# **Syllabus**

ABIZ 3540 A01: Financial Risk Management (Winter 2024)



#### **COURSE DETAILS**

Course Title & Number: Financial Risk Management; ABIZ 3540 A01

Number of Credit Hours: 3

Class Times & Days of Week: Tues/Thus 11:30-12:45

Location for

classes/labs/tutorials:

Agriculture Building #138

Pre-Requisites: ABIZ 1000

### **Instructor Contact Information**

Instructor(s) Name &

**Preferred Form of Address:** 

Dr. Charles Grant, I prefer to be addressed as Dr. Grant

**Office Location:** Agriculture Building office #359

**Office Hours or Availability:** Make an appointment or send an email.

**Office Phone No.** 204-474-9619

Email: <a href="mailto:charles.grant@umanitoba.ca">charles.grant@umanitoba.ca</a> Please when sending emails be

professional and respectful. I will reply your emails within 48h during week days. On weekends I do not respond emails.

**Contact:** By Email or In person

Teaching Assistant:

Contact:

No TA

# **Course Description**

# **U** of M Course Calendar Description

Topics explored will include risk expected returns and valuation of capital; addressing risk in the context of capital budgeting; derivative securities (i.e. futures and options) and financial risk management; the management of risk within and outside of agricultural production; and public policy.

# **General Course Description**

This course is the study of concepts and tools used to measure and mitigage financial risk for firms. The course introduces the study of mathematics for finance and particularly as it relates to the management of financial risk. The course also enhances the student's skills in spreadsheets and Python programming with applications in financial risk management. A risk assessment white paper is to be written and submitted.

#### **Course Goals**

- 1.Understand the scope of risk in agribusiness.
- 2.Introduce the use of a spreadsheet and Python coding for agribusiness risk applications.
- 3.Learn how to measure financial risk.
- 4. Understand the tools of financial risk management.
- 5. Study of concepts and tools used to measure and mitigate financial risk.
- 6. Apply those skills in applications for risk management decisions.
- 7. Write a risk assessment white paper.
- 8. Apply artificial intelligence to risk assessment and mitigation.

# **Course Learning Objectives**

- 1. Understand the scope of risk in agribusiness.
- 2.Introduce the use of a spreadsheet and Python coding for agribusiness risk applications.
- 3.Learn how to measure financial risk.
- 4. Understand the tools of financial risk management.
- 5. Study of concepts and tools used to measure and mitigate financial risk.
- 6. Apply those skills in applications for risk management decisions.
- 7. Write a risk assessment white paper.
- 8. Apply artificial intelligence to risk assessment and mitigation.

# **Textbook, Readings, and Course Materials**

# Required: Grant, Charles W. (AmpedUp) Risk Management, ISBN 978010002848X, © 2021CW Grant and Company Limited

The textbook for this course is an EBook and is available for purchase from the University of Manitoba Bookstore. You will need to purchase a code to get admittance to the book. To get your code you can go the University of Manitoba Bookstore and purchase a code at the service desk or you can phone the University of Manitoba Bookstore at (204) 474-8321 or toll free at 1-800-310-3331 and a customer service person will talk you through the order. Or you can do the online order yourself by starting at the link https://umanitoba.ca/campus/bookstore/shoponline.html It you do it online yourself opt for the "pick up in store" option rather than "delivery". Your code will be emailed to you. Your code for the e-textbook will be emailed to you. You then go to https://ampedupriskmanagement.ca and sign up for the e-textbook. An email will come to you inviting you to submit your purchased code. Allow 24 hours for receipt of the returned email. Upon receipt of your returned email you will be admitted to the e-textbook.

# **Using Copyrighted Material**

Please respect copyright. We will use copyrighted content in this course. I have ensured that the content I use is appropriately acknowledged and is copied in accordance with copyright laws and university guidelines. Copyrighted works, including those created by me, are made available for private study and

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research and must not be distributed in any format without permission. Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, uncles an exception to the *Copyright Act* applies or written permission has been confirmed. For more information, see the University's Copyright Office website at <a href="http://umanitoba.ca/copyright/">http://umanitoba.ca/copyright/</a> or contact <a href="http://umanitoba.ca/copyright/">um copyright@umanitoba.ca</a>.

# **Course Technology**

The course will follow the required textbook, both the physical textbook and its digital links. For course management, UM Learn will be used. The use of other technology (i.e., tablets, cellphones, laptops, etc.) is expected and will be used to solve various agribusiness problems. The spreadsheet and Python software used in the course are open source and free of charge. It is the general University of Manitoba policy that all technology resources are to be used in a responsible, efficient, ethical and legal manner.

