

Business Finance

FINC 3320-09

Spring 2018

FINC 3320-10

Location and Time:
pm

FINC 3320-09 TWC 335

M W 12:30 - 1:50

FINC 3320-10 TWC 334

M 6:00 pm - 8:50

pm

Instructor: Steve Johnson

Office: SHB 210F

Email: sjj008@shsu.edu (email is usually the best way to contact me)

Telephone: 936-294-1283



$$\frac{E[r_p] - r_f}{\sigma_p}$$



$$PV = (PMT/r) * (1 - (1 + r)^{-N})$$

$$E[r_i] - r_f = \beta_i * (E[r_m] - r_f)$$

Note: I want you to succeed in this course. I chose to be a finance professor because I like to help students succeed in their academic careers and to successfully prepare students for a good job after graduation. Please email me if anything course-related is unclear.

Office Hours:

Tuesday/Thursday Huntsville campus, SHB 210F about 9:30 am – 10:50 am
and (almost) any time I'm in my office with my door open.

Monday/Wednesday The Woodlands Center, about 9:30 am – 10:50 am
I will usually be in the computer lab before
class.

Monday night The Woodlands Center, about 5:30 pm – 5:50 pm
I will usually be in TWC 334 at this time.

If these times are not convenient for you and you have questions about the course material, please schedule an appointment with me. In addition, if I am in my office and the door is open, I am usually (90%+ of the time) available.

Emails:

I will try to answer your emails as soon as possible. However, I do not usually check my email between late Friday afternoon and Sunday morning. The rest of the time, from Sunday afternoon until early Friday afternoon, I will usually be able to answer your emails within 24 hours, unless I am out of town and do not have access to a secure web connection.

Brief course outline, objectives, and assessment of learning

1. You will learn how to use the time value of money to value assets and to analyze and amortize loans. Assessment of your learning of these skills will involve solving problems that require the calculation the correct value of time to maturity, number of payments, amount of each payment, present value and future value of a number of lump sums and streams of cash flows, calculating the effective interest rate on an automobile loan, and more.

2. You will learn how to analyze financial statements in order to determine the firm's financial health. Assessment of your learning of these skills will involve
 - i) calculating different line items in the financial statements given incomplete information, and
 - ii) calculating and interpreting ratios and other measures of financial performance.
3. You will learn about different types of risk and the relationship between risk and return. The assessment of your learning of these skills will involve questions that require
 - i) calculating the values of the expected return, standard deviation of return, variance of returns, and other measures of risk and return,
 - ii) calculating values in asset pricing models such as the CAPM, the FF 3-factor model, and more,
 - iii) questions over definitions of terms used, and
 - iv) conceptual questions where you can demonstrate your understanding of both
 - a) the theoretical models and
 - b) how to apply these models, skills and concepts to real-world problems.
4. You will combine the concepts, models, and skills acquired in items #1 - #3 to make capital budgeting decisions. Assessment of your learning of these skills will include
 - i) determining whether or not to accept a capital budgeting project, and
 - ii) demonstrating an understanding of the strengths and weaknesses of alternative capital budgeting methods, such as the IRR, Payback, Discounted Payback, and more.
5. In addition to the four items above, with any time remaining in the course, we will investigate additional topics, such as capital structure, short-term cash management, international finance, and financial news articles. Assessment of your learning of these skills and topics will involve the following:

- i) quantitative problems that require the calculation of a number for the solution, and
- ii) qualitative problems that measure your understanding of the concepts involved in these topics.

IDEA Objectives:

1. Learn fundamental principles, generalizations, and theories.
2. Gain factual knowledge (terminology, classifications, thinking, problem solving, and decisions).

