# Course Distribution

**Course**

<table>
<thead>
<tr>
<th>Course</th>
<th>GE Specialization</th>
<th>SUST</th>
<th>MA TH</th>
<th>CHEM</th>
<th>Take</th>
<th>SUST</th>
<th>BIO</th>
<th>BIOL</th>
<th>CHEM</th>
<th>ENG 1030 Composition</th>
<th>MATH 1054 Precalculus</th>
<th>COMM 1402 Speech Comm</th>
<th>GE 2024 Research &amp; Technology</th>
<th>Interdisciplinary Distribution Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE 3000 Transfer Transitions*</td>
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<tr>
<td>MATH 1054 Precalculus &amp;**</td>
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<td>COMM 1402 Speech Communication</td>
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## Humanities

- **6 S.H. (from different areas)**
  - 3 S.H. Humanities Gen Ed
  - 3 S.H. ENGL 151 English I
  - 3 S.H. MATH 191 Precalculus I
  - 3 S.H. MATH 165 or Any Unused Credits
  - 3 S.H. ENGL 152 English II
  - 3 S.H. ENVI 134 Carbon Footprint + 1 cr

## Disciplinary & Interdisciplinary

- **19 S.H.**
  - 1 S.H. ENVI 1101 Intro Earthy Geo Systems
  - 1 S.H. ENVI 152 Environ Science
  - 1 S.H. ENVI 3011 Data Analysis for Environment and Health

## Take one "GE Approved" course from one area below:

- Fine Arts/History: Humanities Gen Ed
- Foreign Language (Must take I & II): Humanities Gen Ed
- Interdisciplinary: Humanities Gen Ed
- Music or Theatre: Humanities Gen Ed
- Philosophy or Religion: Humanities Gen Ed

## Social Sciences

- **6 S.H. (from different areas)**
  - 3 S.H. ES 3210 GIS for Env. and Health
  - 3 S.H. ENVI 121 Renew Energy +1 cr

## Take one "GE Approved" course from one area below:

- Environmental Studies Elective
- Environmental Science Elective
- Environmental Studies Elective
- Environmental Studies Elective
- Environmental Studies Elective

## Political Science

- **3 S.H.**
  - 3 S.H. SUST 4300 Independent Practicum in Sustainability Sciences

## Science and Mathematics

- **7 S.H.**
  - 7 S.H. MATH 1016 Statistics**
  - 7 S.H. CHEM 181 General Chemistry I
  - 7 S.H. CHEM 1083 Chemistry I***
  - 7 S.H. MATH 2415 Calculus I
  - 7 S.H. PHYS 2091 General Physics I
  - 7 S.H. CHEM 156 Intro to Statistics
  - 7 S.H. BIOL 161 General Biology I
  - 7 S.H. BIOL 162 General Biology II
  - 7 S.H. Technology Gen Ed or any**
  - 7 S.H. ENV 241 Env Sustainability
  - 7 S.H. ENV 232 Environmental Policy
  - 7 S.H. CHEM 182 General Chemistry II
  - 7 S.H. CHEM 183 Chemistry II
  - 7 S.H. CHEM 184 Chemistry II
  - 7 S.H. CHEM 185 Chemistry II
  - 7 S.H. CHEM 186 Chemistry II
  - 7 S.H. CHEM 187 Chemistry II

## Additional Requirements

- **26 S.H.**
  - GE 3000 Transfer Transitions
  - ENG 1030 Composition
  - MATH 1054 Precalculus
  - COMM 1402 Speech Communication
  - GE 2024 Research & Technology
  - ENGL 151 English I
  - MATH 191 Precalculus I
  - MATH 165 or Any Unused Credits
  - ENGL 152 English II
  - ENVI 1101 Intro Earthy Geo Systems
  - ENVI 152 Environ Science
  - ENVI 3011 Data Analysis for Environment and Health
  - ENVI 134 Carbon Footprint + 1 cr
  - ENVI 1101 Intro Earthy Geo Systems
  - ENVI 152 Environ Science
  - ENVI 3011 Data Analysis for Environment and Health
  - ENVI 134 Carbon Footprint + 1 cr
  - ES 2101 Geo-Hydro Systems
  - ES 2400 Intro to Oceanography
  - ES 3210 GIS for Env. and Health
  - ENVI 121 Renew Energy +1 cr
  - ENVI 220: Life Cycle Analysis
  - BUSN 273 Corporate Social Responsibility
  - ENVI 241 Env Sustainability
  - ENVI 232 Environmental Policy
  - CHEM 182 General Chemistry II
  - CHEM 183 Chemistry II
  - CHEM 184 Chemistry II
  - CHEM 185 Chemistry II
  - CHEM 186 Chemistry II
  - CHEM 187 Chemistry II

