ACT 2210 Course Outline

Introduction to Risk Management

Property & Casualty Insurance Topics
Basic Techniques for Ratemaking

Fall 2012

Instructor:

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Sessional Instructor
University of Manitoba
Warren Centre for Actuarial Studies & Research

Manager, Actuarial Analytics
The Wawanesa Mutual Insurance Company
General Information

Course Code: ACT2210
Section: A02
Prerequisites: MATH 1700, MATH 2750, STAT 2000
Duration: September 6, 2012 – December 5, 2012
Credit Hours: 3
Class Time: Mon, Wed 4:00-5:15
Class Room: 108 Drake
Number of Classes: 24
First Class: Monday, September 10, 2012
Last Class: Wednesday, December 5, 2012

Instructor Information

Office: 404 Drake
Office Phone: (204) 272-1503
Cell Phone: (204) 997-4403
Work Phone: (204) 985-5608
Office Hours: Mondays after class (5:15-6:00)\(^1\)
Work email: jpursaga@wawanesa.com
University email: pursagaj@cc.umanitoba.ca

Organization of Syllabus

- Course Description
  - Topics to be covered
  - Number of pages from relevant text references
  - Number of lectures per topic
- Course Materials
- Important Dates During the Term
- Evaluation Procedure
- Exam Content
- Class Communications
- Excused Absences from Exams
- Late Submissions of Assignments
- Academic Integrity
- Medical Absenteeism

\(^1\) Unless otherwise stated or communicated in advance from the instructor
Course Description

Overview

- Description of the Syllabus
- Introduction to Property & Casualty Insurance
- The Casualty Actuarial Society
  - 1 class

Basic Ratemaking

- Chapter 1 – Introduction (12) &
  - 1 class
- Chapter 2 – Rating Manuals (23)
  - 1 class
- Chapter 3 – Ratemaking Data (13)
  - 1 class
- Chapter 4 – Exposures (15)
  - 1 class
- Chapter 5 – Premium (26)
  - 2 classes
- Chapter 6 – Losses and Loss Adjustment Expenses (35)
  - 2 classes
- Chapter 7 – Other Expenses and Profit (16)
  - 1 class
- Chapter 8 – Overall Indication (9)
  - 1 class
- Statements of Principles
  - Risk Classification Statement of Principles – American Academy of Actuaries (19)
  - Statement of Principles Regarding Property & Casualty Insurance Ratemaking (5)
    - 1 class
- Chapter 9 – Traditional Risk Classification (20)
  - 1 class
- Chapter 10 – Multivariate Classification (18)
  - 1 class
- Chapter 11 – Special Classification (28)
  - 2 class

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2 The number of pages in the associated reference material follows the topic in brackets. i.e. “Chapter 1 – Introduction (12) is 12 pages long in the Basic Ratemaking text"
• Chapter 12 – Credibility\(^3\) (23)
  o 1 class
• Chapter 13 – Other Considerations (24)
  o 1 class
• Chapter 14 – Implementation (26)
  o 2 classes

**Additional Topics – Time Permitting**
- Other Topics in Property & Casualty Insurance
  o 1 class
- Current Events in Property & Casualty Insurance
  o 1 class

**Course Materials**

- Course Calendar

The following course materials can be downloaded for free from the CAS website:

- [CAS Exam 5 Syllabus](#) – Basic Techniques for Ratemaking and Estimating Claim Liabilities
- Werner, G, and Modlin, C., [Basic Ratemaking](#), Casualty Actuarial Society, October 2010
- American Academy of Actuaries Committee on Risk Classification, [Risk Classification Statement of Principles](#), June 1980
- Casualty Actuarial Society Committee on Ratemaking Principles, [Statement of Principles Regarding Property and Casualty Insurance Ratemaking](#), Casualty Actuarial Society, May 1988

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\(^3\) Since this topic is dealt with in detail in another course (ACT 4340 – Actuarial Modeling Methods 3), the presentation in this course will be from a high level and concepts will be tested at a much more basic level than would be required for a course that focuses on the concept.
Important Dates during the Term:

- September 10, 2012: First Class – Introduction & Syllabus
- October 3, 2012: Exam 1 (30%)
- October 11, 2012: UMAC Fish Dinner
- November 9, 2012: 4:00 – 5:15 PM Make-up class in lieu of Wednesday, November 14, 2012
- November 12, 2012: Observed of Remembrance Day (No Class)
- November 14, 2012: No Class & Last Date for Voluntary Withdrawal
- December 5, 2012: Last Day of Classes

Evaluation Procedure

All exams are cumulative.

Success in the course and on the Casualty Actuarial Society Exam 5 will depend on working a large number of exercises. Each student should work as many exercises as possible. This course is hard. Do not get behind. It is very important to read ahead of each lecture.

All questions will be long-answer and graded according to a rubric. Responses that do not fall within the rubric, but that are considered legitimate, relevant, and correct will be given credit.

Exam 1: 30%
Exam 2: 30%
Exam 3: 40% (During the Final Examination Period)

Preliminary Grade Distribution

- A+ 90-100
- A 80-89
- B+ 75-79
- B 70-74
- C+ 62-69
- C 55-61
- D 50-54
- F <50

This grade distribution is subject to approval from the Warren Centre.

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4 Every effort has been made to schedule exams that do not conflict with SOA/CAS examination windows. Also, the Career Development Centre’s “Actuarial Recruitment Schedule – Fall 2012” has been taken into consideration to avoid conflicts that may arise for students.

