



BUSFIN 7290 – Enterprise Risk Management (ERM) 1 Spring 2024

Course Information

- **Course times and location:** Mondays 6:15 PM – 9:30 PM in 355 Gerlach Hall (via Zoom for remote students) plus weekly Carmen interaction
- **Credit hours:** 1.5
- **Mode of delivery:** In Person

Instructor

- **Name:** Narasimha (Naresh) Vadrevu
- **Email:** vadrevu.1@osu.edu
- **Office location:** None
- **Office hours:** Unless announced otherwise, the instructor is available to meet with students on an individual basis by appointment. Please email to make an appointment for an office visit.
- **Course Webpage:** on CarmenCanvas
- **Preferred means of communication:**
 - My preferred method of communication for questions is at my **vadrevu.1@osu.edu** email.
 - My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to be sure you receive these messages.

Course Prerequisites

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

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 risks *and* mitigating risks is an 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. The current business environment also is changing. 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 analysis of how risk management contributes to firm value and discusses a general framework for how to use risk management to create value.

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. We will examine risk management problems for financial intermediaries as well as for firms outside the financial sector.

Learning Outcomes

By the end of this course, students should successfully be able to:

- Understand and define Risk, Risk Management, ERM, and the factor influencing ERM
- Risk Assessment and Measurement
- Quantitative Risk Assessment and Methods
- ERM Strategies
- Current State of ERM

Pedagogy

Mode of delivery: The course will be structured as a combination of lectures, discussions, and cases. **All classes will be IN PERSON.** You will find a sequence of materials and activities each week in Carmen, and we will meet for a weekly in-person during our scheduled class meeting time. I will post my PowerPoint slides on the course website on Canvas before each class to help you follow the lectures and take notes. Please remember that posted slides are not complete. For completeness, you should attend the lectures.

Pace of activities: This course is divided into **weekly modules** that are released one week ahead of time. Students are expected to keep pace with weekly deadlines but may schedule their efforts freely within that time frame.

Credit hours and work expectations: This is a 1.5 credit-hour course. According to [Ohio State bylaws on instruction](http://go.osu.edu/credithours) (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for

example) in addition to 6-8 hours of homework (reading and assignment preparation, for example).

Attendance and participation requirements: Research shows regular participation is one of the highest predictors of success. With that in mind, I have the following expectations for everyone's participation:

- **Weekly sessions: Required**

You are expected to join the live course instruction every week. 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. And during the week you will probably log in multiple times into Carmen for reading assignments and homework activities. If you have a situation that might cause you to miss a class, discuss it with me *as soon as possible*.



Course Materials, Fees and Technologies

Required Materials and/or Technologies

- *Course notes* are posted on the course website. Please bring your notes to class each day to participate in the class discussion.
- HBS Course packet
 - Will be published soon
- *Required readings* are posted on the class website. Students are expected to have completed the assigned reading before class. To encourage preparation and facilitate class discussion, the professors will call on students in class to share their insights.

Recommended/Optional Materials and/or Technologies

- Suggested readings related to current events will be posted periodically on the class website.
- *Additional Resources:* Below are some national and international news resources that are relevant to the course and excellent sources of information for any serious business student.
 - 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 mostly 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)
 - 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)



Required Equipment

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection
- **Webcam:** built-in or external webcam, fully installed and tested
- **Microphone:** built-in laptop or tablet mic or external microphone
- **Other:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at go.osu.edu/student-tech-access.

Required Software

Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Visit the [installing Office 365](https://go.osu.edu/office365help) (go.osu.edu/office365help) help article for full instructions.

CarmenCanvas Access

You will need to use [BuckeyePass](https://buckeyepass.osu.edu) (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you do each of the following:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](https://go.osu.edu/add-device) (go.osu.edu/add-device) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- [Install the Duo Mobile application](https://go.osu.edu/install-duo) (go.osu.edu/install-duo) on all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at [614-688-4357 \(HELP\)](tel:614-688-4357) and IT support staff will work out a solution with you.

Technology Skills Needed for This Course

- Basic computer and web-browsing skills
- [Navigating CarmenCanvas](https://go.osu.edu/canvasstudent) (go.osu.edu/canvasstudent)
- [CarmenZoom virtual meetings](https://go.osu.edu/zoom-meetings) (go.osu.edu/zoom-meetings)
- [Recording a slide presentation with audio narration and recording, editing and uploading video](https://go.osu.edu/video-assignment-guide) (go.osu.edu/video-assignment-guide)



- Being able to use Microsoft Office products, such as Word, Excel, PowerPoint, etc.

Technology Support

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

- **Self Service and Chat:** go.osu.edu/it
- **Phone:** [614-688-4357 \(HELP\)](tel:614-688-4357)
- **Email:** servicedesk@osu.edu



Grading and Faculty Response

How Your Grade is calculated (Subject to change)

Assignment Category	Points
Assignment 1	50
Assignment 2	50
Assignment 3	50
Final Exam	100
Class Participation	50
Peer Review	50
Total	350

See [Course Schedule](#) for due dates.

