of the following courses/minimum grades:
  - ENG 1030 College Composition (minimum grade of B-)
  - COMM 1402 Speech Comm as Critical Citizenship (minimum grade of C)
  - IEL 2801 Intro to Field Experience Subject Area K-12 (minimum grade B-)
  - Laboratory Science course (minimum grade of C)
  - Math requirement (minimum grade of C)
- C. Completion of the Speech/Language Screening test available from the Child Study Institute.
- D. All applicants must file a formal application for admission with the office of the major department and have an admission interview with the program coordinator. Contact Professor Jerry Weiner, Coordinator of K-12 Secondary Education Program, Willis 109, (908) 737-4270.

Evaluator's Signature _____	Date _____
Advisor's Signature _____	Date _____
Advisor's Signature _____	Date _____
Advisor's Signature _____	Date _____
Advisor's Signature _____	Date _____
Advisor's Signature _____	Date _____
Advisor's Signature _____	Date _____
Advisor's Signature _____	Date _____

Your major department is located in the Science Building (C), Room 233, phone (908)737-3700.

**YOU MUST BRING THIS EVALUATION AND YOUR KEAN UNIVERSITY TRANSCRIPT TO ALL ADVISING/REGISTRATION SESSIONS.**

**ADDITIONAL MAJOR INFORMATION AND REQUIREMENTS**

GECP.

GEHU Humanities  
GESS Social Sciences  
GESM Science and Mathematics  
GEHPE Health and Physical Education  
GECP Approved GE Concentration Pairs:  
Special Disciplinary Pairs and Pairs  
Across Disciplines

**GENERAL EDUCATION INFORMATION AND 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 and 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 taken 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

**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.

MATH 1010, 1016, 1054, CPS 1031, 1032 or 1231 may be used to satisfy the Science and Mathematics Distribution requirement.

**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.

**GE Concentration Sequences**

A concentration is a two-course sequence in the Liberal Arts and Sciences, outside the major, that builds upon an introductory GE Distribution course. Three different options for satisfying the concentration exist:

(1)two courses in the same discipline at the two thousand level or above; (2)two courses from different disciplines at the two thousand level or above that cover a similar topic or theme (students taking this second option must obtain approval from the GE office prior to registration); (3)a preapproved pair of courses at the 1000 level or above that is published in the University Bulletin under GECP Distribution courses.

**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.