Course Syllabus: MACC Financial Accounting

Professor: Kyle Welch,  
Email: kylewelch@email.gwu.edu  
Office: Funger 601D

Course Description
A young student asked Warren Buffett's advice on what to study in school. Warren Buffett’s main advice was to learn accounting. “Accounting is the language of business and there's nothing like getting it early and getting it into your system.”

CEOs, analysts and investors make decisions that impact the success of firms and the overall economy. The decisions by these captains of industry are, in a large part, based on accounting information. Accounting results provide the basic scorecard for assessing and understanding the financial health of a government, charity, or business. Understanding accounting is a critical foundation for careers as an equity research analyst, investor, auditor, manager, or consultant. This is an essential course for understanding a crucial foundation of capital markets—the financial accounting of economic events.

The course content will provide a foundation on which to build further expertise in both accounting and finance. The course starts with a top down approach looking first at what questions investors and managers have and the partial answers financial accounting provides. To sufficiently address these topics we will learn the principles of accounting, the vocabulary of accounting, and the economics of accounting information.

The class learning objectives are targeted towards the learning outcome statements of the Chartered Financial Analyst (CFA) Level 1 exam.1 While many students might not have interest in the CFA exam, targeting learning outcomes to the financial accounting material in the exam enables the course to stay up to date on the most critical financial accounting material to learn. Moreover organizing the class around the CFA curriculum enables the course to have additional free content online from alternative sources that can provide additional understanding.

The readings will primarily cover the financial accounting text. We will also look at additional works evaluating metrics and management decisions with financial reporting. It is highly recommended that students read the material before each class in order to keep up with the discussion and to do well on quizzes. This course is excellent for students interested in how financial accounting impacts decision making. No prior experience is necessary to take this course.

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1 Approximately 20% of the total content in the CFA level 1 exam will be reviewed over the next 15 weeks.
Instructor Information
Prior to becoming a professor at George Washington University, Kyle Welch worked on the investment team at the Stanford Management Company (Stanford University’s endowment). While there he developed asset allocation and portfolio strategies. Professor Welch also evaluated public equity, private equity, venture capital, and hedge fund investment opportunities. Prior to working at Stanford, Professor Welch worked at Standard & Poor’s (S&P) in the Corporate Valuation and Consulting group. From 1998 to 2000, Professor Welch worked as a minister for his church in Detroit Michigan.

Kyle and his wife Laura live in Vienna, Virginia and are parents to four children. Professor Welch received his B.S. and Masters from Brigham Young University and his Doctorate from Harvard Business School.

Course Requirements and Grading
Please remember to never let schooling get in the way of your education.

(1) Quizzes (20% of grade)
At the start of each class there will be a short quiz. You will have copies of potential quiz questions before class. I will also throw out your lowest score on two of the quizzes. There is no makeup policy for the quizzes. **Cell phones are not allowed as calculators for quizzes—no exceptions.**

(2) Participation (20% of grade)
Helping your group members and contributing to in-class discussions is critical to this course. To prepare for each discussion, you should complete the required readings and make note of important points and especially questions you have. There will be forced ranking review of the help provided by each group member that will be a component of participation.

(3) Midterm Take Home Exam (20% of grade)
There will be a take home midterm exam. You are not allowed to copy it or scan it (there should not be a digital copy of the exam). You can work ONLY with your group to find solutions (no checking answers with the other groups). You can consult online resources. The exam will be distributed the week before it is due.

(4) Final Exam (30% of grade)
There will be a timed final exam. If you will be absent for the exam let me know at least two weeks in advance. **Cell phones are not allowed as calculators for quizzes or exams—no exceptions.**

(5) Final Project (10% of grade)
You and your group members will present research related to topics covered in the class. Your presentation will be evaluated by your peers.
**Policies**
I encourage you to discuss our readings and your assignments with your classmates. However, all written work should be your own, correctly cite any sources, and strictly follow George Washington University Policy on Plagiarism and Collaboration.

Information about the [Honor System](http://www.gwu.edu/~ntegrity) is available online. You are expected to be thoroughly familiar with, and adhere to, the Honor System. Please note: If a student is found to have violated the Honor System, no matter what sanction is imposed by the Honor System, the instructor is authorized to give the student a grade of “F” in the course.

Please let me know if you have a disability that requires academic accommodations. All discussions will be confidential, but we may need a letter from the University’s Disability Support Services (202-994-8250). Further information is available at [http://gwired.gwu.edu/dss](http://gwired.gwu.edu/dss).

The university has set guidelines pertaining to the observation of religious holidays which include the following policies. Students must notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. These students will be extended the courtesy of absence without penalty, including permission to make up examinations. A schedule of religious holidays most frequently observed by GW students is posted with the division of student affairs.

