## Required Courses for Students Majoring in Chemistry in the College of Science （applicable to students admitted in Fall 2008）

| Academic Year | First Year |  | Second Year |  | Third Year |  | Fourth Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course Titles | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring |
| Common Required Courses <br> （30） | Chinese（3） | Chinese（3） | History（2） |  |  |  |  |  |
|  | Foreign <br> Languages <br> （3） | Foreign <br> Languages <br> （3） |  |  |  |  |  |  |
|  | 16 credit hours of General Education courses，of which one course must be from each of the following core areas：Humanities \＆Thought，Physical Science，Applied Science，and Social Thought \＆ Phenomenon．The remaining courses may be General Education electives． <br> One non－credit Physical Education course each semester of their first three academic years，two of which must be Freshman PE I and Freshman PE II． <br> One non－credit Service Education course in the fall and spring semester of an academic year． |  |  |  |  |  |  |  |
| Required <br> Courses of the <br> Department <br> （69） | Calculus <br> MA1001 <br> （4） | Calculus <br> MA1002 <br> （4） | Analytical <br> Chemistry <br> CM2021 <br> （3） | Analytical <br> Chemistry <br> CM2022 <br> （4） | Physical <br> Chemistry <br> CM3041 <br> （4） | Physical <br> Chemistry <br> CM3042 <br> （4） | Topic <br> Seminar <br> CM4001 <br> （1） | Topic <br> Seminar <br> CM4002 <br> （1） |
|  | General <br> Chemistry <br> CM1001 <br> （3） | General Chemistry CM1002 （3） | Analytical <br> Chemistry <br> Laboratory <br> CM2023 <br> （2） | Analytical <br> Chemistry <br> Laboratory <br> CM2024 <br> （1） | Physical <br> Chemistry <br> Laboratory <br> CM3043 <br> （2） | Physical <br> Chemistry <br> Laboratory <br> CM3044 <br> （2） |  |  |
|  | General <br> Chemistry <br> Laboratory <br> CM1003 <br> （1） | General Chemistry Laboratory CM1004 （1） | Organic <br> Chemistry <br> CM2031 <br> （4） | Organic <br> Chemistry <br> CM2032 <br> （4） | Inorganic <br> Chemistry <br> CM3051 <br> （3） | Inorganic Chemistry CM3052 <br> （3） |  |  |
|  | General <br> Physics <br> PH1001 <br> （3） | General <br> Physics <br> PH1002 <br> （3） | Organic <br> Chemistry <br> Laboratory <br> CM2033 <br> （1） | Organic <br> Chemistry <br> Laboratory <br> CM2034 <br> （2） | Inorganic <br> Chemistry <br> Laboratory <br> CM3053 <br> （1） | Inorganic <br> Chemistry <br> Laboratory <br> CM3054 <br> （1） |  |  |
|  | General <br> Physics <br> Laboratory <br> PH1003 <br> （1） | General Physics Laboratory PH1004 （1） |  |  |  |  |  |  |
|  | Intro to <br> Computer <br> Science I <br> CM1013 <br> （2） |  |  |  |  |  |  |  |
| Total Semester Credit Hours | 20 | 18 | 10 | 11 | 10 | 10 | 1 | 1 |

1．The numerical figures in parentheses refer to course credit hours．
2．The total number of credit hours for required courses amounts to 99 ；the minimum number of earned credit hours required for graduation is 128 ．
3．Students are required to earn a minimum of 14 credit hours of elective courses specified by this Department，eight credit hours of which must be from courses offered by this Department（including CM2011 Chemistry Mathematics）and the remaining six credit hours from courses offered by other departments in the College of Science，the College of Engineering，the College of Electrical Engineering and Computer Science or the College of Earth Sciences during their term of study at the University； students must take（but are not required to pass）mandatory course offerings such as CM2011 Chemistry Mathematics，but course credit hours of failed courses must not be counted toward the student＇s earned credit hours．Students enrolled in the Undergraduate Program of Science and majoring in chemistry must take all courses required of chemistry majors but are exempt from taking General Chemistry Laboratory， Intro to Computer Science I，and Inorganic Chemistry Laboratory，which may be replaced by six credit hours of courses offered by other departments within the College of Science．Undeclared majors in the College of Science must obtain the approval of both their advisor and the head of this Department before taking any electives to fulfill the 14 elective credit－hour requirement（at least four credit hours of which must be from electives offered by this Department）and are not subject to this restriction．
4．The calculation of semester hours shall not include credit hours earned from General Education courses or History．
5．First－year students may take Freshman English or other English courses offered by the English department to fulfill the University＇s foreign language course requirement，but may not waive Freshman English with courses providing instruction in other second foreign languages．
6．Before being permitted to graduate，students must demonstrate their English proficiency by reaching a threshold score in one of the English proficiency tests recognized by the Language Center or by passing two semesters of Remedial English；credit hours thus earned may not be counted toward the minimum number required for a baccalaureate degree（for details，refer to the University＇s Implementation Procedures for Freshman Foreign Language Courses and Implementation Procedures for Remedial English Courses）．
7．Students are required to receive a passing grade in Service Education in accordance with the University＇s Service Education Implementation Procedures before being permitted to graduate．

