



BUSINESS FINANCE 7290¹
Enterprise Risk Management (ERM) 1

Instructor: Steve Lindo
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Location: Gerlach Hall 355
Date/Time: Mondays, 6.10-9.30pm

Course Description

Business Finance 7290, *ERM 1*, extends the skills students developed in pre-requisite classes to the role of risk management within the firm. Taking *and* mitigating risks are integral part of what Senior Executives and Board of Directors do to create shareholder value. Yet, the global financial crisis and corporate meltdowns suggest that many companies do not fully understand the risks that they face or how to balance these risks to create value. Companies around the world are investing in enterprise risk management (ERM) functions and risk-aware employees. Risk management has become one of the top priorities of boards, investors, regulators and rating agencies.

This course is designed to train students in evaluating and managing risks using an enterprise-wide approach. The course starts with an examination of what kinds of risks companies face, how these risks arise, what approaches are appropriate for managing the different kinds of risks, how human behavior affects risk-taking and risk management, and how the practice of risk management has evolved to meet these challenges. It continues with explorations of the identification, measurement, assessment and communication of market risk, credit risk, liquidity risk, operational risk and insurance risk. It ends with an analysis of how risk management contributes to firm value, the implementation issues of enterprise-wide risk management and how to incorporate risk management into corporate decisions.

The main emphasis of the course is on creating value with risk management rather than on the technical details of statistical measurement and pricing of derivatives. The material is necessarily analytical and quantitative, but the course does not require knowledge of mathematics and statistics beyond what is required for the prerequisites.

¹ The professor can change the course schedule if necessary with the exception of the exam. Any changes made will be announced in class with sufficient advance notice and a revised syllabus will be posted on the course website.

Course Prerequisites: BUSFIN 7210 (Corporate Financial Management 1), BUSFIN 7220 (Investment Management 1) and BUSFIN 7230 (Derivatives)

Course Resources

1. *Required readings* are posted on the class website. To encourage preparation and facilitate class discussion, the professor may call on students in class to share their insights. Suggested readings related to current events may be posted periodically on the class website.
2. *Instructor slides* will be posted on the course website prior to each session, in a form that will enable you to take notes during class.
3. *Discussion threads* are posted for each session. Each student is expected to make two contributions to each discussion - one original, and one comment on another student's original contribution. Contributions need not be lengthy and will not be judged on their accuracy or completeness, but must be thoughtful and relevant. Your contributions to discussion threads throughout the course will count towards your participation grade.
4. *Additional Resources:* Below are some national and international news resources and risk management trade associations that are relevant to the course and excellent sources of information.
 - The *Wall Street Journal* (WSJ) provides national and international news as well as detailed information on financial markets and institutions.
 - The *Financial Times* is a daily newspaper out of London with a US edition. The *Financial Times* offers a much more extensive coverage of economic and business activity outside of the United States, compared to most domestic news sources such as the WSJ.
 - The *Economist* is a weekly British newsmagazine that analyzes the week's events and surveys financial market developments. Its target audience includes senior executives as well as high-ranking government officials.
 - *Bloomberg.com*: Bloomberg.com offers news, data, and videos on a broad group of markets, asset classes, and the economy.
 - *Risk Management Trade Associations*:
 - Global Association of Risk Professionals (GARP): A professional association for risk managers, whose mission is to "advance the risk profession through education, training, and the promotion of best practices globally." (www.garp.org)
 - Professional Risk Managers' International Association (PRMIA): A professional association for risk managers, whose mission is to "To be a leader of industry opinion and a proponent for the risk management profession and drive the integration of practice and theory." (www.prmia.org)
 - The Risk Management Association (RMA): A not-for-profit, member-driven professional association whose "sole purpose is to advance the use of sound risk management principles in the financial services industry." (www.rmahq.org)
 - Risk Management Society (RIMS): A non-profit organization "dedicated to educating, engaging and advocating for the global risk community." (www.rims.org)

Course Requirements and Grading

The course requirements include the following components:

Component	Points
Assignments:	
Risk function in annual report exercise	50
Price risk management exercise	100
Value-at-Risk exercise	100
Credit risk case study	100
Operational risk scenario design exercise	100
United Grain Growers case study	150
Final exam	300
Participation	100
TOTAL	1000

The assignments can be prepared in groups of no more than four students. You should form groups on your own. You should inform the Prof Lindo of the group composition through email by Monday Jan. 21. If you have a difficulty forming a group, you should contact Prof. Lindo. No late assignments will ever be accepted.

Class Attendance and Participation: Students are expected to **attend class** and to **arrive on time**. To a significant extent, the value you get from the course depends on your presence in class, and your classmates' opportunities to learn from your insights depend on your presence in class. If you are going to miss a class, email the professor ahead of time to be excused for your absence. Unexcused absences will result in a penalty for each unexcused absence.

Students are expected to have completed the assigned reading and assignments posted on the course content page before the start of class. To encourage preparation and facilitate class discussion, the professors may call on students in class to share their insights. As is the case with real world work environments, students are evaluated not by what they know but by what they **contribute**. Students are never penalized for making comments, which do not appear to be the "right answer." It is only through consideration of many diverse opinions and viewpoints that we will move toward a greater shared understanding of the multi-dimensional material that this course entails. The professor will keep track of participation throughout the course. **If you never make any comments, expect to receive a low participation score.**

Exam Policy:

Everyone will take the final exam on Monday, FEB 25. **There is no make-up exam.**

Extra Credit/Grade Change Policy:

Extra credit will not be offered unless it is available to the entire class. For example, if a student wishes to improve his or her grade at the end of the course, extra credit will not be available for this purpose, as it unfairly penalizes students who have consistently worked hard throughout the course. *This policy is strictly enforced.*

Office hours:

Professor Lindo will conduct weekly office hours via Webex. He is also available to meet with students via Webex on an individual basis by appointment. Please email to arrange an appointment.