As noted above, students are expected to have completed the assigned reading and assignments posted on the course content page by the deadline specified for each assignment. To encourage preparation and facilitate class discussion, the Professor(s) will 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. **If you never make any comments, expect to receive a low participation score.**

Exam Policy:

Everyone will take the exam on Monday, February 26th, 2024 at 6:15 PM. **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.*

Descriptions of Major Course Assignments

*Course requirements: Students will be responsible for three assignments and a final examination. The assignments can be prepared in groups of no more than **four** students. You should form groups on your own. If you have difficulty doing so, you should contact Mr. Vadrevu. You should inform Mr. Vadrevu (vadrevu.1@osu.edu) of the group composition through email by Monday Jan 22, 2024. No late assignments will ever be accepted.*

Late Assignments

Please refer to Carmen for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments. *No late assignments will be accepted.*

Instructor Feedback and Response Time

[Example: I am providing the following list to give you an idea of my intended availability throughout the course. Remember that you can call [614-688-4357 \(HELP\)](tel:614-688-4357) at any time if you have a technical problem.

- **Preferred contact method:** If you have a question, please contact me first through my Ohio State email address, vadrevu.1@osu.edu. I usually reply to emails within **24 hours on days when class is in session at the university. Please email outside of Carmen so that I can reply more quickly to your email.** Emails / messages sent through Carmen cannot be guaranteed to be answered.
- **Class announcements:** I will send all important class-wide messages through the Announcements tool in CarmenCanvas. Please check [your notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to ensure you receive these messages.
- **Grading and feedback:** For assignments submitted before the due date, I will try to provide feedback and grades within **seven days**.

Grading Scale

93–100: A
 90–92.9: A-
 87–89.9: B+
 83–86.9: B
 80–82.9: B-
 77–79.9: C+



73–76.9: C
 70–72.9: C-
 67–69.9: D+
 60–66.9: D
 Below 60: E

Other Course Policies

Academic Integrity Policy

See [Descriptions of Major Course Assignments](#) for specific guidelines about collaboration and academic integrity in the context of this online class.

Ohio State's Academic Integrity Policy

Academic integrity, Misconduct, and collaboration:

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 Mr. Vadrevu recommends that students 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.)

Cheating is grounds for failing this course and additional sanctions. In accordance with faculty rule 3335-5-487, all instances of alleged academic misconduct will be reported to the university Committee on Academic Misconduct. If the committee concludes that a violation has occurred, it recommends appropriate sanctions to the Office of Academic Affairs. As stated in the university's Code of Student Conduct (<http://studentaffairs.osu.edu/resources/>), students have an obligation to report academic misconduct. Such misconduct can be reported to the appropriate faculty member or program dean; confidentiality is protected.

Permitted collaboration for this course is as follows:

- Participation, Individual Assignments, & Final Exam – *No collaboration*

- **Group Assignments – Collaboration with *teammates only*. Sources outside the information included in the assignments & cases, such as case solutions or briefs available for purchase or free on the web or case briefs submitted by other students at OSU or elsewhere in the past or during this semester are **STRICTLY PROHIBITED**. Students caught violating this guideline will be reported to the Committee on Academic Misconduct.**

Turnitin

Students at The Ohio State University are accountable for the integrity of the work they submit. Therefore, you should be familiar with the guidelines provided by the [Committee on Academic Misconduct \(COAM\)](#) and [Section A of OSU's Code of Student Conduct](#) in order to meet the academic expectations concerning appropriate documentation of sources. In addition, OSU has made Turnitin, a learning tool and plagiarism prevention system, available to instructors. For this class, you will submit your papers to Turnitin from Carmen. When grading your work, I will interpret the originality report, following [Section A of OSU's Code of Student Conduct](#) as appropriate. For more information about Turnitin, please see [the vendor's guide for students](#). See also the information for students in the Turnitin Feedback Studio (https://guides.turnitin.com/01_Manuals_and_Guides/Student_Guides/Feedback_Studio). Note that submitted final papers become part of the OSU database.

[Section A of OSU's Code of Student Conduct](#) defines plagiarism as '...the representation of another's work or ideas as one's own; it includes the unacknowledged word-for-word use and/or paraphrasing of another person's work, and/or the inappropriate unacknowledged use of another person's ideas.'

Other sources of information on academic misconduct (integrity) to which you can refer include:

- [Committee on Academic Misconduct](#) (go.osu.edu/coam)
- [Ten Suggestions for Preserving Academic Integrity](#) (go.osu.edu/ten-suggestions)
- [Eight Cardinal Rules of Academic Integrity](#) (go.osu.edu/cardinal-rules)

Copyright for Instructional Materials

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at equity.osu.edu,
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

Your Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. No matter where you are engaged in distance learning, The Ohio State University's Student Life Counseling and Consultation Service (CCS) is here to support you. If you find

yourself feeling isolated, anxious or overwhelmed, [on-demand mental health resources](https://go.osu.edu/ccsondemand) (go.osu.edu/ccsondemand) are available. You can reach an on-call counselor when CCS is closed at [614- 292-5766](tel:614-292-5766). **24-hour emergency help** is available through the [National Suicide Prevention Lifeline website](https://suicidepreventionlifeline.org) (suicidepreventionlifeline.org) or by calling [1-800-273-8255\(TALK\)](tel:1-800-273-8255). [The Ohio State Wellness app](https://go.osu.edu/wellnessapp) (go.osu.edu/wellnessapp) is also a great resource.