**Books and Materials:**
I recommend purchasing the prior years’ version of the CFA Program Curriculum. By using this book the students in the class will save on average $220 for not having to purchase an alternative text book—you are welcome! The required books for the class include:

1. **CFA Institute Level I Volume 3 Financial Reporting and Analysis.** It is much cheaper to buy used books individually online instead of the full curriculum (it costs under $20). Make sure you are purchasing the “Level 1 book” and not the “Level 2” book.
   - **Alternative 1:** Older versions of this book are almost identical and they are likely less expensive. The words in each version of the book really don’t change much, just the page numbers. From my observation, books published in 2010 are practically the same as the most current book. The 2009 and prior versions of the book are written in a tortured way that is not as helpful (I don’t recommend it).
   - **Alternative 2:** If you would like to have a slightly more expensive text book with exactly the same content you can order *International Financial Statement Analysis (CFA Institute Investment Series)* by Thomas R. Robinson and Elaine Henry for ~$60 (still considerably less costly than alternative textbooks). If you get this more expensive text book it also comes with no practice problems. If you would like the practice problems (you will want them) make sure you also get the *International Financial Statement Analysis Workbook (CFA Institute Investment Series) 3rd Edition* as it includes the practice problems.
   - **Alternative 3:** The new curriculum can be found at the CFA institute and is free when you register for the CFA Level 1 exam.
   - **Alternative 4:** If you go to google and search “International Financial Statement Analysis Workbook pdf” you will find copies of the book online. The second edition is the most available one but it is not much different from our text.
2. Calculators used must be one of two types: the
   - **TI BA II Plus** Student or Professional (recommend)
   - **HP 12C** or 12C Platinum (if you want that old school vibe—I don’t use this type).


Note: The content we will cover in this class is also covered via alternative sources which might include a different textbook or just searching topics online. You will notice several practice guides (i.e. SchweserNotes) as you search for books—these notes might also be useful as a complete substitute for the book. I very much recommend using additional resources to supplement what we study. In fact you might even be able to completely substitute out the textbook with online content or completely different textbooks. Using materials other than the CFA text could work for this class, but it will require additional diligence and effort on your part. I can’t read every book or look at every website to see if it is correct or appropriate so proceed at your own risk. There is a high likelihood that someone with the social life compelling them to have an accounting blog likely knows accounting.

YouTube has some great video resources that could supplement your reading. If you commute this might be a nice primer before diving into a topic. There are multiple channels on the topic so find the one that best suits you. In the past, students have found the [IFT](https://www.youtube.com/user/InternationalFinanceTuition) YouTube channel helpful.
## Topics and Schedule

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<th>Class #</th>
<th>Topic</th>
<th>2014 Book pages</th>
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<td><em>Wellcome</em></td>
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<td><em>Why God does not employ accountants</em></td>
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<td><em>Financial Statement Analysis: An Introduction</em></td>
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<td><em>What are the right questions?</em></td>
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<td><em>Financial Reporting Mechanics</em></td>
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<td><em>Understanding Cash Flow Statements</em></td>
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<td><em>Financial Analysis Techniques</em></td>
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<td><em>Financial Analysis Techniques</em></td>
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<td><em>Inventories</em></td>
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<td><em>Non-Current (Long-Term) Liabilities</em></td>
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<td><em>Financial Statement Analysis: Applications</em></td>
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**Learning Outcomes**

**READING: FINANCIAL STATEMENT ANALYSIS: AN INTRODUCTION**
The student should be able to:

a) Describe the roles of financial reporting and financial statement analysis;
b) Describe the roles of the key financial statements (statement of financial position, statement of comprehensive income, statement of changes in equity, and statement of cash flows) in evaluating a company’s performance and financial position;
c) Describe the importance of financial statement notes and supplementary information — including disclosures of accounting policies, methods, and estimates—and management’s commentary;
d) Describe the objective of audits of financial statements, the types of audit reports, and the importance of effective internal controls;
e) Identify and describe information sources that analysts use in financial statement analysis besides annual financial statements and supplementary information;
f) Describe the steps in the financial statement analysis framework.

**READING: FINANCIAL REPORTING MECHANICS**
The student should be able to:

a) Explain the relationship of financial statement elements and accounts, and classify accounts into the financial statement elements;
b) Explain the accounting equation in its basic and expanded forms;
c) Describe the process of recording business transactions using an accounting system based on the accounting equation;
d) Describe the need for accruals and other adjustments in preparing financial statements;
e) Describe the relationships among the income statement, balance sheet, statement of cash flows, and statement of owners’ equity;
f) Describe the flow of information in an accounting system;
g) Describe the use of the results of the accounting process in security analysis.