What this course will require and why this course is important for all business majors:

1. This course covers material that is important for **everybody**. Some of the topics covered in this course are loan amortization and saving for retirement. Almost everybody, at some point, will need to take out a loan and use a credit card. Almost everyone would like to retire comfortably, so saving for retirement is also an important topic for everyone.
2. This course covers material that is vital for **business majors** from **every area** of business, including the following:

i. **Marketing:** Marketing decisions, such as new product development, advertising campaigns, and pricing, have major financial impacts on the firm. **Finance provides a way to estimate the value** created by implementing these decisions.





ii. **Management:** Finance provides tools to managers for making strategic decisions regarding market entry, mergers and acquisitions, project selection, and more. Many of the **most interesting finance problems** involve the **creation and implementation of valuation methods** for strategic decision-making.



iii. **Information Systems:** The primary end use of financial information is strategic decision-making by management. **Finance** provides the **tools** for valuation of projects for strategic decision-making. By understanding what end-users need for decision-making, information systems experts can **improve the design and implementation of the firm's databases.**

iv. Accounting: Financial statements are very important in both finance and accounting. In general, finance emphasizes the use of financial statement information in valuation and decision-making, while accounting emphasizes the importance of creating financial statements that are informative, unbiased, and relevant. By studying **finance**, it is possible to gain a **deeper understanding** of some aspects of **accounting**; by studying accounting, it is also possible to gain a deeper understanding of finance.



v. Entrepreneurship: An entrepreneur needs to understand both

- 1) the specific details of the service provided or product manufactured by the firm and
- 2) **all** the functional areas of business, **including**, but not limited to, accounting, marketing, management, and **finance**.

In particular, finance provides the entrepreneur with the following:

- 1) methods to forecast cash flows, enabling the entrepreneur to forecast when the firm will need additional outside financing.
- 2) methods to value forecasted cash flows, providing the entrepreneur with a method to demonstrate the feasibility of the venture for the purpose of raising funds from potential creditors or equity investors.

3. This course requires a background in **accounting**, **economics**, and **mathematics**.



i. A background in **accounting** is required because we will be analyzing firm performance by examining information contained in the firm's financial statements. Income statements, balance sheets, current assets, specific line items from the financial statements, and the matching principal are all topics that are very important in this course.

ii. A background in **economics** is required because several topics from economics, such as **market structure** (pure competition/ oligopoly/ monopoly), **economic profit vs. accounting profit**, **supply and demand**, and **inflation** are vital for understanding much of finance.

iii. Probably the single most important prerequisite for this course is a background in **mathematics**. Basic time value of money, financial statement analysis, valuation of stocks, bonds, and capital budgeting projects, amortization of loans, and saving for retirement **all** require the use of math. Some of the mathematics that we will use in this course includes, but is not limited to:



- 1) Setting up **word problems**
- 2) **Solving** equations, including but not limited to the following:
 - a) Factoring,
 - b) Distributing, e.g. $x*(y + z) = x*y + x*z$
 - c) Isolating a variable by performing the same operation (multiply, divide, add, subtract, raise to a power, etc.) on both sides of the equation to isolate the variable.

- 3) The use of **exponents**, **logs**, and solving equations with exponents
- 4) An understanding of the **slope** and **intercept** of a line
- 5) An understanding of the **maximum** and **minimum** functions, and
- 6) An understanding of the **slope** and **intercept** of a line

These are all important mathematical skills for this course.

4. This course **will require intellectual effort beyond that** required by many other courses.

i. This course draws heavily from material covered in previous courses. To be successful in this course, you will need to both

- 1) **recall** material learned in accounting, economics, and mathematics, and
- 2) **build** on previous coursework to solve problems in finance.

ii. These problems will be **both quantitative and conceptual**. Many problems in finance involve **at least three steps**:

- 1) **Set up** a problem from finance as a set of **mathematical equations** to solve.
- 2) **Solve** the equation from step #1.
- 3) **Interpret** the results of the solution from step #2.

5. By learning the material in this course, **many topics in business news and world events will become clearer**. Some of these topics include, but are not limited to, movements in the stock market, hostile takeovers, proxy contests, shareholder activism, restructuring, initial public offerings, seasoned public offerings, privatization, derivatives markets, commodities markets, hedge funds, mutual funds, several varieties of white-collar crime, market bubbles, and more.

