Required courses and credits for Interdisciplinary Program of Life Science class 2020

| Category |  | Courses |  | Credits |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Fall semester | Spring semester |  |
| University <br> Required <br> Courses <br> (30 credits) |  |  |  | College Chinese |  | 2 |  |  |
|  |  | English Field |  | 8 |  | 2 credits can be waived if you pass the school English ability criteria |
|  |  | General | Core Courses | 8-12 |  | At least one course for each of the four dimensions |
|  |  | Education | Optional | 8-12 |  |  |
|  |  |  | Total | 20 |  |  |
|  |  | Physical Education |  | 0 |  | $1^{\text {st }} \sim 3^{\text {rd }}$ year required |
|  |  | Service Learning |  | 0 |  | At least 60 hours before graduation |
|  |  | Conduct |  | 0 |  | Each semester with passing grades |
| LSIP <br> Required <br> (27credits) |  | General Physics I, II |  | 3 | 3 |  |
|  |  | General Chemistry I, II |  | 3 | 3 |  |
|  |  | Calculus I, II |  | 3 | 3 |  |
|  |  | Life Science I, II |  | 3 | 3 |  |
|  |  | Seminar |  | 1 |  |  |
|  |  | General Biology Lab Course |  | 2 |  |  |
| First <br> Major <br> Course <br> (Select <br> one) | Course <br> From <br> Life <br> Science <br> (29 <br> credits) | Biochemistry I, II |  | 3 | 3 |  |
|  |  | Molecular and Cellular Biology I |  |  | 3 |  |
|  |  | Molecular and Cellular Biology II |  | 3 |  |  |
|  |  | Molecular and Cellular Biology III |  |  | 3 |  |
|  |  | Genetics |  |  | 3 |  |
|  |  | Organic Chemistry I |  | 3 |  |  |
|  |  | Bioinformatics |  | 3 |  | choose two among the five courses |
|  |  | Plant Biology |  | 3 |  |  |
|  |  | Animal Physiology |  | 3 |  |  |
|  |  | Microbiology |  | 3 |  |  |
|  |  | Biostatistics |  | 3 |  |  |
|  |  | Cell Biology Laboratory |  | 2 |  | experimental courses; choose one among the five courses |
|  |  | Molecular Biology Laboratory |  | 2 |  |  |
|  |  | Biochemistry Laboratory |  | 2 |  |  |
|  |  | Microbiology Laboratory |  | 2 |  |  |
|  |  | Lab for Bio | Photonics | 2 |  |  |
|  | Course <br> From | Organic Chemistry I, II |  | 3 | 3 |  |
|  |  | Biochemistry I, II |  | 3 | 3 |  |


|  | Medical Science (30 credits) | Molecular Biology |  |  | 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cell Biology | 3 |  |  |  |
|  |  | Human Anatomy \& Physiology | 3 |  |  |  |
|  |  | 3D Organon Virtual Reality (VR) Human Anatomy | 1 |  |  |  |
|  |  | Medical Microbiology and Immunology |  |  | 3 | take at least eight credits |
|  |  | Biomedical Engineering | 3 |  |  |  |
|  |  | Medical Genetics | 2 |  |  |  |
|  |  | Pharmacology | 2 |  |  |  |
|  |  | Translational Medicine |  |  | 2 |  |
|  |  | Medical Statistics and Epidemiology |  |  | 3 |  |
| Seco Co | d Major urses | Select one of the elective courses provided by every College in the campus. (except Life Science College) | 27~33 |  |  | except Biomedical Engineering- molecular medicine |
|  | ective |  | 8~15 |  |  |  |
| Total required credits for graduation |  |  | 128 |  |  |  |

