**BUSINESS FINANCE 7221 – FINANCIAL MODELING**

**AUTUMN 2025**

**Instructor:** Tod Schneider **Classroom**: Gerlach 305–T/R 2:45-4:15 PM EST

**Office:** 255B Fisher Hall **Office hours:** By Appointment via Zoom

**E-mail:** [**schneider.275@osu.edu**](mailto:schneider.275@osu.edu)

**COURSE OBJECTIVES & OVERVIEW**

Financial modeling will focus on leveraging primary finance skills and Excel to apply and build:

* Dividend discount model
* Simple discounted cash flow models
* Detailed discounted cash flow model
* Economic Value Added model

Additionally, the course will introduce Python and methods of forecasting.

We will accomplish these objectives through:

* Lecture
* Class exercise + discussion
* Financial modeling practice problems
* Three simple discounted cash flow models
* One detailed discounted cash flow model, thesis and presentation

**CLASS MATERIALS**

*Required* books

* [Investment Valuation](https://www.amazon.com/Investment-Valuation-Techniques-Determining-Finance/dp/1394254601/ref=sr_1_3?crid=1DC76Y2GRJF1O&dib=eyJ2IjoiMSJ9.qO7c1_iJjiWs5WxyJ8uG2BHPJHEkWR1TNb-p-WMPlo3-WnXbCcYcrXPl4iqPx4e8OdYq5xrzyFkWY7seReWgstfap9wtlD1cWf5AuYEzqjKoc3FmKZa7RPc83zQVX1uka_iVQyYtQDfAOasiQk0jomqNlnKXxUyAhu7fl8MwjR22EkTKeFyr5quY4_N9nh8nKpzBqKjP7437ghi5XMQNKmwoRD8YmLyXE2LU4smhJLk.qN1KvrMh13UC_0dvjaoRnMXPvsFumRfAgl7WJUrzwKE&dib_tag=se&keywords=investment+valuation&qid=1754961094&sprefix=investment+valuation%2Caps%2C180&sr=8-3)

*Optional books*

* [Best Practices for Equity Research](https://www.amazon.com/Best-Practices-Equity-Research-PB/dp/1265624666/ref=sr_1_1?crid=G2AGT96QLQ1M&dib=eyJ2IjoiMSJ9.JxwN6rPEBdw8T6gwAnMNVA.3nEZCHUQwgrEby_qwGpcO9Eh3qyhkZ30LVZqgl2Cqck&dib_tag=se&keywords=best+practices+of+financial+analyst+valentine&qid=1754961153&sprefix=best+practices+of+financial+analyst+valentine%2Caps%2C133&sr=8-1)
* [The Dark Side of Valuation](https://www.amazon.com/Dark-Side-Valuation-paperback-2nd/dp/0134431189/ref=sr_1_1?ie=UTF8&qid=1514605190&sr=8-1&keywords=the+dark+side+of+valuation)
* [Narrative and Numbers](https://www.amazon.com/Narrative-Numbers-Business-Columbia-Publishing/dp/0231180489)

**GRADING**



**TopHat Quiz - 15% of total grade**

TopHat quizzes will be graded. This class requires *action*. You must practice and master the rudiments to build useful financial models.

**Excel quiz - 10% of total grade**

The Excel quiz will be a short SINGLE-attempt quiz in CARMEN to assess your ability to:

1) format (aesthetic, print, graph) and 2) apply the correct formula for the financial model (FV, PV, NPV, IRR, simple discounting, scenario/sensitivity/regression analysis).

**Install Anaconda (Python IDE) and sign-up for FMP API key – 5% of total grade**

Install [Anaconda](https://www.anaconda.com/download/) and sign-up for an [API through FMP](https://financialmodelingprep.com/developer/docs/) to work through the in-class quantitative finance example.

**Python ETF project - 10% of total grade**

The Python ETF project will leverage basic Python skills acquired as well as AI to perform an intermarket analysis.

**Three simple DCF models - 15% of total grade**

Build three simple DCF models of three consumer discretionary companies of your choosing by utilizing the most recent annual historical financial data and forecasting key assumptions – sales growth, operating margin, discount rate and terminal growth rate (template provided). Building three simple DCF models will serve two purposes: 1) it will assist in *scoping* the final detailed DCF project by quantitatively determining whether the company *merits* further research 2) it will provide additional practice to master the mechanics of discounted cash flow valuation.

Each group will submit one workbook containing the all three simple DCF models and briefly (10-20 min.) discuss the three simple DCF models and walk-through the rationale for the chosen assumptions.

**Peer review of simple DCF – 10% of total grade**

Each group will peer review another group’s DCF models and provide comments (1 paragraph or 3-4 sentences per model/presentation. Evaluations will be based on: the idea being actionable and providing compelling supporting evidence for the assumptions. Points will be assigned on a scale of 1-10. I expect all comments to be respectful and constructive (use IDEO framework “I like…I wish…what if…”).

**Detailed discount cash flow (DCF) model – 15% of total grade**

You will construct a detailed discounted cash flow model of a positive net income or free cash flow consumer discretionary company.