## Special Notes:

- GE Distribution course required of all students
- Course required by Major
- All Major courses require a grade of C or better
- Must earn a grade of C or better to advance to CHEM 1084

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Revised 4/20/2023 By: Jessica Adams and Breanna Brown
### B.S. IN ENVIRONMENTAL SCIENCE APPROVED MAJOR-RELATED ELECTIVES*

*Subject to change as new courses are approved and old courses are eliminated. Independent Research, Independent Study, and/or Special Topics courses not listed, but will be approved on an individual basis if appropriate. Any combination of 11 semester hours may be selected to fulfill graduation requirements; however, students are strongly encouraged to select courses only after consultation with and approval of their advisor. Failure to do so may result in a less than optimal program experience.*

<table>
<thead>
<tr>
<th>1000 level courses</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>ECO 1020: Principles of Economics I</td>
<td>3</td>
<td>PS 1010: Introduction to Politics: Elements of Politics</td>
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<tr>
<td>ES 1200: Introduction to Geology</td>
<td>4</td>
<td>PSY 1000: General Psychology</td>
</tr>
<tr>
<td>ID 1350: Environmental Ethics</td>
<td>3</td>
<td>REC 1110: Introduction to the Recreation</td>
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<thead>
<tr>
<th>2000 level courses3</th>
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<tbody>
<tr>
<td>BIO 2500: Principles of Botany</td>
<td>3</td>
<td>CHEM 2581 and CHEM 2581L: Organic Chemistry Lecture and Laboratory I**</td>
</tr>
<tr>
<td>CHEM 2180: Principles of Organic Chemistry 1</td>
<td>4</td>
<td>CHEM 2582L and 2582L: Organic Chemistry Lecture and Laboratory II***</td>
</tr>
<tr>
<td>CHEM 2283: Quantitative Analysis**</td>
<td>4</td>
<td>ENV 2020: Evolutionary Biology</td>
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<tr>
<td>CHEM 2491: Inorganic Chemistry**</td>
<td>3</td>
<td>ENV 2500: Biominericy</td>
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<td>SUST 2008: Introduction to Composting</td>
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<thead>
<tr>
<th>3000 level courses3</th>
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<tbody>
<tr>
<td>BIO 3000: Marine Biology</td>
<td>4</td>
<td>ES 3364: Invertebrate Paleontology</td>
</tr>
<tr>
<td>BIO 3315: Microbiology*</td>
<td>3</td>
<td>ES 3265: Geomorphology</td>
</tr>
<tr>
<td>BIO 3315L: Microbiology Lab*</td>
<td>1</td>
<td>ES 3360: Air Pollution</td>
</tr>
<tr>
<td>BIO 3400: Zoology: Form and Function</td>
<td>4</td>
<td>HIST 3852: History of Science</td>
</tr>
<tr>
<td>BIO 3553: Field Botany</td>
<td>3</td>
<td>PHIL 3800: Environmental Philosophy</td>
</tr>
<tr>
<td>ENV 3180: Environmental Organic Chemistry</td>
<td>4</td>
<td>PSY 3420: Environmental Psychology</td>
</tr>
<tr>
<td>ENV 3201: Biodiversity</td>
<td>4</td>
<td>REC 3810: Recreation and the Environment</td>
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<tr>
<td>ENV 3230: Urban Ecology</td>
<td>4</td>
<td>SOC 3150: Urban Sociology</td>
</tr>
<tr>
<td>ENV 3250: Medicinal Botany</td>
<td>3</td>
<td>SOC 3420: Environment and society</td>
</tr>
<tr>
<td>ENV 3380: Environmental Instrumentation</td>
<td>4</td>
<td>SUST 3100: Renewable Energy</td>
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<tr>
<td>ENV 3400: Environmental Oceanography</td>
<td>4</td>
<td>SUST 3200: Environmental Health and Safety for Sustainability</td>
</tr>
<tr>
<td>ENV 3600: Coral Reefs and Coastal Systems</td>
<td>4</td>
<td>SUST 3300: LEED Lab and AP Credential Preparation</td>
</tr>
<tr>
<td>ENV 3720: Entomology</td>
<td>4</td>
<td>SUST 3400: Intro to Environmental Engineering</td>
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<tr>
<td>ES 3000: Global Climate Change and Society</td>
<td>4</td>
<td>SUST 3600: Global Sustainability Development</td>
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<tr>
<th>4000 level courses3</th>
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<tbody>
<tr>
<td>BIO 4415: Ichthyology</td>
<td>4</td>
<td>ENV 4601: Marine Conservation</td>
</tr>
<tr>
<td>BCHM 4415: Biochemistry***</td>
<td>3</td>
<td>ENV 4605: Field Methods in Marine Research</td>
</tr>
<tr>
<td>BCHM 4415L: Biochemistry Lab****</td>
<td>1</td>
<td>ENV 4800: Environmental Toxicology and Human Health</td>
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<tr>
<td>ENV 4103L: Environmental Hazards</td>
<td>4</td>
<td>ES 4200: Remote Sensing</td>
</tr>
<tr>
<td>ENV 4710: Physiological Ecology</td>
<td>4</td>
<td>GBUS 4320: Global Business and Technology</td>
</tr>
<tr>
<td>ENV 4210: Conservation Biology</td>
<td>4</td>
<td>SUST 4000: Technology for Sustainability</td>
</tr>
<tr>
<td>ENV 4435: Behavioral Ecology</td>
<td>3</td>
<td>SUST 1110 Life Cycle Assessment</td>
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<tr>
<td>ENV 4600: Plant-Animal Interactions</td>
<td>4</td>
<td>SUST 4300: LEED and AP Prep</td>
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<tr>
<td></td>
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<td>SUST 4500: Air and Solid Pollution Control</td>
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1. Students may not receive credit for CHEM 2180 and CHEM 2581, 2581L, and 2582L
2. Courses need to be taken together for both lab and lecture sections
3. Require CHEM1084 as a prerequisite course
4. Require CHEM2581 as a prerequisite course
5. Require CHEM2582 as a prerequisite course
GENERAL EDUCATION AND UNIVERSITY REQUIREMENTS

