FIN 4550-1001 (MBA 5520-5001) FINANCIAL Management with Excel Fall 2022

Instructor: Dr. Mingsheng Li
Class Time: 11:30-12:45pm T/T

Class Locations: Tuesdays – Olscamp Hall 113 Thursdays- Central Hall 1005

Office Hours: 2:30-3:30 pm T/Th or by appointment

Office Location: Maurer Center 318
Primary contact method: E-mail via mli@bgsu.edu

When you contact me, please email me directly via <u>mli@bgsu.edu</u> and indicate that you are in FIN4550/MBA5520. Specifically, please do <u>NOT</u> contact me by sending text messages from Canvas because it delays my responding time, and it is quite time consuming to search a message from Canvas after receiving Canvas notice.

Required Text: Principles of Finance with Excel, 2nd Edition, 2011 Oxford (or 1st Edition 2006)required

> TOP HAT SOFTWARE-required

Please enroll in Tophat using the following link:

https://app.tophat.com/e/917546 (for FIN4500/MBA5520 – Fall 2022).

More importantly, please <u>enroll in Tophat using your official names</u> <u>and BGSU email</u> as they are in the BGSU Canvas system. Otherwise, your Tophat grade cannot be synced with Canvas grade.

- ➤ Recommended Text: Financial Analysis with MS Excel, 6th Edition, 2012, South-West-Cengage Learning, by Mayes & Shank.
- Assigned Mini-cases & homework, readings materials (PDF files), PowerPoint notes, and other handouts

Prerequisite: grade of C or better in FIN 3000.

I. Course Description

FIN 4550 (Financial Modeling) is an advanced course in Finance. It focuses primarily on the development of spreadsheet applications and the use of the case method to apply decision-making procedures to real world problems in finance areas.

II. Course Goals

FIN 4550 is a course devoted to (1) enhance students' knowledge primarily in the areas of corporate finance and investments; (2) improve students' analytical skills and problem solving ability through spreadsheet developments; (3) enable students to explore and better understand current issues in finance, and (4) maximize students' learning opportunity by applying Excel skill to solve finance problems. The course employs different methods (such as spreadsheet development, case study, project, etc.) in achieving these goals. Additionally, lectures are presented throughout the course discussing the main theories and issues in finance areas and introducing Excel functions that are commonly used in finance.

The objectives of the course include the following:

- 1. Apply finance theories and use spreadsheet as a main tool to analyze realistic financial problems in the areas of:
 - (1) financial statements and performance;
 - (2) working capital management and free cash flow forecast;

- (3) capital budgeting and funds allocation associated with fixed assets;
- (4) alternative source of capital and related cost of raising capital;
- (5) investment analysis, including time value of money, security valuation, and duration.
- (6) Risk analysis and basic derivatives.
- 2. Using case method as a main pedagogy, maximum involvement and participation on the part of the students is stressed. The course will attempt to develop each student's ability to make decisions in realistic situations after (i) analyzing problems facing the firm and individuals and (ii) evaluating all available but viable alternatives.
- 3. Another objective is to expose the student to outside reading materials that are relevant to the course topics discussed. These may come from various sources such as the Journal of Applied Corporate Finance, Journal of Portfolio Management, Financial Analysts Journal, Journal of Empirical Finance, Financial Review, SSRN.com, and/or from practitioners' publications such as Business Week and the Wall Street Journal.

III. Student Learning Outcomes

After successfully completing this course, students should be able to:

- 1. Demonstrate a clear understanding of both conceptual background and analytical techniques necessary to make sound corporate financial management and investment decisions;
- 2. Develop communication skills through class discussions, presentations, group assignments, and outside readings;
- 3. Keep the desire to continue to learn throughout their remaining years for personal benefit and professional growth;
- 4. Retain and effectively use the knowledge and skills related to problem solving in various areas of finance.
- 5. More effectively utilize spreadsheets to make and present calculations and analysis.