6. By taking this course, you will learn how to **find answers to your own questions**. We will learn how to find multiple types of information from a number of different websites. Some of the types of information you will be able to access after taking this course include, but are not limited to the following: stock prices, foreign exchange rates, business news, financial terms and concepts, and commodity prices.

7. **Required materials** include the **textbook and a financial calculator**: You **will** need the **textbook** and a **financial calculator** for this course.

i. **Textbook (Required)**: Fundamentals of Financial Management (concise edition), by Brigham and Houston, 8th edition, ISBN 9781285065137

Textbook (Required, but multiple (but limited) copies available online): Lessons in Corporate Finance, by Asquith and Mullins, 1st edition, ISBN 9781119207412

ii. **Calculator**: You will need a calculator that has the time value of money (TVM) functions. Graphing calculators usually have a menu of TVM functions. If you use any calculator other than a TI BA-2+ or TI-BA-2+ professional, I might not be able to help you since I always use the TI BA-2+.

Please bring your calculator to class and to exams. I will be using a Texas Instruments BA-2+.

Please do not bring any devices with wireless communication to the exam. If you have a **cell** phone it should be turned **completely off--not** just set to vibrate.

Evaluation: There are 3 comprehensive unit exams, a number of in-class exercises, a mathematics exam, and one final exam in this course. The evaluation weights for each component of the course are as follows:

40%	Best 2 of 3 comprehensive unit exams (20 points each, 40 points possible)
30%+	In-class exercises, quizzes, and attendance (30+ points possible)
20%	Final exam (20 points possible)
10%, +/-	Professionalism
100%+	

Comprehensive unit exams: There are three comprehensive unit exams in this course. Note that the student is responsible for any announcements made in class. If an exam is missed due to a university-sponsored event or other excused absence, let me know ASAP and I will write an alternate version that can be taken when you return.

The lowest comprehensive unit exam score will be dropped.

The final exam score will replace your lowest (of the best 2 of 3) comprehensive unit exam score if by so doing your grade is improved.

Taking comprehensive unit exams: There are several details to remember about taking comprehensive unit exams.

- i. Comprehensive unit exams are **closed-book** (and **closed-neighbor**).
- ii. You may bring one 3"x5" note card with you to the comprehensive unit exams.
- iii. You may fill both sides of the card with notes.
- iv. You will need a financial calculator for the comprehensive unit exams and the final exam. I recommend the Texas Instruments BA-2+. I will use the TI BA 2+ in class.
- v. **Laptops, palm pilots, cell phone apps, and any type of calculating device with wireless communication capabilities are not allowed on the comprehensive unit exams.**

Comprehensive unit exam contents and study guide: Comprehensive unit exams cover primarily the following material:

- i. **Practice problems.** I will assign additional practice problems. These problems are usually not to hand in. We will go over most of these problems in class. I usually write Excel spreadsheet solutions for the quantitative problems.

Then I upload these spreadsheets to Blackboard after class. These spreadsheets contain all the steps to solving the problem. You can change any of the yellow-highlighted values to obtain a new practice problem.

ii. **Lectures.** Sometimes I type lecture material into Excel during class. After class, I upload the lecture to Blackboard. Lectures include both **qualitative** and **quantitative** material. This provides a convenient way to go over the notes after class.

iii. **In-Class Exercises:** We will spend a significant amount of class time working on exercises. Absence from class will result in zero credit for that day's exercise--with the exception of extreme circumstances (in which case, arrangements for work must be made ahead of time with the instructor). Note that it is possible, with perfect attendance and full participation, to get more than 100% of the in-class exercise and attendance portion of the class (i.e., more than 20 points total).

iv. **Required readings:** I will also assign required readings from both the textbook and from online sources.

v. **Study guide** I will provide a study guide before each comprehensive unit exam. This study guide will contain specific items from categories i. - iv. above.

Final Exam:

i. The final exam is **comprehensive**. It counts for 20% of your final grade and it can't be dropped. It will be given at the regularly scheduled time given in the schedule of courses.

ii. The final exam is **closed-book (and closed-neighbor)**.

iii. You may bring a **full 8.5" x 11" sheet of notes** to the final exam. You may fill both sides of the sheet with notes.

