

**ACTU 386**  
 Actuarial Math Lab II  
*Winter 2018*

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**Office Hours:** TBA

**Introduction to Excel (5 weeks) – 40% of the overall score for the course**

Excel			
Introduction to the Basic Concepts Relative to a Pension Plan <ul style="list-style-type: none"> <li>• Types of pension plans</li> <li>• Normal Cost</li> <li>• Actuarial Liability</li> </ul>	Move, Copy and Edit methods Window Options Undo function Help functions Creating a chart	Find and Replace functions Sort functions Subtotal functions AutoFilter functions Pivot Table functions Protection features	VBA – User defined functions Iterative functions Comments Data Form functions Audit functions
Excel Environment Commonly Used functions Lookup functions	Formatting a chart Functions related to dates	Control objects Functions related to text	Error messages Others actuarial uses of Excel

**Introduction to Access (4 weeks) – 30% of the overall score for the course**

Access			
Access Environment Creating a database Editing a table Getting info in and out of a database	Creating Forms Sort and Filter functions Queries SQL queries	Keeping the information accurate Reports Sharing the database Security	Pages and Modules

**Introduction to Axis (4 weeks) – 30% of the overall score for the course**

Axis	
Introduction to the basic concepts relative to life insurance <ul style="list-style-type: none"> <li>○ Definition of life insurance</li> <li>○ Different types of coverage available                             <ul style="list-style-type: none"> <li>▪ term vs Whole life</li> <li>▪ universal vs. traditional</li> <li>▪ lapse supported product</li> </ul> </li> </ul>	Introduce the concept of modules, datasets Learn how to navigate within AXIS Describe the concepts of Funds, Subfunds and Cells Describe the mechanics of a cell Learn to use certain functionalities: overrides, filters, etc... Work through a case study of how Axis can be used to price a simple life insurance plan.

**Evaluation:** Assignments 100%

**Academic Integrity and the Academic Code of Conduct**

This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: [concordia.ca/students/academic-integrity](http://concordia.ca/students/academic-integrity)." [Undergraduate Calendar, Sec 17.10.2]