IV. Course Content

The following outline relates the student learning objectives to specific topics:

- 1. Financial Statement/Financial Condition Analysis
- 2. Time Value of Money and Security Valuations.
- 3. Source and Cost of Capital/Capital Structure Decisions
- 4. Capital Budgeting and Investment Decisions
- 5. Security Risk Analysis and Portfolio Management
- 6. Dividend Policy and Empirical issues
- 6. Use and Valuation of Options

VI. Grading Policy

Given the nature of the course, students will be actively involved throughout the course. Case analyses, both written and oral, will be required. Students will be actively involved in using spreadsheet applications to financial problems. A student's performance and final letter grade in the course are evaluated in several areas: 1) written case report and case presentations; 2) assigned homework and quizzes, 3) participation in class discussions, 4) exams and research projects. The course grade will be determined based on the following distribution:

In-class exercise from Tophat	10%
Individual assignments	15%
Mid-term 1	25%
Mid-term 2	25%
Talent Project*	25%
Exam 3	25%
Total	100%

Letter grade will be determined as: A—90% or above, B—80%~89%, C—70%~79%, D—60% ~ 69%, F-- below 59%

*Note that the grade on a Talent project can be used to replace either mid-term 1 or mid-term 2 grade. If one considers doing a talent project, you must follow the procedure, i.e., submitting your proposal, progress report, and final project as listed for Talent Project Guideline. The talent project can be completely individually or by a group of no more than three people. Failure to submit either a proposal or program report disqualifies for the Talent Project.

VII. Assessing the learning outcomes

During the semester, the instructor will be continually monitoring the students' performance to assess and evaluate their progress towards their learning outcome of the subject matter. The instructor's assessment will primarily consist of evaluating the student's individual assignments, class participations (through Tophat), three exams, and talent project.

Note:

Homework will be assigned on a regular basis; however, not of all the assignments will be collected. Assigned homework problems will be discussed at the conclusion of the coverage of each chapter. Answers to assigned problems will be made available to students after class discussions. **Doing homework before class discussions is REQUIRED** for each student and very helpful for students to understand course materials and will have significant effect on your grades.

VIII. Class Policy and Procedures

At a minimum, all policies (including *COVID* polices) stated in the current BGSU Academic Honesty Policy and Code of Student Conduct should be followed. Additional class policies include:

A. Make-up Policy:

Make-up exam request may be considered ONLY in case of illness, emergency or university obligations. When you request for a make-up exam, you need to present written documents from doctors or from relevant department advisors/supervisors of BGSU to prove absence. When absence is unavoidable and with excusable reasons, students need to report to the instructor either before the exam or at the next class after the exam to arrange a possible make-up exam. The grade for any missed exams without excusable reasons or without reporting to the instructor within the required period is zero. Final exam focuses on the topics covered after mid-term 2. However, many topics are connected. There is NO make-up for assigned homework because students have at least 3-days to complete an assignment after an assignment is announced and before the deadline is due.

B. Attendance Policy:

Attendance is **required** and recorded by taking attendance from Tophat. When absence is unavoidable, student must show written evidence. *If emergency situation (e.g., sick or family emergency, etc.), you need to bring your document to your instructor's office hours during the earliest available time after you come back to class so that <i>the ATTENDANCE part in Tophat can be adjusted accordingly* for the class you missed. Otherwise, it is not impossible to make any adjustment at the end of the semester.

C. Codes of Conduct and Academic Honesty Policy:

All students are subject to Academic Honesty Policy. Academic dishonesty in terms of cheating, reporting or sharing other people's work to be your own (plagiarism), or any other violations will be reported and penalties will be assigned. For details, refer to:

- BGSU Student Handbook (http://bgsu.edu/downloads/sa/file15768.pdf)
- The Academic Charter, B.II.H (http://www.bgsu.edu/offices/facsenate/page471.html)
- Student Discipline Programs (http://bgsu.edu/offices/sa/studentdiscipline/index.html)

Any cheatings will be identified and punished according BGSU rules.

F. Discipline/Course Specific Policies:

- All assignments must be completed independently by each student/group. You are NOT allowed to copy answers from any other people or from other sources, nor are you allowed to share your work with any other people.
- > Students are NOT allowed to take photos or scan exam or quiz questions. Nor are students allowed to use materials (e.g., homework, mini-case, projects, exam questions) from previous students.
- > It is absolutely NOT allowed to use other people's codes to complete your project.
- > Students are NOT allowed to distribute or post any materials or answers from this course to anyone or internet.
- > Violation of any of the above will result in zero grade for the assignment, and will be disciplined based on the BGSU Academic Honesty Policy.
- > The instructor has the right to re-assign a zero grade for any assignments to students who share work with others or copy assignments from other places.