- iv. You will need a **financial calculator** for the final exam.
- v. **Communication devices, such as a cell phone with a calculator app, are not allowed on the final exam.**
- vi. **Study guide** I will provide a study guide before the final exam.

Attendance: All students are expected to attend class regularly and punctually.

- i. **Student attendance will be taken each class meeting.**
- ii. You are allowed six unexcused absences per semester for classes that meet two times a week and three unexcused absences for classes that meet once a week.. Note that students who are absent without an acceptable excuse receive 0 points from any class exercise on that day, in addition to 0 points for attendance.
- iii. **Absences totaling more than six class periods (for classes that meets twice a week) or more than three class periods (for classes that meet once a week) will result in a grade of "F" for the course.**
- iv. Please come to class on time. Three late arrivals will be treated like one 75-minute class period absence (half an absence for a night course) and will be included in determining the class attendance and participation score. A very late arrival at an night course (after the second half of class has begun) will be treated as at least half of an absence.
- v. Personal use of cell phones or personal communication using other devices during class is prohibited. **However, if a cell phone does ring, or vibrate, I get to answer it.**
- vi. **Penalties for ringing cell phones, etc.** Typically, disrupting class with a ringing or vibrating cell phone, talking or texting on a phone, or other, similar

behaviors, will count the same as one tardy. Persistent and/or extreme disruptions of class may be penalized more strongly. If this occurs regularly, the course grade may be negatively affected.

vii. Excused absences are listed in the University Bulletin. **Any and all misconducts will be handled according to the procedures presented in the bulletin.**

Professionalism: Professional behavior will be rewarded. The potential positive impact is 10%, an entire letter grade.

There are several ways to assure that you will not get credit for professionalism. The classroom is your corporate office. Business-like behavior is both required and appreciated.

i. Unprofessional behavior, such as disrupting class by talking out loud with your neighbors, talking on a cell phone, etc., will result in a reduced professionalism score. Persistent use of computers or other electronic devices during class for any purpose other than the assigned task or for taking lecture notes will also result in a penalty to your "Professionalism" score.

ii. Extremely and/or consistently unprofessional behavior will result in a score of 0 or less for professionalism. ***If you behave in a way that would result in being fired from a job, you will not pass this course.***

Study: This is an upper-division, 3000-level, university course. This course is taught at a higher level than the prerequisites (1000- and 2000- level courses) for this class.

i. You are expected to study from one to two hours outside of class for each hour in class. Reading chapters ahead of the lecture schedule and reviewing your notes immediately after class will greatly enhance your learning of the material.

ii. Be sure to check Blackboard and to download the class notes regularly.

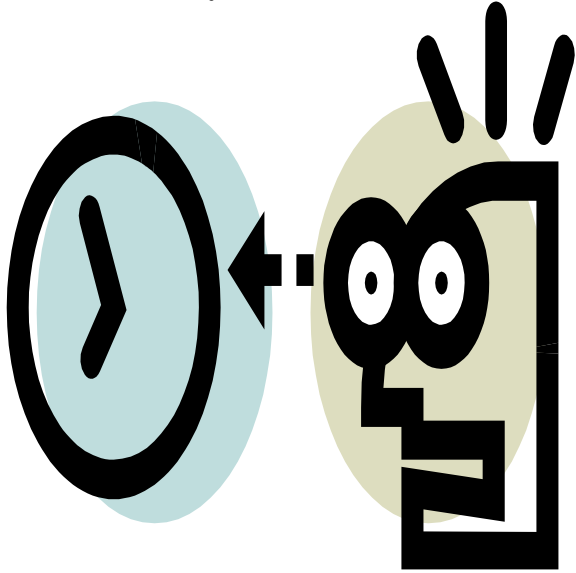
iii. If you have any trouble with any aspects of the course work, please feel free to stop in during my office hours. To see me outside office hours, it is advisable to make an appointment so that I can be at my office when you stop by.