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 and/or multiple measures placement prior to registration. Students may be exempt from testing due to SAT/ACT scores or prior college work.

Prerequisites and Equivalencies for GE Foundations
Courses
GE 1000/GE 3000 is a University Graduation Requirement
GE 1000
Required of all freshmen & transfers entering with 0-29 credits
Prerequisite: None Equivalent:
ID 1001

GE 3000
Required of transfers entering with 30 credits or more
Prerequisite: 30 credits and ENG 1030

ENG 1030
Prerequisite: Placement testing or exemption from placement testing
ENG 1025 if required by placement testing
Equivalent: ENG 1031/1032, ENG 1033/1034, ENG 1430 (ESL version), ENG 1620 (Honors version), ENG 1020, ENG 1400

MATH 1000 or MATH 1044*
Prerequisite: MATH 0901 if required by placement testing
*MATH 1044 is available as a Foundation option for CBPM students only
Equivalent: MATH 1000: MATH 1001/1002, MATH 1003/1004, MATH 1051

MATH 1010 or 1016 or 1030
Prerequisite: MATH 0901 if required by placement testing
Co-requisite: Math 0902 (only required, with advisement, based on placement test score and intended major)

MATH 1054
Prerequisite MATH 0901 if required by placement testing and MATH 1000

COMM 1402
Prerequisite CS 0412 if required by placement testing
ENG 1025 if required by placement testing
May be taken concurrently with ENG 1030
Equivalent COMM 1400

GE 2021-2026 Research and Technology is offered as college-based course
GE 2021 College of BPM
GE 2022 College of EDU
GE 2023 All College of CLA
GE 2024 College of NAHS & NJCSTM & NWGC (Speech Language and Hearing Science majors)
GE 2025 SFPA & Michael Graves College
GE 2026 Undecided Majors and other special populations
Prerequisite CS 0412 if required by placement testing; ENG 1030 or equivalent course
Equivalent: GE 2020

GE Distribution Courses
Approved 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.
These courses are designated as GEHU, GESS, and GESM.
GEHU Humanities
GESS Social Sciences
GESM Science and Mathematics

Required GE Distribution Courses
ENG 2403 is a required Humanities Distribution course
with an emphasis on diversity
Prerequisite: CS 0412 if required by placement testing;
ENG 1030 or equivalent
Equivalent: ENG12203

HIST 1062 is a required Social Sciences Distribution course. Prerequisite: None

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 the second of two semesters of study at the introductory or intermediate level.
Credit for the first semester may be used as elective credit.

UNIVERSITY REQUIREMENTS

GE 1000/3000 Requirement
All undergraduate students must satisfy this University requirement for graduation by successfully completing one of the following courses at Kean University: GE 1000 Transition to Kean (all freshmen and transfers entering with 0-29 credits) or GE 3000 Transfer Transitions (transfers entering with 30 credits or more).

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.

Note: Equivalent courses may be prior General Education or prerequisite coursework taken by students that is now discontinued.