# **Expectations: I Expect You To**

The student is expected to participate actively in the course. Active participation means staying on top of the course material, completing and submitting assignments on time, and preparing for exams, and seeking help on course material that is not clear. You are expected to read the required textbook. We operate in a respectful work and learning environment. I expect you to follow the Section 2.5 ROASS policies concerning Class Communication, Academic Integrity, and Recording Class Lectures.

#### **Academic Integrity:**

Each student in this course is expected to abide by the University of Manitoba <u>Academic Integrity principles</u>. Always remember to reference the work of others that you have used. Also be advised that you are required to complete your assignments independently unless otherwise specified. If you are encouraged to work in a team, ensure that your project complies with the academic integrity regulations. You must do your own work during exams. Inappropriate collaborative behavior and violation of other Academic Integrity principles, will lead to the serious <u>disciplinary action</u>. Visit the <u>Academic Calendar</u>, <u>Student Advocacy</u>, and <u>Academic Integrity</u> web pages for more information and support.

#### **Recording Class Lectures:**

No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without permission {Claudia Narvaez-Bravo} Course materials (both paper and digital) are for the participant's private study and research.

#### **Student Accessibility Services:**

The University of Manitoba is committed to providing an accessible academic community. <u>Students Accessibility Services (SAS)</u> offers academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services 520 University Centre Phone: (204) 474-7423

Email: Student accessibility@umanitoba.ca

# **Expectations: You Can Expect Me To**

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You can expect availability of the TA or myself for consultation if needed. Email is my preferred method of communication. All assessments will be graded fairly. You can expect me to treat all of your questions and comments with respect and to take your concerns seriously.

# **CLASS SCHEDULE AND COURSE EVALUATION**

This schedule is subject to change at the discretion of the instructor and/or based on the learning needs of the students but such changes are subject to <u>Section 2.8 of ROASS</u>.

Required Work or	Evaluation		
Preparation	Type of Assessment	Due Date & Time	Value of Final Grade
Chapters 1-5	Assignment 1	Feb 2, 11:59 pm	20%
Chapters 1-5	Midterm Exam 1	Feb 6, 1130 am-12:30 pm	25%
Chapters 6-9	Assignment 2	Mar 15, 11:59 pm	20%
Chapters 6-9	Midterm Exam 2	Mar 19, 11:30 am – 12:30 pm	25%
Chapter 11	Bonus Assignment	Apr 5, 11:59 pm	5%
Chapter 10	Risk White Paper	Apr 10, 11:59 pm	10%
TOTAL			105%

# **Grading**

Indicate your grading scale. A sample is given below that you can adjust to your course expectations.

Letter Grade	Percentage out of 100	Grade Point Range	Final Grade Point
A+	95-100	4.25-4.5	4.5
Α	86-94	3.75-4.24	4.0
B+	80-85	3.25-3.74	3.5
В	72-79	2.75-3.24	3.0
C+	65-71	2.25-2.74	2.5
С	60-64	2.0-2.24	2.0
D	50-59	Less than 2.0	1.0
F	Less than 50		0

Topic	Dates (Times)
1. Getting Started (Chapter 1)	Jan 8-12
2. Measuring Risk – Dristributions and Capital Budgeting (Chapter 2)	Jan 8-12
3. General Market Model (Chapter 3)	Jan 15-19
4. Mitigating Risk - Forwards and Futures (Chapter 4)	Jan 22-26
5. Mitigating Risk - Options (Chapter 5)	Jan 29 - Feb 2
6. First Assignment Submitted (Chapters 1-5)	Feb 2 (11:59 pm)
7. First Mid-term Examination (Chapters 1-5)	Feb 6 (7:00-8:00 pm)
8. Data Analysis for Risk Assessment (Chapter 6)	Feb 12-16
9. Winter break	Feb 19-23

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9. Diversification – Portfolio (Chapter 7)	Feb 26-Mar1
13. Second Assignment Submitted (Chapters 6-9)	Mar 15 (11:59 pm)
14. Second Midterm examination (Chapters 6-10)	March 19 (7:00-8:00 pm)
15. Artificial Intelligence for Risk Assessment (Chapter 10)	Apr 1-5
16. Bonus Assignment Submitted (Chapter 10)	Apr 5 (11:59 pm)
17. Risk Assessment White Paper (Chapter 11)	Apr 1-10
18. Risk Assessment White Paper Submitted (Chapter 11)	Apr 10 (11:59 pm)

# **Voluntary Withdrawal**

The last date to drop Winter term spanning courses with refunds: January 20, 2024 you will receive a VW for the course, but you will not be charged the Winter Term portion of the fees. Voluntary Withdrawal (VW) deadline Winter term classes: March 20, 2024 Please refer to the Registrar's Office web page for more.