Technology requirements: Every student in this course must have a working SHSU email account and check it regularly, at least once or twice a day. I will use email to communicate with you outside of class. Every student in this course must also have access to Blackboard. I regularly post announcements and files on Blackboard.

University policies: Please see <http://www.shsu.edu/syllabus/> for the following:

- * University policy on academic dishonesty
- * Student absences on religious holy days policy
- * Students with disabilities policy
- * University policy on visitors in the classroom

Course Outline: Business Finance (Section 09 MW daytime)



This is a **tentative** course outline.
There may be changes in this


schedule, including test dates, as
the semester progresses.

You are responsible for everything, including reading assignments and announcements, presented in class and in Blackboard.

Note: BH = Brigham and Houston text

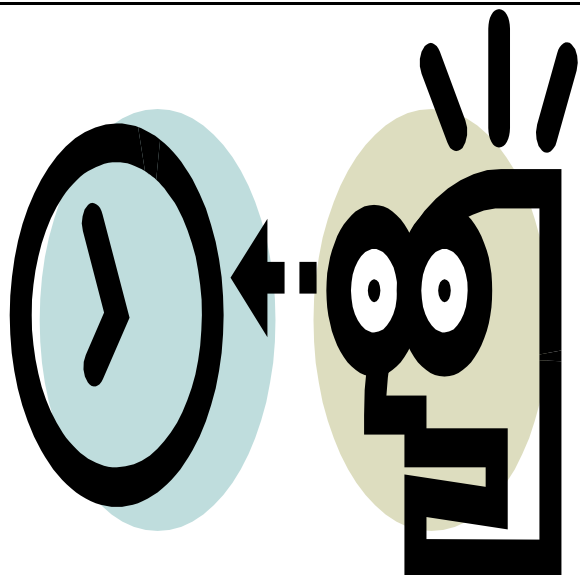
AM = Asquith and Mullins text

Dates	Chapters	Topics
W Jan 17	Syllabus; Intro to time value of money (TVM)	Syllabus, TVM
M Jan 22 W Jan 24	BH 5, 1, 2 + AM 13 + notes	Time value of money (TVM) (Lump sums, multiple lump sums, amortization, annuities, saving for a goal, saving for retirement), conceptual material from chapters #1 and #2, +TBA
M Jan 29 W Jan 31	BH 5, 1, 2 + AM 13 + notes	Time value of money (TVM) (Defined benefit, defined contribution), other topics, + TBA

M Feb 5 W Feb 7	BH 5, 1, 2 + AM 13 + notes, review, Comprehensive Unit Exam #1 on Wednesday	More TVM, other basic finance, + math review, syllabus; Exam #1 on Wednesday
M Feb 12 W Feb 14	BH 3, 4, 5 + AM 2, 3 + notes + articles	Accounting and finance; measuring corporate performance; accounting fraud; More TVM
M Feb 19 W Feb 21	BH 3, 4, 5 + AM 2, 3 + notes + articles	Accounting and finance; measuring corporate performance; accounting fraud; More material related to chapters BH 3, 4, and 5; AM 2 and 3.
M Feb 26 W Feb 28	BH 3, 4, 5 + AM 2, 3 + notes + articles	Accounting and finance; measuring corporate performance; accounting fraud; More material related to chapters 3, 4, and 5; AM 2 and 3.
M Mar 5 W Mar 7	BH 7 + notes + articles	Bonds + TBA
3/12-3/16		SPRING BREAK!!!!!!!!!!!!!!!!!!!!!! 
M Mar 19 W Mar 21	Review for exam, TBA, Comprehensive Unit Exam #2 on Wednesday	Review for Exam #2; TBA Exam #2 on Wednesday

