

**Department of Statistical and Actuarial Sciences
Mathematics of Financial Options (FM3613B)**

Course outline for Winter 2021

Table of Contents and Schedule

Week	Dates	Topic	Instructor
1	Jan 1 15	Probability, Risk and Uncertainty.	M. Escobar-Anel
2	J 18 22	Repaying loans over time, increasing payments	M. Escobar-Anel
3	Jan 25 29	Bond Pricing with Default.	M. Escobar-Anel
4	Feb 1 5	CDO and Tranching.	M. Escobar-Anel
5	Feb 8 12	CDO and Tranching. (Test 1)	M. Escobar-Anel
6	Feb 15 19	Reading Week	N/A
7	Feb 22 26	Modeling Stock Prices	M. Escobar-Anel
8	Mar 1 5	Mean Variance Portfolio.	M. Escobar-Anel
9	Mar 8 12	Mean Variance Portfolio. (Test 2)	M. Escobar-Anel
10	Mar 15 19	Capital Asset Pricing Model.	M. Escobar-Anel
11	Mar 22 26	A Qualitative Introduction to Options (Test 3)	M. Escobar-Anel
12	Mar 29 Apr 2	Basic Stochastic Calculus.	M. Escobar-Anel
13	Apr 5 9	Black-Scholes Formula.	M. Escobar-Anel
14	Apr 12	Final Exam preparation.	M. Escobar-Anel

Online Participation and Engagement

- Students are expected to participate and engage with content as much as possible
- Students can post on OWL Forum their questions, answers, and have discussions

4. Course Materials

Textbook (required): Quantitative Finance: A Simulation-Based Introduction Using Excel.
Matt Davison. 978-1439871683

Supplemental: Instructor course notes.

and cognitive testing. The Academic Accommodation for Students with Disabilities policy can be found at:

[https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic
Accommodation_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf)

Academic Consideration for Student Absence

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the semester, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next

<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>

Completion of this course will require you to have a reliable internet connection and a device that meets the system and technical requirements for both Zoom and Proctortrack. Information about the system and technical requirements are available at the following links:

<https://www.proctortrack.com/tech-requirements/>

<https://support.zoom.us/hc/en-us>

* Please note that Zoom servers are located outside Canada. If you would prefer to use only your first name or a nickname to login to Zoom, please provide this information to the instructor in advance of the test or examination.

Professionalism & Privacy

Western students are expected to follow the [Student Code of Conduct](#). Additionally, the following 92 reW* n147(m)-2(i)4(5()-194(d)11(e)--7(o)-7(m)-2/)5(/)5(w)-4(w)-fowormchn5

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <https://www.uwo.ca/se/digital/>.

Learning-skills counsellors at the Student Development Centre (<http://www.sdc.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mental_health) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC, <http://westernusc.ca/services>.