

Sacred Heart University  
MS Molecular Biochemistry (MBC)

The master of molecular biochemistry requires a total of 34 credits distributed as follow:

A) Required Chemistry Courses

16 credits of required courses

|   |   |   |  |
|---|---|---|--|
| 1 | CH521 or CH522 Advanced Organic or Org. Synthesis | 3 |  |
| 3 | CH533 Biophysical Chemistry                       | 3 |  |
| 2 | CH553 Advanced Inorganic Chemistry                | 3 |  |
| 4 | CH563 Biochemical Analysis                        | 3 |  |
| 5 | CH597 Computational Bioanalytical Chemistry Class | 2 |  |
| 6 | CH597L Computational Bioanalytical Chemistry lab  | 1 |  |
| 7 | CH598 Comprehensive exam                          | 1 |  |

B) 18 credits of elective courses

|    |   |   |  |
|----|---|---|--|
| 1  | CH525 Supramolecular Chemistry  | 3 |  |
| 2  | CH526 Medicinal Chemistry and Pharmacology                            | 3 |  |
| 3  | CH529 Special topic: Nuclear Magnetic Resonance Spectroscopy          | 3 |  |
| 4  | CH531 Adv. Physical Chemistry I: Molecular Structure                  | 3 |  |
| 5  | CH532 Adv. Physical Chemistry II: Molecular Dynamics                  | 3 |  |
| 6  | CH537 Microscale & Nanophase Materials: Chemical Process and Analysis | 3 |  |
| 7  | CH545 Bio-informatics   | 3 |  |
| 8  | CH547 Computational Chemistry & molecular Modeling                    | 3 |  |
| 9  | CH556 Chemical Application of Group Theory                            | 3 |  |
| 10 | CH557 Bioinorganic Chemistry  | 3 |  |
| 11 | CH561 Advanced Analytical Chemistry I: Spectroscopy                   | 3 |  |
| 12 | CH562 Advanced Analytical Chemistry II: Chromatography                | 3 |  |
| 13 | CH567 CH-Experimental Design  | 3 |  |
| 14 | CH569 Special Topic: Mass Spectrometry                                | 3 |  |
| 15 | CH571 Adv Environmental Chemistry                                     | 3 |  |
| 16 | CH575 Polymer Chemistry   | 3 |  |
| 17 | CH590 Chem-informatic   | 3 |  |

March 13, 2010