## **University College Dublin (UCD) Approved Chemistry/Biochemistry Requirements**

| Notre Dame Course Number/Name           | UCD Course Number/Name                            |
|---|---|
| CHEM 30321-Physical Chemistry I         | CHEM 30060-Quantum Mechanics and Molecular        |
| (Approved for biochemistry majors only) | Spectroscopy                                      |
| CHEM 30322-Physical Chemistry II        | CHEM 30290-Chemical Thermodynamics and            |
|   | Physical Chemistry                                |
|   | OR  |
|   | CHEM 30080-Thermodynamics and Reaction            |
|   | Kinetics  |
| CHEM 30333-Analytical Chemistry         | CHEM 30110-Instrumental Analysis                  |
| CHEM 30342-Intermediary Metabolism      | BMOL 20050-Metabolic Biochemistry                 |
|   | OR  |
|   | BIOC 20020-Machinery of Life                      |
| CHEM 40434-Physical Methods in          | CHEM 30230-Symmetry and Spectroscopy              |
| Chemistry                               |   |
| CHEM 48498-Undergraduate Research       | SCI 30010-Introduction to Scientific Research     |
| CHEM 50531-Molecular Biology I          | BMOL 30030-Regulation of Gene Expression          |
|   | OR  |
|   | BMOL 20090-Molecular Genetics and Biotechnology   |
| BIOS 20303-Fundamentals of Genetics     | <b>GENE 30010-</b> Genetics and Recombinant DNA   |
|   | OR  |
|   | GENE 20010-Plant and Animal Genetics              |
| BIOS 30341-Cell Biology                 | CELB 30090-Advanced Cell Biology                  |
|   | OR  |
|   | CELB 20040-Cell and Molecular Biology -Principles |
|   | OR  |
|   | CELB 20010-Cell Biology                           |
|   | OR  |
|   | CELB 30070-Cell Biology                           |

Note: Some of the courses do contain a lab component but are only 3 credits. You will simply need to make up the science credit with research or other science course at ND.