

This section contains the descriptions of courses offered at the University of Calgary. The courses are arranged in alphabetical order by course title not by abbreviation. In order to better understand the notations used throughout this section, an illustrated example of a course description is provided.

All courses listed are not necessarily offered every year and students should consult the Schedule of Classes for an official listing of those courses that will be offered in a given session.

Since this Calendar is published a considerable time before the opening of the academic year, the University reserves the right to make whatever changes circumstances may require including the cancellation of a particular course.



**Course Numbers:**

The number of the course indicates the level of the course.

- Junior level: 200's
- Senior level: 300's and 400's
- Upper level undergraduate: 500's
- Graduate level: 600's and 700's

**Hours of Instruction:**

The hours of instruction per week are indicated with this code.

- **M** More than a full course; refer to individual course description for hours.
- **F(3-3)** Full course; equivalent of 3 hours of lectures and 3 hours of lab each week for 2 sessions.
- **F(3-1S-3)** Full course; equivalent of 3 hours of lectures, 1 seminar hour, and 3 hours of lab each week for 2 sessions.
- **Q(3-0)** Quarter-course; equivalent of 3 hours of lectures each week for 1 half session.
- **H(3-3/2)** Half-course; equivalent of 3 hours of lectures every week and 3 hours of lab every other week for 1 session.
- **E(0-3)** Eighth-course; equivalent of 3 hours of lab each week for one quarter session.

The figures "S" or "T" attached to a number signify seminar or tutorial hours.

**Cross-Listed Courses:**

Courses which are listed under two Departments and which can be taken for credit from either Department, but not both. The credit is determined by the student's registration.

**Prerequisite:**

Must be completed before registering in this class.

**Corequisite:**

Must be completed at the same time as this class.

**Not Included in GPA:**

A course with this notation is graded as CR (Completed Requirements) or F (Fail). The course is not included in the calculation of the grade point average.

Medical Science 609  
(Biochemistry 609)

H(3-2T)

**Gene Expression**

The flow of genetic information from DNA to final protein product. The subject will be covered in two courses offered in alternating years: gene structure and regulation of transcription, including gene structure and organization, chromatin structure, regulation of transcription and post-translational processing; and the activity of genes during development including stored messenger ribonucleoprotein particles and translational control in gametes, the switch from maternal to zygote genome control of development in early embryos and the molecular basis of morphogenesis and differentiation.

**609.01. Gene Structure and Regulation of Transcription**

**609.02. Genes and Development**

**Prerequisite:** Medical Science 537 (Biochemistry 537) or equivalent.

**Note:** Credit for both Medical Science 609.02 and 751.14 will not be allowed.

**Notes:**

Certain courses carry the notation "Not open to students with credit in course number XXX" or "Credit for both course number XXX and course number XXX will not be allowed." Students may take these courses if they wish, but credit for both courses will not be granted towards their degree.