#### **ASSIGNMENT DESCRIPTIONS**

Instructions, grading rules, and rubrics will be provided as per <u>Section 2.5 ROASS</u>. Assignments 1 and 2 refer to chapters 1-5 and 6-9 of the textbook. The bonus assignment refers to chapter 11. The executive business plan refers to chapter 10.

**TITLE**: Assignment 1

**GOAL**: To learn the materials presented in chapters 1-5 of the textbook. **PROCEDURE**: Read chapters 1-5 and complete the assignment questions.

**SUBMISSION GUIDELINES**: Bind up your answers including quizzes into a single pdf document and submit the document by uploading it to the appropriate folder in UM Learn on or before midnight on February 2, 2024.

**EVALUATION CRITERIA**: See Assignment 1 rubric on UM Learn.

TITLE: Assignment 2

**GOAL**: To learn the materials presented in chapters 6-9 of the textbook. **PROCEDURE**: Read chapters 6-9 and complete the assignment questions.

**SUBMISSION GUIDELINES**: Bind up your answers including quizzes into a single pdf document and submit the document by uploading it to the appropriate folder in UM Learn on or before midnight on March 15, 2024.

**EVALUATION CRITERIA**: See Assignment 2 rubric on UM Learn.

**TITLE**: Bonus Assignment

**GOAL**: To learn the materials presented in chapter 11 of the textbook. **PROCEDURE**: Read chapter 11 and complete the assignment questions.

**SUBMISSION GUIDELINES**: Bind up your answers including quizzes into a single pdf document and submit the document by uploading it to the appropriate folder in UM Learn on or before midnight on April 5, 2024.

**EVALUATION CRITERIA**: See Bonus Assignment rubric on UM Learn.

TITLE:

**GOAL**: To learn to write a risk assessment white paper.

**PROCEDURE**: Read chapter 10 and complete the risk assessment white paper.

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**SUBMISSION GUIDELINES**: Submit the documnent as a spreadsheet by uploading it to the appropriate folder in UM Learn on or before midnight on April 5, 2024.

**EVALUATION CRITERIA**: See riske assessment white paper rubric on UM Learn.

# **Referencing Style**

All written assignments in this course **shall include in-text citation**. Citation style: APA style. Example:

Derwing, T. M., Rossiter, M. J., & Munro, M. J. (2002). Teaching native speakers to listen to foreign-accented speech. *Journal of Multilingual and Multicultural Development*, 23(4), 245-259.

# **Assignment Feedback**

Feedback on student's performance will be provide as formative (i.e., comments) and summative (i.e., grade). The feedback will be delivered electronically (UML).

# **Assignment Extension and Late Submission Policy**

Assignment Due Dates: For each business day the assignment is overdue, a 10% deduction from the assignment's value will be applied.

Be sure to upload your assignments to the designated folders for each assignment on UMLearn. If you mistakenly submit your assignment in the wrong folder, it is your responsibility to rectify this, and the assignment will be marked as late. Please note that assignments will not be accepted via email.

Each assignments is to be submitted as a single pdf document.

#### **UNIVERSITY SUPPORT OFFICES & POLICIES**

#### Schedule "A"

**Section (a) sample** re: A list of academic supports available to Students, such as the Academic Learning Centre, Libraries, and other supports as may be appropriate:

#### **Writing and Learning Support**

The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three

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days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor's feedback.

These Academic Learning Centre services are free for U of M students. For more information, please visit the Academic Learning Centre website at: http://umanitoba.ca/student/academiclearning/

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 205 Tier Building.

#### **University of Manitoba Libraries (UML)**

As the primary contact for all research needs, your liaison librarian can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject: <a href="http://bit.ly/WcEbA1">http://bit.ly/WcEbA1</a> or name: <a href="http://bit.ly/1tJ0bB4">http://bit.ly/WcEbA1</a> or name: <a href="http://bit.ly/1tJ0bB4">http://bit.ly/1tJ0bB4</a>. In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: <a href="http://bit.ly/1sXe6RA">http://bit.ly/1sXe6RA</a>. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries' homepage: <a href="http://www.umanitoba.ca/libraries">http://www.umanitoba.ca/libraries</a>.

Section (b) sample: re: A statement regarding mental health that includes referral information:

For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781.

