## California State Polytechnic University, Pomona

Degree Curriculum Sheet

Plan (Major) CHEMISTRY Subplan/Option Chemistry

| Required Core Courses |  |  |
| :--- | ---: | :---: |
| Course | CHM 121/121L | $3 / 1$ |
| General Chemistry | CHM 122/122L | $3 / 1$ |
| General Chemistry | CHM 123/123L | $3 / 1$ |
| General Chemistry | CHM 221/221L | $2 / 2$ |
| Quantitative Analysis | CHM 314 | 3 |
| Organic Chemistry | CHM 315 | 3 |
| Organic Chemistry | CHM 316 | 3 |
| Organic Chemistry | CHM 317L | 1 |
| Organic Chemistry Lab | CHM 318L | 1 |
| Organic Chemistry Lab | CHM 319L | 1 |
| Organic Chemistry Lab | CHM 342/342L | $2 / 2$ |
| Spectroanalytical Methods | CHM 343/343L | $2 / 2$ |
| Separation Methods | CHM 354/344L | $2 / 2$ |
| Electroanalytical Methods | CHM 422/422L | $1 / 2$ |
| Physical Chemistry | CHM 424/424L | $12 / 21$ |
| Organic Synthesis | CHM 491 | 3 |
| or Organic Analysis | CHM 492 | 3 |
| Senior Research Project | CHM 493 | 2 |
| Senior Research Project |  |  |
| Undergraduate Seminar |  |  |
|  |  |  |
|  |  | Total Units |


| Required Subplan/Option Core Courses |  |  |
| :--- | ---: | :---: |
| Course |  | Units |
| Physical Chemistry | CHM 311 | 3 |
| Physical Chemistry | CHM 312 | 3 |
| Physical Chemistry | CHM 313 | 3 |
| Elements of Biochemistry | CHM 321/321L | $3 / 1$ |
| or (Biochemistry | CHM 327/327L | $(3 / 1)$ |
| and Biochemistry) | CHM 328/328L | $(3 / 1)$ |
| Physical Chemistry Lab | CHM 353L | 2 |
| Inorganic Chemistry | CHM 401 | 3 |
| Inorganic Chemistry | CHM 402 | 3 |
| Two elective courses, approved 300, 400-level or higher, excluding | $6-8$ |  |
| CHM 400, 491, 492, 493 \& 499. |  |  |
|  |  |  |
|  | Total Units | $\mathbf{2 7 - 2 9}$ |

Catalog Year 2013-2014
Minimum Units Required
2013-2014
Name

| Required Support Courses |  |  |
| :--- | ---: | :---: |
| Course | BIO 115/115A/115L | $3 / 1 / 1$ |
| Basic Biology (B2, B3) | CS 128 | 4 |
| Introduction to C++ | MAT 114 | 4 |
| Analytic Geom \& Calculus (B4) | MAT 115 | 4 |
| Analytic Geom \& Calculus | MAT 116 | 4 |
| Analytic Geom \& Calculus | MAT 216 | 4 |
| Differential Equations | PHY 131/131L | $3 / 1$ |
| General Physics (B1, B3) | PHY 132/132L | $3 / 1$ |
| General Physics | PHY 133/133L | $3 / 1$ |
| General Physics |  |  |
|  | Total Units | 37 |

## Other Requirements

A reading knowledge of a foreign language, especially German, is strongly recommended for students planning advanced study in Science.

| Unrestricted Electives |  |
| :--- | :---: |
| Course | Units |
| Unrestricted Electives | $0-5$ |
| Select a sufficient number of courses so that the total from <br> "Required Subplan/Option", "Required Support", "GE", and <br> "Unrestricted Electives," is at least 125 units. |  |
|  | Total Units | $\mathbf{0 - 5}$|  |
| :--- |


| General Education Requirements | Units |
| :--- | :---: |
| Area | $\mathbf{1 2}$ |
| Area A Communication \& Critical Thinking |  |
| 1 | Oral Communication |
| 2 | Written Communication |
| 3 | Critical Thinking |

## Area B Mathematics \& Natural Sciences

Select at least one lab course from sub-area 1 or 2.
Physical Science
2 Biological Science
3 Laboratory Activity
4 Math/Quantitative Reasoning
5 Science \& Technology Synthesis
Area C Humanities
Visual and Performing Arts
2 Philosophy and Civilization
3 Literature and Foreign Language
4 Humanities Synthesis
Area D Social Sciences
U.S. History, Constitution, American Ideals

2 History, Economics and Political Science
3 Sociology, Anthropology, Ethnic \& Gender Studies
4 Social Science Synthesis
Area E Lifelong Understanding \& Self Development
Total Units

American Institutions
Courses that satisfy this requirement may also satisfy G.E. Area
D1

## American Cultural Perspectives Requiremen

Refer to catalog for list of courses that satisfy this requirements, Course may also satisfy major, minor, GE, or unrestricted elective requirements

The following required support courses should be taken to satisfy the
indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.

| Course |  | GE Area |
| :--- | ---: | :---: |
| General Physics | PHY 131/131L | B1, B3 |
| Basic Biology | BIO $115 / 115 \mathrm{~A} / 115 \mathrm{~L}$ | B2, B3 |
| Analytic Geom \& Calculus | MAT 114 | B4 |

The remaining GE requirements may be satisfied by any course approved for that area.

No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree. A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.