Policy Regarding COVID

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the Safe and Healthy Buckeyes site for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.



Accessibility Accommodations for Students with Disabilities

Requesting Accommodations

The university strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability including mental health, chronic or temporary medical conditions, please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with [Student Life Disability Services \(SLDS\)](#). After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services.

Disability Services Contact Information

- Phone: [614-292-3307](tel:614-292-3307)
- Website: slds.osu.edu
- Email: slds@osu.edu
- In person: [Baker Hall 098, 113 W. 12th Avenue](#)

Accessibility of Course Technology

This online course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations as early as possible.

- [CarmenCanvas accessibility](http://go.osu.edu/canvas-accessibility) (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- [CarmenZoom accessibility](http://go.osu.edu/zoom-accessibility) (go.osu.edu/zoom-accessibility)



Course Schedule

Refer to the CarmenCanvas course for up-to-date due dates.

Week 1 MON, JAN 8	<p align="center">What is Risk? Risk Management? ERM? People and Behaviors, Governance, Culture and Risk Taking</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> • Risk Management - A Corporate Governance Manual - Aswath Damodaran – Chapters 1 through 3 • RIMS, 2012, Exploring Risk Appetite and Tolerance. • Wittenberg, Pellerum, and Smith-Bingham, 2012, Defining your Risk Appetite: The Importance of Taking a Quantitative and Qualitative Approach • Lam, Next Frontier: Performance-based Continuous ERM <p><i>Assignment:</i> Assignment1 – Firm's views on risk and risk management</p>
Week 2 MON, JAN 15	<p align="center">Martin Luther King Holiday – No Class</p>
Week 3 MON, JAN 22	<p align="center">Risk Assessment and Measurement</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> • Risk Management - A Corporate Governance Manual - Aswath Damodaran – Chapter 4 • Curtis and Carey, 2012, Risk Assessment in Practice, <i>Thought Leadership in ERM</i>. • Doherty, Why Risk is Costly for Firms (Chapter 7)
Week 4 MON, JAN 29	<p align="center">Quantitative Risk Assessment and Methods</p> <p><i>Reading:</i></p> <ul style="list-style-type: none"> • Risk Management - A Corporate Governance Manual - Aswath Damodaran – Chapters 5 through 7 • Lynch, 1997, <i>Value-at-Risk (excluding exercise)</i> – HBS Course Packet • Nocera, Jan. 2, 2009, <i>Risk Management</i>, NY Times Magazine. <p><i>Additional Reading:</i></p> <ul style="list-style-type: none"> • Van Liebergen, <i>Machine Learning: A Revolution in Risk Management and Compliance?</i> <p><i>Assignment:</i> Assignment 2 – Risk Assessment, and VaR</p>



<p>Week 5</p> <p>MON, FEB 5</p>	<p>ERM Strategies</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> • Risk Management - A Corporate Governance Manual - Aswath Damodaran – Chapters 8 through 9 • Stulz, 2013, How Companies Can Use Hedging to Create Shareholder Value, <i>Journal of Applied Corporate Finance</i>. • HBS Note on Forward Contract and Swaps; Introduction to Derivatives • HBS Case: Hedging Currency Risks At AIFS <p><i>Additional Readings:</i></p> <ul style="list-style-type: none"> • Woolward, 2017, Risk-Based Approaches to Cybersecurity, <i>RIMS.org</i>
<p>Week 6</p> <p>MON, FEB 12</p>	<p>ERM Strategies</p> <p><i>Readings:</i></p> <ul style="list-style-type: none"> • Risk Management - A Corporate Governance Manual - Aswath Damodaran – Chapters 10 through 12 • Kaplan and Mikes, 2012, Managing Risks, A New Framework, <i>Harvard Business Review</i> • HBS Case – Honeywell, Inc. and Integrated Risk Management <p><i>Assignment:</i></p> <p><i>Assignment 3 – Hedging Strategies</i></p>
<p>Week 7</p> <p>MON, FEB 19</p>	<p>ERM and Strategy Current State of ERM</p> <p><i>Reading</i></p> <ul style="list-style-type: none"> • Risk Management - A Corporate Governance Manual - Aswath Damodaran – Chapters 12 through 13 • Meulbroek, 2002, A Senior Manager's Guide to Integrated Risk Management, <i>Journal of Applied Corporate Finance</i>
<p>Final Exams Session</p>	
<p>MON, FEB 26</p>	<p>FINAL EXAM</p>