M Mar 26 W Mar 28	BH 8, 9, + AM 7, 8, +TBA	Risk/return; asset pricing models; stock pricing
M Apr 2 W Apr 4	BH 9, 10, 11, AM 7, 8 + AM 13, 14, 15, 16	Stock pricing; cost of capital; capital budgeting
M Apr 9 W Apr 11	BH 11, 12, 13, 14 + AM 13, 14, 15, 16	Capital budgeting; Cash flow estimation; Capital structure and leverage; Distributions to shareholders
M Apr 16 W Apr 18	BH 13, 14 (and parts of 15 and 17)	Capital structure and leverage; Distributions to shareholders; some working capital management and/or international finance
M Apr 23 W Apr 25	BH 15, 17 Comprehensive Unit Exam #3 on Wednesday	Working capital management; International finance; Exam #3 on Monday
M Apr 30 W May 2	Review for exam, TBA,	Working capital management; International finance; Review for final exam; TBA
Monday, May 7	Final exam for FINC 3320 09	Final Exam FINC 3320 09, 12:30 – 2:00 pm, Monday, May 7, 2018

Course Outline: Business Finance (Section 10 M night)



This is a **tentative** course outline. There may be changes in this schedule,


including test dates, as the semester progresses.

You are responsible for everything, including reading assignments and announcements, presented in class and in Blackboard.

Note: BH = Brigham and Houston text

AM = Asquith and Mullins text

Dates	Chapters	Topics
W Jan 17	Syllabus; Intro to time value of money (TVM)	Syllabus, TVM
M Jan 22	BH 5, 1, 2 + AM 13 + notes	Time value of money (TVM) (Lump sums, multiple lump sums, amortization, annuities, saving for a goal, saving for retirement), conceptual material from chapters #1 and #2, +TBA
M Jan 29	BH 5, 1, 2 + AM 13 + notes	Time value of money (TVM) (Defined benefit, defined contribution), other topics, + TBA

M Feb 5	BH 5, 1, 2, + AM 13 + notes, review, Comprehensive Unit Exam #1	More TVM, other basic finance, + math review, syllabus; Exam #1
M Feb 12	BH 3, 4, 5 + AM 2, 3 + notes + articles	Accounting and finance; measuring corporate performance; accounting fraud; More TVM
M Feb 19	BH 3, 4, 5 + AM 2, 3 + notes + articles	Accounting and finance; measuring corporate performance; accounting fraud; More material related to chapters BH 3, 4, and 5; AM 2 and 3.
M Feb 26	BH 3, 4, 5 + AM 2, 3 + notes + articles	Accounting and finance; measuring corporate performance; accounting fraud; More material related to chapters 3, 4, and 5; AM 2 and 3.
M Mar 5	BH 7 + notes + articles	Bonds + TBA
3/12-3/16		SPRING BREAK!!!!!!!!!!!!!!!!!!!!!!  A cartoon illustration showing a blue convertible car that has crashed into a large, colorful beach umbrella. Two people are inside the car, one of whom is wearing a life preserver. Various beach items like a hat, sunglasses, and a flip-flop are flying through the air around the car. Puffs of smoke are coming from the back of the car, suggesting a recent collision.
M Mar 19	Review for exam, BH 8, 9, TBA	Review for Exam #2; TBA; Risk/return; asset pricing models; stock pricing;
M Mar 26	BH 8, 9, +TBA; Comprehensive Unit Exam #2	Risk/return; asset pricing models; stock pricing; Comprehensive Unit Exam #2

M Apr 2	BH 9, 10, 11 + AM 13, 14, 15, 16	Stock pricing; cost of capital; capital budgeting;
M Apr 9	BH 11, 12, 13, 14+ AM 13, 14, 15, 16	Capital budgeting; Cash flow estimation; Capital structure and leverage; Distributions to shareholders
M Apr 16	BH 13, 14 (and parts of 15 and 17)	Capital structure and leverage; Distributions to shareholders; some working capital management and/or international finance
M Apr 23	BH 15, 17 Comprehensive Unit Exam #3	Working capital management; International finance; review for final exam; +TBA; Exam #3
M Apr 30	Review for exam, TBA	TBA
Monday, May 7	Final exam for FINC 3320 10	Final Exam FINC 3320 10, 8:30 – 10:30 pm (We can probably start at 6 pm)