G. Other University Policies:

Disability Policy: In accordance with the University policy, if the student has a documented disability and requires accommodations to obtain equal access in this course, he or she should contact the instructor at the beginning of the semester and make this need known. Students with disabilities must verify their eligibility through the Office of Disability Services for Students, 413 South Hall, 419-372-8495. (http://www.bgsu.edu/offices/sa/disability/)

Religious Holidays: It is the policy of the University to make every reasonable effort allowing students to observe their religious holidays without academic penalty. In such cases, it is the obligation of the student to provide the instructor with reasonable notice of the dates of religious holidays on which he or she will be absent. Absence from classes or examinations for religious reasons does not relieve the student of responsibility for completing required work missed. Following the necessary notification, the student should consult with the instructor to determine what appropriate alternative opportunity will be provided, allowing the student to fully complete his or her academic responsibilities. (As stated in *The Academic Charter*, B-II.G-4.b at: http://www.bgsu.edu/downloads/bgsu/file919.pdf).

Tentative Schedule and Related Topics (Detailed schedule and deadlines see Canvas Modules)

Week	Chapter and Topic
1 -5	Introduction and class orientation
	Excel basics: chapters 24-29
	Chapter 2: Time Value of Money
	Chapter 3: What does it cost?
	Chapter 4: Capital Budgeting
	Chapter 5: more problems in capital budgeting
	Exam 1 (around Sept. 22, Thursday – week 5)
6-10	Chapter 6: WACC, Gordon Model
	Chapter 7: Financial Planning Model
	Chapter 8: Risk, Liquidity Analysis
	Chapter 9 &10: Portfolio Analysis & Investment
	Chapters 11 - 13: CML, SML, CAPM
	Exam 2 (around Oct. 27, Thursday – week 10)
11-15	Chapter 15: Bond Valuation
	Chapter 16: Stock Valuation
	Chapter 19 Dividend Policy
	Chapter 20 - 21: Introduction of Options
	Chapter 22: Advanced topics in options
	Student Presentations /Final Review
16	Final Exam: 11:30am-2:00pm
	Friday, Dec. 9, 2022

Notes:

- 1. The instructor reserves the right to change this schedule (especially exam dates and case assignments) if necessary.
- 2. Students need special arrangements for classes and tests due health conditions please contact **Office of Disability Services** (372.8495 or http://www.bgsu.edu/offices/sa/disability).
- 3. All assignments must *be submitted to Canvas* before the deadlines posted on Canvas.
- 4. No class on 11/17 due to SFA conference. No class on 11/24 due to Thanksgiving holiday.

Key Date Points

- ➤ 09/27 (Tue, the 6th week): one-page outline about a chosen topic and tentative issues to be addressed (Any student who fail to submit an outline by this day is not qualified to do this project).
- ➤ 11/01 (Tue, the 11th week): two pages mid-term progress report, which includes (but not limited to) the followings: (1) narrowed down issues to be addressed in the project and progress made; (2) related literature (academic papers and articles) collected and reviewed; (3) data collected and possible test methods to be used. (2 points penalty for late submission, suggested by previous students)
- ➤ 12/01: turn-in the *final version* of the completed project. (3 points penalty for late submission)
- > 12/09, 11:30-2:00pm Final Exam

Note that it is each student's responsibility to mark these key dates on your calendar and submit your report on time. Missing a report on the required date will result in a penalty and the related points will be taken away from total project grade. If any individual could not meet the deadline due to unexpected circumstance, the affected individual needs to inform your instructor prior to the deadline.

Research & Talent Project

Purpose and Description

Students have different talents and unique interests due to their personality, education background or career goals. Thus, it would be more beneficial for students to choose whatever a topic and format that you are interested as your project, which of course must be related to the main topics of the course. Instead of imposing a specific topic on you based on your instructors' judgment, students have a chance to choose a topic and format to utilize your potential, explore your interests, and demonstrate your talent.