#### **Student Counselling Centre**

Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. Student Counselling Centre: <a href="http://umanitoba.ca/student/counselling/index.html">http://umanitoba.ca/student/counselling/index.html</a>
474 University Centre or S207 Medical Services

474 University Centre or \$207 Medical Services (204) 474-8592

#### **Student Support Case Management**

Contact the Student Support Case Management team if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team.

Student Support Intake Assistant <a href="http://umanitoba.ca/student/case-manager/index.html">http://umanitoba.ca/student/case-manager/index.html</a>
520 University Centre
(204) 474-7423

#### **University Health Service**

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation.

University Health Service http://umanitoba.ca/student/health/

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104 University Centre, Fort Garry Campus (204) 474-8411 (Business hours or after hours/urgent calls)

#### **Health and Wellness**

Contact our Health and Wellness Educator if you are interested in peer support from *Healthy U* or information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault.

Health and Wellness Educator <a href="https://umanitoba.ca/student/health-wellness/welcome-about.html">https://umanitoba.ca/student/health-wellness/welcome-about.html</a>

britt.harvey@umanitoba.ca

#### Live Well @ UofM

For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site:

http://umanitoba.ca/student/livewell/index.html

**Section (c) sample:** re: A notice with respect to copyright:

All students are required to respect copyright as per Canada's *Copyright Act*. Staff and students play a key role in the University's copyright compliance as we balance user rights for educational purposes with the rights of content creators from around the world. The Copyright Office provides copyright resources and support for all members of the University of Manitoba community. Visit <a href="http://umanitoba.ca/copyright">http://umanitoba.ca/copyright</a> for more information.

**Section (d) sample:** re: A statement directing the student to University and Unit policies, procedures, and supplemental information available on-line:

#### Your rights and responsibilities

As a student of the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school.

The <u>Academic Calendar http://umanitoba.ca/student/records/academiccalendar.html</u> is one important source of information. View the sections *University Policies and Procedures* and *General Academic Regulations*.

While all of the information contained in these two sections is important, the following information is highlighted.

 If you have questions about your grades, talk to your instructor. There is a process for term work and final grade appeals. Note that you have the right to access your final examination scripts. See the Registrar's Office website for more information including appeal deadline dates and the appeal form <a href="http://umanitoba.ca/registrar/">http://umanitoba.ca/registrar/</a>

- You are expected to view the General Academic Regulation section within the Academic Calendar and specifically read the Academic Integrity regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic integrity in your academic work. Visit the Academic Integrity Site for tools and support <a href="http://umanitoba.ca/academicintegrity/">http://umanitoba.ca/academicintegrity/</a> View the Student Academic Misconduct procedure for more information.
- The University is committed to a respectful work and learning environment. You have the
  right to be treated with respect and you are expected conduct yourself in an appropriate
  respectful manner. Policies governing behavior include the:

#### **Respectful Work and Learning Environment**

http://umanitoba.ca/admin/governance/governing documents/community/230.html

#### **Student Discipline**

http://umanitoba.ca/admin/governance/governing\_documents/students/student\_discipline.html and,

#### **Violent or Threatening Behaviour**

http://umanitoba.ca/admin/governance/governing\_documents/community/669.html

- If you experience Sexual Assault or know a member of the University community who
  has, it is important to know there is a policy that provides information about the supports
  available to those who disclose and outlines a process for reporting. The Sexual Assault
  policy may be found at:
  - http://umanitoba.ca/admin/governance/governing documents/community/230.html More information and resources can be found by reviewing the Sexual Assault site <a href="http://umanitoba.ca/student/sexual-assault/">http://umanitoba.ca/student/sexual-assault/</a>
- For information about rights and responsibilities regarding Intellectual Property view the policy <a href="https://umanitoba.ca/governance/sites/governance/files/2021-06/Intellectual">https://umanitoba.ca/governance/sites/governance/files/2021-06/Intellectual</a>
   Property Policy - 2013 10 01 RF.pdf

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective faculty/college/school web site <a href="http://umanitoba.ca/faculties/">http://umanitoba.ca/faculties/</a>

Contact an **Academic Advisor** within our faculty/college or school for questions about your academic program and regulations <a href="http://umanitoba.ca/academic-advisors/">http://umanitoba.ca/academic-advisors/</a>

#### **Student Advocacy**

Contact Student Advocacy if you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic or discipline concerns.

http://umanitoba.ca/student/advocacy/

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520 University Centre 204 474 7423

student\_advocacy@umanitoba.ca