

“Taxes and Investments” A new (1.0 credit hour) course for all business students

More than 300 syllabi are on the American Taxation Association’s website yet none focus on the taxation of investments—which affects everyone’s wealth.

This course can be taught at either the undergraduate or graduate level to all business students. No previous course work in taxation is necessary.

This course integrates taxation with finance and focuses on the role taxes play in evaluating individual investment decisions.

The seminal text “Taxes and Business Strategy,” by Scholes, Wolfson, Erickson, Maydew, and Shevlin, contains a table titled “Six investment vehicles for investors” inside its cover.

The course is built around this table (on page 3 below).

Students analyze the difference between after-tax amounts accumulated through investments (e.g., stocks, taxable bonds, muni bonds, and annuities) held either personally or in a retirement account.

The only materials necessary for the course are a financial calculator and paying a small royalties fee (\$10) for a “course packet” that contains copyrighted materials—none written by me.

The course packet is available by contacting Greg Geisler at geisler@umsl.edu.

New editions of the course packet are available every year from Greg Geisler.

Professor Geisler has taught the course more than 10 times and currently teaches it once per year.

Professor Geisler will provide the full syllabus for the course upon request.

All other materials necessary for an instructor to teach the course are also available every year upon request.

Summary of Taxes and Investments-a new (1.0 credit hour) course for all business students

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Course Description and Objective:

Traditionally, tax courses focus only on legal rules and state that the objective of learning tax rules is to be able to minimize taxes. The objective of this course is to understand the role taxes play in evaluating investment decisions confronted by individual taxpayers. In this tax course, you will apply tools learned in finance to settings impacted by tax laws. The goal is not to minimize taxes but to maximize the present value of any taxpayer's wealth. You gain the ability to quantify the effect taxes have on taxpayer's investments. Also, you will become an effective evaluator of the tax planning strategies involving an individual's investments.

Unlike tax knowledge that can become irrelevant when the law is repealed or changed, the analytical skills you develop in this course will never become outdated.

Course Materials:

- *Financial Calculator* (approximate cost = \$15): Needed to perform present value of future cash flows and after-tax computations for problems in class, on the problems, and on the exams. Bring your calculator to every class.

Greg Geisler teaches this course every year.

He will provide you with his files every year.

The files contain both the *Course Packet* and Professor Geisler's lecture notes.

- *Course Packet* Print it off of the course web site. Also, write a check for \$10 payable to "Jerold Stern," an accounting professor at Indiana University, for materials from his self-published text "Tax Concepts and Analysis" that are contained in the course packet for the course. They are a significant part of the course packet. Instead of requiring you to buy the text, many parts of Professor Stern's text have been condensed and edited into the course packet. You are paying him a royalty for use of his copyrighted material. Bring a \$10 check payable to "Jerold Stern" to next class and the Instructor will mail them to Professor Stern at Indiana University, Kelley School of Business, 1309 East 10th Street, Bloomington, IN, 47405-1701.

Prerequisites: Successful completion of one course in Finance.

SIX Investment Models

<u>Investment Model/ Examples</u>	Rate of Taxation	Frequency Of Taxation	Is Initial Investment Deductible?	After-Tax Accumulation (ATA) (i.e., Future Value of Investment After-Taxes)
1) Current Model / <u>Savings Account, Certif. of Dep., Corporate Bond</u>	Ordinary	Annual	No	$= \text{AT\$} [1 + R (1 - t)] ^ n$
1C) Current Model-- lower tax rate / (Assets annually producing only lower-taxed income): e.g., <u>Stock Mutual Fund, Dividend Paying stock</u>	Lower than Ordinary	Annual	No	$= \text{AT\$} [1 + R (1 - g)] ^ n$
2)Deferred Model / e.g., <u>Single Premium Annuity (SPA)</u>	Ordinary	Deferred	No	$= \text{AT\$} [(1 + R) ^ n (1 - t_n) + t_n]$
2C)Deferred Model-lower tax rate / (Appreciating capital assets with no annual income): e.g., <u>Land, Nondividend paying stock</u>	Lower than Ordinary	Deferred	No	$= \text{AT\$} [(1 + R) ^ n (1 - g_n) + g_n]$
3) Tax-Exempt Model / e.g., <u>Municipal Bond, Roth IRA, Roth 401(k)</u>	None	Never	No	$= \text{AT\$} [1 + R] ^ n$
4) Retirement Model / e.g., <u>401(k), 403(b), Deductible traditional IRA</u>	Ordinary	Deferred	Yes	$= \frac{\text{AT\$}}{(1 - t_0)} (1 + R) ^ n (1 - t_n)$ <p style="text-align: center;">or</p> $= \text{BT\$} (1 + R) ^ n (1 - t_n)$

The 12½ hours in class will cover the following topics:

2½ hours Topics Covered in Class

- 1st General Tax Formula, Tax Rate Schedules of Individual
 Compare Before-Tax amounts (BT\$) and After-Tax amounts (AT\$)
 Efficient Tax Planning
 After-Tax Cash Flow (ATCF) Model
 Apply ATCF Model to Sale of Stock at Gain or Loss
 Compute After-Tax (AT) Future Value or AT Present Value and compute AT Internal Rate of Return
 Investment Model #1) Current Model (e.g., Savings Account)
 4 Tax Planning Variables: one is Character (of Income)
 Tax Laws on Asset Sale: Is Gain or Loss “capital” or not? Capital Gain Tax Rates. Capital Loss Rules.
- 2nd Investment Model #1C) Current Model but with lower (i.e., Capital gain or Dividend) tax rate
 (e.g., Mutual Fund or Nonappreciating Dividend paying stock).
 Trends in Dividend Income after the tax rate for individuals was cut in 2003.
 4 Tax Planning Variables: one is Timing.
 Investment Models #2) Deferred Model (e.g., Single Premium Deferred Annuity); and #2C) Deferred
 but with capital gain tax rate (appreciating capital asset with no annual income (e.g., land)).
 Investment Model #3) Exempt Model (e.g., Muni bonds, some 529 College Savings plans)
- 3rd Tax Laws on Roth IRA (Investment Model #3).
 Investment Model #4) Retirement Account Model (e.g., Deductible IRA, and 401(k)).
 Assumes: tax rate at contribution versus later distribution are the same.
- 4th Investment Model #4) Retirement Account Model (e.g., 401(k), Deductible IRA) if tax rate at
 contribution versus later distribution are different.
 Comparisons of all six Investment Models and “real-life” Investment Decisions.
 Proper “clienteles” for the different types of investment models (e.g., investment models that are most
 tax efficient for retirement versus personal accounts).
- 5th Implicit tax (i.e., reduction in before-tax rate of return) on investments taxed favorably
 - Apply to comparison of investments: 3) Exempt Model versus 1) Current Model
 Marginal Tax Rates (MTR) of Individuals:
 - How MTR’s not equal to rate in the Tax Schedule if change causes movement to different bracket.
 - How MTR’s not equal to rate in the Tax Schedule if AGI before the change or AGI after the
 change is in the phase-out range of one of the 19 tax laws where a deduction or a credit
 decline at AGI increases.
 - How MTR’s not equal to Alternative Minimum Tax (AMT) rate schedule in the Tax Schedule if AMT
 Base is in the phase-out range where AMT Exemption Deduction declines as Base increases.

EXAM (after the 12½ hours in class)