KEAN UNIVERSITY - COLLEGE OF NATURAL, APPLIED AND HEALTH SICENCES
(72104) B.S. IN CHEMISTRY (Chemical Instrumentation Option, ACS Certified) : 124 S.H.

EFFECTIVE DATE: Fall 2014
START TERM:

| NAME |  | TRANSFER INSTITUTIONS (X) Credits: |  |
| :---: | :---: | :---: | :---: |
| STUDENT ID\# |  | In Progress |  |
| GENERAL EDUCATION¹: 32 Semester Hours (S.H.) |  | ACADEMIC Major and Capstone Requirements ${ }^{3}$ 60-61 S.H. |  |
| Foundation Requirements 13 S.H. |  | CHEM 1083 Chemistry I | 4 |
| GE 1000 Transition to Kean² | 1 | CHEM 1084 Chemistry II | 4 |
| ENG 1030 College Composition ${ }^{3}$ | 3 | CHEM 2283 Quantitative Analysis | 4 |
| MATH 1000 Algebra for College Students ${ }^{4}$ | 3 | CHEM 2491 Inorganic Chemistry | 3 |
| COMM 1402 Speech Communication | 3 | CHEM 2493 Descriptive Inorganic Chemistry Lab | 2 |
| GE 2024 Research \& Technology | 3 | CHEM 2581 Organic Chemistry I | 3 |
|  |  | CHEM 2582 Organic Chemistry II | 3 |
| Disciplinary \& Interdisciplinary Distribution Requirements |  | CHEM 2583 Organic Chemistry Lab and Recitation I WE | 2 |
| Humanities: 6 S.H. (from different areas) |  | CHEM 2584 Organic Chemistry Lab and Recitation II | 2 |
| *ENG 2403 World Literature | 3 | CHEM 3284 Instrumental Method of Analysis WE | 4 |
| Select one course from below: |  | CHEM 3381 Physical Chemistry I | 3 |
| Fine Arts/Art History | 3 | CHEM 3382 Physical Chemistry II | 3 |
| Philosophy or Religion | 3 | CHEM 3383 Physical Chemistry Lab and Recitation I | 2 |
| Foreign Languages ${ }^{5}$ (Must take I and II for credit) | 3 | CHEM 3581 Biochemistry | 3 |
| Music or Theatre | 3 | CHEM 3583 Biochemical Techniques | 3 |
| Interdisciplinary | 3 | CHEM 3902 Independent Chemistry Research (2 semesters) | 2, 2 |
|  |  | Or CHEM 4284 Exp. Analytical Problem Solving | 3 |
| Social Sciences: 6 S.H. (from different areas) |  | CHEM 4150 Spectroscopic ID of Organic Compounds | 3 |
| *HIST 1000 Civil Society in America | 3 | CHEM 4285 Chemical Separations | 3 |
| or HIST 1062 Worlds of History |  | CHEM 4481 Advanced Inorganic Chemistry | 3 |
| Select one course from below: |  |  |  |
| Psychology | 3 | G.E. and Major Capstone ${ }^{\text {3 }}$ |  |
| Economics or Geography | 3 | CHEM 4908 Seminar in Chemistry | 3 |
| Political Science | 3 |  |  |
| Sociology or Anthropology | 3 | FREE ELECTIVES4: 3-4 S.H. at least $50 \%$ must be $3000 / 4000$ level |  |
| Interdisciplinary | 3 |  |  |
|  |  |  |  |
| Science and Mathematics: 7 S.H. |  |  |  |
| MATH 1054 Precalculus ${ }^{4}$ | 3 |  |  |
| PHYS 2095 Physics I | 4 |  |  |
|  |  |  |  |
| Additional Required Courses: 28 S.H |  |  |  |
| BIO 1300 General Biology I | 4 |  |  |
| BIO 1400 General Biology II | 4 |  |  |
| MATH 2415 Calculus I | 4 |  |  |
| MATH 2416 Calculus II | 4 |  |  |
| MATH 3415 Calculus III | 4 |  |  |
| PHYS 2096 Physics II | 4 |  |  |
| PHYS 2097 Physics III | 4 |  |  |
| 1. See prerequisites and equivalencies on page 3 . <br> 2. Required of all Freshmen and Transfers with fewer than 10 credits. <br> 3. Eng 1030 College Comp, all Major courses, and the Capstone, require a grade of C or better. <br> 4. Students whose qualifying score on the placement test makes them eligible to take Math 1054 or Math 2415 may take that course instead. In that case, Math 1054 or Math 2415 will count as the General Education requirement and the student may take another 3 or 6 credits in Free Electives to total 124 S.H. <br> 5. Credit granted upon completion of two semesters of elementary or intermediate foreign language. Three credits can be applied to Humanities, and 3 credits can be applied to Free Electives. |  |  |  |
|  |  | Other Transfer: |  |
|  |  | Special Notes: |  |
|  |  | ${ }^{*}$ G.E. required course |  |
|  |  |  |  |
|  |  | TOTAL CREDITS: |  |
|  |  | Advisor: |  |
|  |  | Advisor Signature: |  |

Rev. 04/14