The detailed model must include:

1. Discounted cash flow calculation
2. Key drivers
3. Forecasted financial statements and
4. Forecasted financial ratios

**Investment memo – 10% of total grade**

The memo must include:

1. **Actionable** buy or sell recommendation
2. Quantitative assumptions that are clear and **well supported**
3. **A financial model** that is flexible and easy to follow

**DCF presentation - 10% of total grade**

Present a 5-10 minute pitch for your chosen consumer discretionary company. The presentation should walk through key assumptions, articulate the downside/upside, expand on the key misunderstanding and be well supported. Ideally, the presentation should motivate the audience (your peers) to action (buy or sell).

**GRADE SCALE**



A: Exemplary Performance; A-: Strong Performance; B+: Good Performance; B: Adequate Performance; B-: Adequate Performance, with Some Deficiencies; C+: Weak Performance, with Serious Deficiencies; C: Poor Performance, with Pervasive Deficiencies Performance below the “C” level will be addressed on a case-by-case basis

**EXPECTATIONS**

* **Technology** – A laptop with Microsoft Excel and access to the internet is **required** for this course.
* **Late assignments** – The responsibility to submit assignments on time resides with you. As a policy, I will **not** accept late assignments. It isn’t fair to make exceptions for some students and not others. Additionally, late or missed assignments will make class time less valuable and result in a slower grading process for all. That being said, if you experience a medical or family emergency *and* provide documented support I will work with you.
* **Homework file name** – Please include in the file name: 1) **the chapter number(s)** and 2) your name in the file name. Inside the workbook label the tabs with the chapter number and the question number (i.e. Chapter 1 question 1 = 1.1)

**FISHER HONOR CODE**

As a member of the Fisher College of Business community, I am personally committed to the highest standards of ethical behavior. Becoming a leader comes with great responsibility and I am ever mindful of my actions and the impact they have on my community. I hold myself to the highest standards and will adhere to the following tenets:

*Act with Honor* – My actions will be guided by what is honorable and moral, and not just what leads to success. I pledge to act with honor and integrity in both my academic and professional career, as well as in my social life.

*Respect for All* – I understand that we live in a large and diverse community, and as a member, I acknowledge the richness of this community and pledge to be inclusive and respectful of one

and all. I will be civil and courteous in my words and actions toward others.

*Give Back* – I recognize that I would not be successful without the help of so many others.

Implicit in this belief is my responsibility to help others reach their own goals and ideals.

As a leader in the community and business environment, I pledge to live by these principles

and celebrate those who share these ideals.

**FLEXIBILITY**

While the syllabus is a course plan, I reserve the right to make modifications based on my professional judgement to this plan throughout the course. To be clear the content and objectives of the course will remain the same but the *manner* in which we go about achieving these objectives may necessitate modification. It is best to adopt a flexible mindset and recognize that while the syllabus is a contract that a contract implies trust. Trust that I am qualified to make these judgements. Trust that I have your best interest in mind. And a trust that I intend to earn.

**DISENROLLMENT**

University Rule 3335-8-3 provides that a student may be dis-enrolled after the third instructional day of the semester, the first Friday of the semester, or the student’s second class session of the course, whichever occurs first, if the student fails to attend the scheduled course without giving prior notification to the instructor.

**ACADEMIC MISCONDUCT**

Academic misconduct will **not** be tolerated. According to University Rule 3335-1-31-02, all suspected cases of academic misconduct must be reported to the Committee on Academic Misconduct. Again, if I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University’s *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

Other sources of information on academic misconduct (integrity):

The Committee on Academic Misconduct web pages (COAM Home)

Ten Suggestions for Preserving Academic Integrity (Ten Suggestions)

***USE OF ARTIFICIAL INTELLIGENCE (AI)***

Unless we specifically mention otherwise (and in writing), the use of any AI-generated content in any deliverables in this course will be considered academic misconduct and will be acted on as such. Writing assignments will be turned in online and I will be using Turnitin and other applications that have AI detection algorithms. You need to complete the assignments using your own brain and your own thinking...which will lead to more of your own learning!

**DISABILITY SERVICES**

The Office of Disability Services verifies students with specific disabilities and develops strategies to meet the needs of those students. Students requiring accommodations based on identified disabilities should contact the instructor at the beginning of the semester to discuss his/her particular needs. All students with a specific disability are encouraged to contact the Office of Disability Services to explore the potential accommodations available to them.

***RELIGIOUS ACCOMODATIONS POLICY***

Ohio State has had a longstanding practice of making reasonable academic accommodations for students’ religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student’s religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students’ sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student’s presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student’s request for time off shall be provided if the student’s sincerely held religious belief or practice severely affects the student’s ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the Office of Institutional Equity.

**UNIVERSITY COVID POLICY (UPDATED)**

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](https://safeandhealthy.osu.edu/tracing-isolation-quarantine) 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](mailto:slds@osu.edu); 614-292-3307; or [slds.osu.edu](https://slds.osu.edu/).

**CLASS SCHEDULE (subject to change – Carmen course page will reflect any changes)**



**PLEASE REFER TO THE COURSE CARMEN SITE FOR ASSIGNMENT SCHEDULE**