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

| Academic Year | First Year |  | Second Year |  | Third Year |  | Fourth Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course <br> Titles | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring |
| Common Required Courses （30） | Chinese <br> （3） | Chinese（3） | History（2） |  |  |  |  |  |
|  | Foreign Languages （3） | Foreign Languages （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（excluding Genes and Genetics）， 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 Courses of the Department （70） | Calculus MA1001 <br> （4） | General Physics PH1022 (3) | Organic Chemistry LS2005 （3） | Organic <br> Chemistry <br> LS2006 <br> （3） | Cell Biology LS2019 <br> （2） | Cell Biology <br> LS2020 <br> （2） | Seminar I <br> LS4001 <br> （1） | Seminar II <br> LS4002 <br> （1） |
|  | General Chemistry CM1001 <br> （3） | General Chemistry CM1002 <br> （3） | Organic <br> Chemistry <br> Laboratory <br> LS2007 <br> （1） | Organic <br> Chemistry <br> Laboratory <br> LS2008 <br> （1） | Biostatistics <br> LS2012 <br> （3） | Molecular Biology LS3014 <br> （4） | Ecology LS4015 <br> （3） |  |
|  | General <br> Chemistry <br> Laboratory <br> CM1003 <br> （1） | General <br> Chemistry <br> Laboratory <br> CM1004 <br> （1） | Biochemistry LS2001 <br> （3） | Biochemistry LS2002 <br> （3） | Genetics LS2010 <br> （3） | Animal Physiology LS3018 <br> （4） |  |  |
|  | General Biology LS1001 <br> （3） | General Biology LS1002 <br> （3） | Biochemistry Laboratory LS2003 <br> （1） | Biochemistry Laboratory LS2004 <br> （1） |  | Animal Physiology Laboratory LS3020 （1） |  |  |
|  | General <br> Biology <br> Laboratory <br> LS1003 <br> $(1)$ | General <br> Biology <br> Laboratory <br> LS1004 <br> （1） | Microbiolog $\begin{gathered} \mathrm{y} \\ \text { LS3003 } \end{gathered}$ <br> （3） | Plant Physiology LS3001 <br> （3） |  |  |  |  |
|  |  |  |  | Plant Physiology Laboratory LS2014 （1） |  |  |  |  |
| Total Semester Credit Hours | 18 | 17 | 11 | 12 | 8 | 11 | 4 | 1 |

1．The numerical figures in parentheses refer to course credit hours；the calculation of semester hours shall not include credit hours earned from General Education courses or History．
2．The total number of credit hours for required courses amounts to 100 ；the minimum number of earned credit hours required for graduation is 128 ，which does not include course credit hours earned from the General Education Course，Genes and Genetics．
3．Students are required to earn a minimum of 12 credit hours of elective courses offered by this Department during their term of study at the University．These electives must have course titles beginning with＂LS，＂one of which must be Thesis Research，but no more than two graduate－level Thesis Research courses will be recognized．
4．Undeclared majors in the College of Science and students majoring in Life Sciences at the undergraduate level must obtain the approval of both their advisor and the head of this Department before taking any electives to fulfill the 12 elective credit－hour requirement and are not subject to Article 3．Course selection for life science majors enrolled in the Undergraduate Program of Science must be done in accordance with the rules and regulations of the program．Genes and Genetics taken by such students may be counted as one under the Physical Science area under the General Education courses．
5．First－year students may take either Freshman English or an English course 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 either 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 who wish to apply for a double major in Life Science must comply with the relevant rules and regulations of the University．Once the students complete all the required courses of this Department，he or she shall obtain a double major．The Department＇s required courses shall be taken at this Department；applications for course credit waivers for required courses which share the same titles and course credit hours with those offered by this Department and which the students have taken at other departments must be approved by this Department before being put into effect．
8．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．

