BIOINFORMATICS (BINF)

BINF*6110 Genomic Methods for Bioinformatics Winter Only [0.50]
This course provides an introduction to current and emerging methods used to generate genomic data analyzed in bioinformatics. This may include techniques for DNA sequencing as well as transcriptome, proteome and metabolome analysis. The objective is to develop an appreciation for the challenges of producing data.

Restriction(s): Restricted to students in Bioinformatics programs.
Department(s): Dean's Office, College of Biological Science
Location(s): Guelph

BINF*6210 Software Tools for Biological Data Analysis and Organization Fall Only [0.50]
This course will familiarize students with tools for the computational acquisition and analysis of molecular biological data. Key software for gene expression analyses, biological sequence analysis, and data acquisition and management will be presented. Laboratory exercises will guide students through application of relevant tools.

Restriction(s): Restricted to students in Bioinformatics programs.
Department(s): Dean's Office, College of Biological Science
Location(s): Guelph

BINF*6410 Bioinformatics Programming Fall Only [0.50]
This course will introduce bioinformatics students to programming languages. Languages such as C and Perl will be introduced with a focus on bioinformatics applications. The topics covered will serve to aid students when existing software does not satisfy their needs.

Restriction(s): Restricted to students in Bioinformatics programs.
Department(s): Dean's Office, College of Biological Science
Location(s): Guelph

BINF*6420 Biosequence Pattern Analysis Winter Only [0.50]
This course is an overview course on different approaches to analyze biological sequences. Basic concepts are introduced, as well as related algorithms.

Restriction(s): Restricted to students in Bioinformatics programs.
Department(s): Dean's Office, College of Biological Science
Location(s): Guelph

BINF*6500 PhD Research Writing in Bioinformatics Summer, Fall, and Winter [1.00]
Background literature pertinent to the student's initial research direction will be studied. Starting with a reading list provided by the advisor and the instructor, the student will build on this list and construct a major literature review over two semesters. As the student begins to generate initial ideas for their own research direction, their ideas are written and explained. The emphasis will be on a sub-field or sub-fields of bioinformatics and the depth of study will be appropriate to the doctoral level.

Restriction(s): PhD students in Bioinformatics program
Department(s): Dean's Office, College of Biological Science
Location(s): Guelph

BINF*6890 Topics in Bioinformatics Fall Only [0.50]
Selected topics in bioinformatics will be covered. The course might focus on biological or informatics topics, or upon a mixture of both.

Restriction(s): Restricted to students in Bioinformatics programs.
Department(s): Dean's Office, College of Biological Science
Location(s): Guelph

BINF*6970 Statistical Bioinformatics Winter Only [0.50]
This course presents a selection of advanced approaches for the statistical analysis of data that arise in bioinformatics, especially genomic data. A central theme to this course is the modelling of complex, often high-dimensional, data structures.

Restriction(s): Restricted to students in Bioinformatics programs.
Department(s): Dean's Office, College of Biological Science
Location(s): Guelph

BINF*6999 Bioinformatics Masters Project Summer, Fall, and Winter [1.00]
A major research paper is completed and presented by students in the Master of Bioinformatics program.

Restriction(s): Restricted to MBNF students only
Department(s): Dean's Office, College of Biological Science
Location(s): Guelph