**READING: FINANCIAL REPORTING STANDARDS**
The student should be able to:

a) Describe the objective of financial statements and the importance of financial reporting standards in security analysis and valuation;
b) Describe roles and desirable attributes of financial reporting standard-setting bodies and regulatory authorities in establishing and enforcing reporting standards, and describe the role of the International Organization of Securities Commissions;
c) Describe the status of global convergence of accounting standards and ongoing barriers to developing one universally accepted set of financial reporting standards;
d) Describe the International Accounting Standards Board’s conceptual framework, including the objective and qualitative characteristics of financial statements, required reporting elements, and constraints and assumptions in preparing financial statements;
e) Describe general requirements for financial statements under IFRS;
f) Compare key concepts of financial reporting standards under IFRS and U.S. GAAP reporting systems;
g) Identify characteristics of a coherent financial reporting framework and the barriers to creating such a framework;
h) Describe implications for financial analysis of differing financial reporting systems and the importance of monitoring developments in financial reporting standards;
i) Analyze company disclosures of significant accounting policies.

READING: UNDERSTANDING INCOME STATEMENTS

The student should be able to:

a) Describe the components of the income statement and alternative presentation formats of that statement;

b) Describe general principles of revenue recognition and accrual accounting, specific revenue recognition applications (including accounting for long-term contracts, installment sales, barter transactions, gross and net reporting of revenue), and implications of revenue recognition principles for financial analysis;

c) Calculate revenue given information that might influence the choice of revenue recognition method;

d) Describe general principles of expense recognition, specific expense recognition applications, and implications of expense recognition choices for financial analysis;

e) Describe the financial reporting treatment and analysis of non-recurring items (including discontinued operations, extraordinary items, unusual or infrequent items) and changes in accounting standards;

f) Distinguish between the operating and non-operating components of the income statement;

h) Describe how earnings per share is calculated and calculate and interpret a company’s earnings per share (both basic and diluted earnings per share) for both simple and complex capital structures;

i) Convert income statements to common-size income statements;

j) Evaluate a company’s financial performance using common-size income statements and financial ratios based on the income statement;

k) Describe, calculate, and interpret comprehensive income;

l) Describe other comprehensive income, and identify major types of items included in it.

READING: UNDERSTANDING BALANCE SHEETS

The student should be able to:

a) Describe the elements of the balance sheet: assets, liabilities, and equity;

b) Describe uses and limitations of the balance sheet in financial analysis;

c) Describe alternative formats of balance sheet presentation;

d) Distinguish between current and non-current assets, and current and non-current liabilities;

e) Describe different types of assets and liabilities and the measurement bases of each;

f) Describe the components of shareholders’ equity;

g) Analyze balance sheets and statements of changes in equity;

h) Convert balance sheets to common-size balance sheets and interpret common-size balance sheets;

i) Calculate and interpret liquidity and solvency ratios.

READING: UNDERSTANDING CASH FLOW STATEMENTS

The student should be able to:

a) Compare cash flows from operating, investing, and financing activities and classify cash flow items as relating to one of those three categories given a description of the items;

b) Describe how non-cash investing and financing activities are reported;
c) Contrast cash flow statements prepared under International Financial Reporting Standards (IFRS) and U.S. generally accepted accounting principles (U.S. GAAP);

d) Distinguish between the direct and indirect methods of presenting cash from operating activities and describe arguments in favor of each method;

e) Describe how the cash flow statement is linked to the income statement and the balance sheet;

f) Describe the steps in the preparation of direct and indirect cash flow statements, including how cash flows can be computed using income statement and balance sheet data;

i) Convert cash flows from the indirect to direct method;

j) Analyze and interpret both reported and common-size cash flow statements;

k) Calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios.

READING: FINANCIAL ANALYSIS TECHNIQUES

The student should be able to:

a) Describe tools and techniques used in financial analysis, including their uses and limitations;

b) Classify, calculate, and interpret activity, liquidity, solvency, profitability, and valuation ratios;

c) Describe relationships among ratios and evaluate a company using ratio analysis;

d) Demonstrate the application of DuPont analysis of return on equity, and calculate and interpret effects of changes in its components;

e) Calculate and interpret ratios used in equity analysis and credit analysis;

f) Explain the requirements for segment reporting, and calculate and interpret segment ratios;

g) Describe how ratio analysis and other techniques can be used to model and forecast earnings.