Specifically:

- --No specific topic or format is imposed on you; your creativity is the only limit. However, whatever you choose, you **are Required to apply extensively** various useful Excel functions such as basic *Macro*, Web query, *Vlookup*, *Hlookup*, *Match*, *Index*, *VB Application*, *Form Controls* and *ActiveX Controls* (from *Insert* under *Developer*) and different macros to the topic and project at your choice and to create dynamic charts & tables in your project whenever possible.
- -- The project could be a research paper, creating a new case (with spreadsheet template, explanations, and answer keys), developing a computer program or software, writing an Excel & Financial manual or, anything related to the main topics of this course. I will post several sample projects that were completed by previous students.
- --Grading will be based on contents of the project, depth and coverage, relevance to the course topics, usefulness to other fellow students, creativeness and innovation, writing quality, presentation (both writing and in-class presentation) clarity and consistence. The bottom line is that if you just spend a few weeks in a rush before the deadline and without a good-plan and gradual buildup, you won't learn much as you could otherwise and your grade won't be good either.

Main Data Sources:

If students decide to do a research project or create a new case, the following data sources are available: Bloomberg Terminals (Finance Research & Trading Room)

Yahoo and Google Finance—current and historical information of firms and macro information

BSBA Learning Goals and Outcomes

BSBA Learning Goals:

Goal 1: Students graduating with a BSBA degree will demonstrate competency in business knowledge and its application

Outcomes: Students will -

- 1. Demonstrate understanding of fundamental knowledge in accounting, economics, finance, business statistics, operations & supply chain management, business law, organizational behavior, marketing, information technology, management science, and global strategy.
- 2. Demonstrate proficiency in using business-related software applications.
- 3. Demonstrate competency in integrating knowledge across business disciplines.

Goal 2: Students graduating with a BSBA degree will demonstrate competency in applying appropriate problem solving, decision making and critical thinking skills

Outcomes: Students will -

- 1. Identify a business problem, develop and critically evaluate alternative solutions, and make appropriate recommendations.
- 2. Assess the outcomes of a course of action and make appropriate adjustments.

Goal 3: Students graduating with a BSBA degree will demonstrate effective communication and interpersonal skills

Outcomes: Students will -

- 1. Effectively write a business document.
- 2. Make effective oral presentations in both individual and team settings.
- 3. Demonstrate the understanding and application of teamwork.

Goal 4: Students graduating with a BSBA degree will recognize the ethical aspects of business.

Outcomes: Students will -

- 1. Recognize the context of the ethical situation (economic, legal or cultural).
- 2. Define the ethical responsibilities of business organizations.
- 3. Describe the ramifications of unethical behavior.

College of Business faculty & student expectations

What we expect of students:

- Attendance Students are expected to consistently attend class, arrive to class on time, stay for the entire class, and to let instructors know when this will not be the case.
- **Preparation** Students are expected to put in the necessary work outside of class (reading, watching video, practice problems) to be prepared for class.
- Participation Students are expected to contribute regularly and meaningfully, as the course structure allows.
- Academic Honesty Students are expected to be aware of and uphold the BGSU Academic Code of Conduct.
- **Professional Etiquette/Manners** Students are expected to behave in a manner that enhances the learning or skill development of themselves and others.
- **Engagement** Students are expected to be actively involved outside of the classroom (community service, extracurricular clubs, internships), in order to discover and nurture their passion.

What students can expect of us:

- **Communication** Students can expect faculty to clearly describe specific expected behavior, course policies, due dates of assignments, the criteria on which they will be graded, and any changes to the course.
- **Preparation and Organization** Students can expect faculty to be well-prepared for class activities, and maintain sufficient organization for the functionality of the course.
- **Feedback** Students can expect faculty to provide feedback, either through reasonably prompt graded assignments, or written and oral comments.
- **Expertise** Students can expect faculty to be well-qualified and passionate about the subject they teach, and to provide real-world applications of material when appropriate.
- Accessibility Students can expect faculty to hold regular office hours, and to reply to email and discussion boards within a few days' time. Faculty will try to learn student names, and will generally be cordial to students outside the classroom.
- **Respect** Students can expect the faculty to respect their privacy, and to avoid denigrating the student when circumstances cause the student's performance to be less than optimal.