### C130 - BSc Honours Biological and Medical Sciences

**A: Upon successful completion of this module, the graduates in biological and medical sciences will be able to demonstrate a systematic understanding of:**

Methods for acquiring, interpreting and analysing biological information through the study of texts, original reports and data sets.

The subcellular architecture of cells and tissues, including membranes and organelle structure and function.

The structure and function of the major cellular macromolecules and the methods required for their analysis.

The major metabolic pathways and how they are integrated and regulated in both health and disease.

The genetic and microbial basis of human disease.

How extracellular and intracellular signals regulate physiological mechanisms at the cellular and molecular level.

How biomedical technologies can advance knowledge and solve biotechnological, biomedical and socio-economic problems.

The relationship between molecular and cellular processes, and evolutionary biology.

**B: Upon successful completion of this module students will be able to:**

Apply the methods and techniques learned to review, extend and apply knowledge and understanding to initiate and carry out projects.

Evaluate evidence, arguments and assumptions to reach sound judgements to achieve a solution, or range of solutions, to a problem.

**C: Upon successful completion of this module students will:**

Able to plan and execute all the core practical and professional skills relevant to first post-employment in the discipline, independently.

Be fully aware of relevant ethical implications of proposed courses of actions or situations and take the necessary steps to work within the limits of these.

**D: Upon successful completion of this module students will be able to demonstrate qualities and transferrable skills needed for employment. In particular, they will be able to demonstrate:**

Initiative

Personal responsibility

Decision-making in complex & unpredictable circumstances

Problem solving skills that can be applied in many types of employment

Lifelong learning skills to address their own learning needs within their discipline and new areas of learning

Communicate effectively and confidently to both specialist & non-specialist audiences.