READING: INVENTORIES

The student should be able to:

a) Distinguish between costs included in inventories and costs recognized as expenses in the period in which they are incurred;

b) Describe different inventory valuation methods (cost formulas);

c) Calculate cost of sales and ending inventory using different inventory valuation methods and explain the effect of the inventory valuation method choice on gross profit;

d) Calculate and compare cost of sales, gross profit, and ending inventory using perpetual and periodic inventory systems;

f) Compare cost of sales, ending inventory, and gross profit using different inventory valuation methods;

f) Describe the measurement of inventory at the lower of cost and net realizable value;

h) Describe the financial statement presentation of and disclosures relating to inventories;

READING: LONG-LIVED ASSETS

The student should be able to:

a) Distinguish between costs that are capitalized and costs that are expensed in the period in which they are incurred;
b) Compare the financial reporting of the following types of intangible assets: purchased, internally developed, acquired in a business combination;
c) Describe the different depreciation methods for property, plant, and equipment, the effect of the choice of depreciation method on the financial statements, and the effects of assumptions concerning useful life and residual value on depreciation expense;
d) Calculate depreciation expense;
e) Describe the different amortization methods for intangible assets with finite lives, the effect of the choice of amortization method on the financial statements, and the effects of assumptions concerning useful life and residual value on amortization expense;
f) Calculate amortization expense;
g) Describe the revaluation model;
h) Explain the impairment of property, plant, and equipment and intangible assets;
i) Explain the de-recognition of property, plant, and equipment and intangible assets;
j) Describe the financial statement presentation of and disclosures relating to property, plant, and equipment and intangible assets;
k) Compare the financial reporting of investment property with that of property, plant, and equipment.

READING: INCOME TAXES
The student should be able to:
a) Describe the differences between accounting profit and taxable income, and define key terms, including deferred tax assets, deferred tax liabilities, valuation allowance, taxes payable, and income tax expense;
b) Explain how deferred tax liabilities and assets are created and the factors that determine how a company’s deferred tax liabilities and assets should be treated for the purposes of financial analysis;
c) Calculate the tax base of a company’s assets and liabilities;
d) Calculate income tax expense, income taxes payable, deferred tax assets, and deferred tax liabilities, and calculate and interpret the adjustment to the financial statements related to a change in the income tax rate;
e) Evaluate the impact of tax rate changes on a company's financial statements and ratios;
f) Distinguish between temporary and permanent differences in pre-tax accounting income and taxable income;
g) Describe the valuation allowance for deferred tax assets—when it is required and what impact it has on financial statements;
h) Compare a company’s deferred tax items;
i) Analyze disclosures relating to deferred tax items and the effective tax rate reconciliation, and explain how information included in these disclosures affects a company’s financial statements and financial ratios;
j) Identify the key provisions of and differences between income tax accounting under IFRS and U.S. GAAP.

READING: NON-CURRENT (LONG-TERM) LIABILITIES
The student should be able to:
a) Determine the initial recognition, initial measurement and subsequent measurement of bonds;
b) Describe the effective interest method and calculate interest expense, amortization of bond discounts/premiums, and interest payments;
c) Explain the derecognition of debt;
d) Describe the role of debt covenants in protecting creditors;
e) Describe the financial statement presentation of and disclosures relating to debt;
f) Explain the motivations for leasing assets instead of purchasing them;
g) Distinguish between a finance lease and an operating lease from the perspectives of the lessor and the lessee;
h) Determine the initial recognition, initial measurement, and subsequent measurement of finance leases;
i) Compare the disclosures relating to finance and operating leases;
j) Compare the presentation and disclosure of defined contribution and defined benefit pension plans;
k) Calculate and interpret leverage and coverage ratios.

READING: FINANCIAL REPORTING QUALITY: RED FLAGS AND ACCOUNTING WARNING SIGNS
The student should be able to:
a) Describe incentives that might induce a company’s executives to manage reported earnings, financial positions, and cash flows;
b) Describe activities that will result in a low quality of earnings;
c) Describe the three conditions that are generally present when fraud occurs, including the risk factors related to these conditions;
d) Describe common accounting warning signs and methods for detecting each.

READING: ACCOUNTING SHENANIGANS ON THE CASH FLOW STATEMENT
The student should be able to:
a) Describe reasons for investors to assess the quality of cash flow statements;
b) Analyze and describe the following ways to manage or manipulate the cash flow statement: stretching out payables, financing of payables, securitization of receivables, issuing stock options, and using stock buybacks.

READING: FINANCIAL STATEMENT ANALYSIS: APPLICATIONS
The student should be able to:
a) Evaluate a company’s past financial performance and explain how a company’s strategy is reflected in past financial performance;
b) Forecast a company’s future net income and cash flow;
c) Describe the role of financial statement analysis in assessing the credit quality of potential debt investment;
d) Describe the use of financial statement analysis in screening for potential equity investments;
e) Explain appropriate analyst adjustments to a company’s financial statements to facilitate comparison with another company.