Course website:

The course website is on Carmen (the University's Canvas system). The URL is <https://carmen.osu.edu>. The website will be used to post course slides, readings, other class materials and assignments.

Communication:

The quickest way to contact the professor is by email. ***Please email outside of Carmen so that he can reply more quickly to your email.*** Emails sent through Carmen can only be answered from within Carmen. Students can expect replies to emails within 24 hours.

Email address:

Prof. Lindo steve.lindo@gmail.com or lindo.7@osu.edu

ACADEMIC INTEGRITY

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's *Code of Student Conduct*, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of

unauthorized materials during an examination. Ignorance of the University's *Code of Student Conduct* is never considered an "excuse" for academic misconduct, so students please review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct. (Students can find the full Code at http://studentlife.osu.edu/pdfs/csc_12-31-07.pdf)

If a professor suspects that a student has committed academic misconduct in this course, they are obligated by University Rules to report their suspicions to the Committee on Academic Misconduct.

DISABILITY SERVICES

The Student Life Disability Services (SLDS) (www.ods.ohio-state.edu) verifies students with specific disabilities and develops strategies to meet their needs. Students requiring accommodations based on identified disabilities should contact the instructor at the beginning of the term to discuss their particular needs. Students with a specific disability are encouraged to contact SLDS to explore potential accommodations available to them.

Course Schedule	
Session 1 MON, JAN 7	<p style="text-align: center;">Risks Which Companies Face, Different Risk Management Approaches, How Human Behavior Affects Risk-taking and Risk Management, How Risk Management Has Evolved</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> • Kaplan and Mikes, 2012, Managing Risks, A New Framework, <i>Harvard Business Review</i> • Executive Report, 2012, Exploring Risk Appetite and Tolerance, <i>RIMS</i> • Rowe, 2018, Organizational Balance and Shareholder Value, <i>An Insider's Guide to Risk Management</i> <p><i>Assignment:</i></p> <ul style="list-style-type: none"> • Assess a firm's risk function from its annual report
Session 2 MON, JAN 14	<p style="text-align: center;">Risk Measurement Approaches, Price Risk</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> • Curtis and Carey, 2012, Risk Assessment in Practice, <i>COSO Thought Leadership in ERM</i> • Desai, Dessain & Sjöman, 2007, Hedging Currency Risk at AIFS, <i>HBS</i> • Crittenden and Ip, 2014, Managing Interest Rate with Swaps and Other Hedging Strategies, <i>US Bancorp Insights</i>

	<p><i>Assignment:</i></p> <ul style="list-style-type: none"> AIFS FX hedging case exercise, <i>HBS</i>
MON, JAN 21	Martin Luther King Holiday – No Class
<p>Session 3 MON, JAN 28</p>	<p style="text-align: center;">Price Risk Measurement and Mitigation</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> Nocera, Jan. 2, 2009, Risk Mismanagement, <i>NY Times Magazine</i> Das and Lynch, 1997, Value-at-Risk (excluding exercise), <i>HBS</i> Géczy, Minton, and Schrand, 2016, The Use of Multiple Risk Management Strategies: Evidence from the Natural Gas Industry (Paper Translation of 2006 <i>Journal of Risk</i> article). <p><i>Assignment:</i></p> <ul style="list-style-type: none"> Value at Risk exercise
<p>Session 4 MON, FEB 4</p>	<p style="text-align: center;">Credit and Liquidity Risk Identification, Measurement and Mitigation</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> Credit Risk Management Best Practices & Techniques, 2018, <i>RMA</i> Lopez, 2008, What Is Liquidity Risk, <i>Federal Reserve Bank of San Francisco</i> Pan, 2006, Liquidity Management Top Ten, <i>Capital Advisors Group</i> <p><i>Assignment:</i></p> <ul style="list-style-type: none"> Credit risk case study

<p>Session 5 MON, FEB 11</p>	<p style="text-align: center;">Operational and Insurance Risk Identification, Measurement and Mitigation</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> • Iyer, Managing Operational Risk, 2014, <i>Citi Transaction Banking Academy</i> • Shields & Trust, An Introduction to Operational Risk, 2010, <i>The Actuarial Profession</i> • Vaughan and Vaughan, 2008, Chapter 3, <i>Fundamentals of Risk and Insurance (Tenth Edition)</i> <p><i>Assignments:</i></p> <ul style="list-style-type: none"> • Operational risk scenario design
<p>Session 6 MON, FEB 18</p>	<p style="text-align: center;">Interconnected Risks, Integrated ERM and the Value of ERM</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> • Smithson and Simkins, 2005, Does Risk Management Add Value: A Survey of the Evidence, <i>Journal of Applied Corporate Finance</i> • Meulbroek, 2002, A Senior Manager's Guide to Integrated Risk Management, <i>Journal of Applied Corporate Finance</i> • Insights on GRC, 2014, Expecting More from Risk Management, <i>Ernst & Young</i> <p><i>Assignment:</i></p> <ul style="list-style-type: none"> • United Grain Growers Ltd exercise, <i>HBS case</i>
<p style="text-align: center;">Final Exams Session</p>	
<p>MON, FEB 25</p>	<p style="text-align: center;">FINAL EXAM</p>