Department of Mathematics & Statistics
Concordia University

ACTU 386
Actuarial Math Lab II
Winter 2020

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

Excel			
Introduction to the Basic Concepts Relative to a Pension Plan • Types of pension plans • Normal Cost • Actuarial Liability	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
 	
o Definition of life insurance
o Different types of coverage available
  • term vs Whole life
  • universal vs. traditional
  • lapse supported product
	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 an case study of how Axis can be used to price a simple life insurance plan.

Evaluation: Assignments 100%