5 Location will be announced at a later date.

6 Coordinated by the instructor.
Exam Content

The content (what sections of the textbook) of each exam will be communicated by the instructor a minimum of (1) week prior to exam administration.

Please note that class discussion items may also be tested, although not referenced or included in the accompanying reference texts. It is imperative that you attend class and participate in discussion to further your understanding of the material. From time to time, the instructor will discuss relevant news from the Property & Casualty insurance industry that is testable on each of the 3 exams.

Class Communications

All required materials (other than those directly available from the internet) will be sent to the class via email from the instructor. The instructor will describe how to provide contact email information during the first class.

Excused Absences from Exams

If a student is excused from writing a scheduled examination, that student will have the weight of the excused examination added to the subsequent examination. If the excusal is for medical reasons, the student is expected to provide a doctor’s note confirming that they were unable to complete the examination. It is strongly suggested that the student have their doctor complete the “Medical Absenteeism” form included at the end of this syllabus. The form will be provided in an email to each student after the instructor has received contact information from each student.

Late Submissions of Assignments

Since there will be no assignments in this class there is no policy to follow regarding late submission of assignments.
Academic Integrity

Plagiarism, cheating and examination impersonation will not be tolerated. Plagiarism, or any other form of academic dishonesty, is subject to serious academic penalty. It is important that you understand what constitutes academic dishonesty and the very serious consequences. Attached below is the Asper School of Business policy on Academic Integrity:

Academic Integrity – Asper School of Business

It is critical to the reputation of the Asper School of Business and of our degrees, that everyone associated with our faculty behave with the highest academic integrity. As the faculty that helps create business and government leaders, we have a special obligation to ensure that our ethical standards are beyond reproach. Any dishonesty in our academic transactions violates this trust. Section 8 of the University Policies, found in The University of Manitoba Calendar, addresses the issue of academic dishonesty. Specifically, acts of academic dishonesty include, but are not limited to:

- using the exact words of a published or unpublished author without quotation marks and without referencing the source of these words
- duplicating a table, graph or diagram, in whole or in part, without referencing the source
- paraphrasing the conceptual framework, research design, interpretation, or any other ideas of another person, whether written or verbal (e.g., personal communications, ideas from a verbal presentation) without referencing the source
- copying the answers of another student in any test, examination, or take-home assignment
- providing answers to another student in any test, examination, or take-home assignment
- taking any unauthorized materials into an examination or term test (crib notes)
- impersonating another student or allowing another person to impersonate oneself for the purpose of submitting academic work or writing any test or examination
- stealing or mutilating library materials
- accessing test prior to the time and date of the sitting
- changing name or answer(s) on a test after that test has been graded and returned
- submitting the same paper or portions thereof for more than one assignment, without discussions with the instructors involved

Group Projects and Group Work

Many courses in the Asper School of Business require group projects. Students should be aware that group projects are subject to the same rules regarding academic dishonesty. Because of the unique nature of group projects, all group members should exercise special care to ensure that the group project does not violate the policy on Academic Integrity. Should a violation occur, group members are jointly accountable unless the violation can be attributed to a specific individual(s).

Some courses, while not requiring group projects, encourage students to work together in groups (or at least do not prohibit it) before submitting individual assignments. Students are encouraged to discuss this issue as it relates to academic integrity with their instructor to avoid violating this policy.

In the Asper School of Business, all suspected cases of academic dishonesty are passed to the Dean's office in order to ensure consistency of treatment.
Medical Absenteeism

University of Manitoba
L.H. Asper School of Business
Medical Absenteeism Form

STUDENT IDENTIFICATION: (PLEASE PRINT CLEARLY)

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Middle Initial</th>
<th>U of M Student Identification Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Instructor Name</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Student’s Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

TO BE COMPLETED BY THE ATTENDING PHYSICIAN: (after the above section is completed) (PLEASE PRINT CLEARLY)

<table>
<thead>
<tr>
<th>Physician’s Last Name</th>
<th>Physician’s First Name</th>
<th>Middle Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address</td>
<td>City, Province</td>
<td>Postal Code</td>
</tr>
<tr>
<td>Telephone Number</td>
<td>Fax Number</td>
<td></td>
</tr>
</tbody>
</table>

To the attention of the physician: Your evaluation of the student’s condition is being used for the purpose of determining whether or not the student has a valid reason to miss an important exam or assignment. Your professional evaluation is necessary to ensure that only valid cases are excused.

I certify that the nature of the student’s condition is severe enough to prevent the student from taking an exam or completing an assignment. If requested, my associates or I will verify for the above named instructor/administrator that this information is accurate.

The student’s condition will likely span the following dates:

(Indicate start date) until (Indicate end date)

Physician’s Signature Date

NOTES TO PHYSICIAN:
• Please make a note in the student/parent’s file indicating that the student has given the above named instructor/administrator permission to verify with you, your staff, or your colleagues, that the information contained on this form is correct. Thank you for your professional evaluation of this student’s condition.
• PLEASE ATTACH THIS FORM TO YOUR REGULAR OFFICE STATIONERY THAT INDICATES THE STUDENT VISITED YOUR OFFICE.

NOTES TO STUDENT:
• The use of this form is at the option of the student. However, in order to obtain an excused absence for an assignment or exam the student must obtain a doctor’s certification that the student’s condition is severe enough to prevent the student from taking the exam or completing the assignment.
• It is NOT SUFFICIENT to provide a note that only indicates the student visited the doctor’s office.