COURSE TIMES AND LOCATIONS:
Section 001: TR 5:55 p.m. – 7:10 p.m. Krug Hall 210

Instructor: Prof. Shelly L. Canterbury
Office: Enterprise Hall, Room 231
Office Hours: TR 11:00 a.m – 11:45 a.m., R 7:30 – 8:30 p.m., and by appointment
Email: scanterb@gmu.edu
Telephone: 703-993-1835 (however, the best way to reach me is through email)

Blackboard homepage: http://myMason.gmu.edu

Course Description and Prerequisites:

491 Advanced Topics in Valuation Prerequisites: FNAN 301; degree status (Formal admission into the School of Management). This course focuses on advanced valuation topics and builds on the knowledge and skills developed in FNAN302.

Course Materials:

1. Highly recommended: Corporate Valuation: Theory, Evidence, and Practice, Robert W. Holthausen, Mark E. Zmijewski, Cambridge Business Publishers LLC, 2014. Although the text is “highly recommended” and not required, it is an excellent reference for the material that we will cover. If you do not purchase the textbook, make sure that you have a classmate who is willing to share their textbook with you. You will be responsible for the material that is used from the textbook.

2. Required: Use of Excel in this class will be extensive. Therefore, you should have a reasonable level of proficiency building spreadsheets with this application.

3. Required: Laptops are required and should be brought to class. We will be working through the several valuation and return models during some of our class sessions. Being able to see the logic and links of an Excel model on your laptop does help in resolving a number of questions.

4. Bloomberg terminal. Bloomberg LP licenses computer software and services providing real-time financial data, news feeds, messages, and other market relevant data. The complex analysis capabilities offered through Bloomberg will allow you to quickly access company and industry data, analyze multi-year performance, and provide competitive analysis with a consolidated set of data. I will provide helpful instructions on Blackboard on how to create an account. (See Appendix B for guidelines on use.)

5. Oracle Crystal Ball simulation software application. Crystal Ball is a Monte Carlo simulation software package that works with Excel. Once you have constructed your
Excel analysis of a finance problem, Crystal Ball allows you to quickly simulate the analysis in order to develop a distribution of possible outcomes. Crystal Ball is an Oracle product. As some of the cases for this course involve simulation, the School of Business has acquired licenses for the students enrolled in this course to be able to download and install this software on their personal laptops (or desktops). There is a section on the course Blackboard site with information, details and exhibits related to Crystal Ball.

6. **Required: Valuation Cases**  This class is case-based. I have developed a coursepack through Harvard Business Publishers (HBS):

   https://cb.hbsp.harvard.edu/cbmp/access/33621715

   There is a charge for the materials required.

7. **Other resources:**  In any profession, the classroom is the “tip of the iceberg” and students who wish to excel in their careers do more than just attend classes, take exams, and complete projects. Although it is far from complete, I have provided additional readings and sites under the “Resources” folder on Blackboard. In the first week of class, please register for free investment resources and read them daily.

8. **Supplemental Materials:**  There may be situations where additional materials are needed. They will be provided either on Blackboard or other websites. In certain situations, there may be a small charge if the materials are provided through Harvard Business Publishers.

### Learning Goals (Competencies) for the Undergraduate Finance Major Program (approved by Finance Faculty, December 2, 2009)

Upon completing our undergraduate finance program, our majors will be competent in each of the following areas (highlighted goals are covered in FNAN302):

1. Finance majors will be able to value complex projects, assets and securities.
2. Finance majors will be able to demonstrate, evaluate, and explain the risk return trade-offs in finance.
3. Finance majors will be able to conduct a financial analysis of a firm using financial statements.
4. Finance majors will be able price and use derivatives.
5. Finance majors will recognize and understand how to address ethical issues in finance including agency problems.
6. Finance majors will be able to conduct research to support the analysis of a firm or financial project and effectively present their analysis.
7. Finance majors will understand the relationships among investors, firms, financial institutions, and regulatory entities in financial markets and systems.
8. Finance majors will understand how global financial markets and institutions affect firms and investors.

### Course Objectives for FNAN491 are:

**Objective 1:** understand the valuation process used to value equity securities

**Objective 2:** understand the various valuation techniques required to determine the intrinsic value of the firm

**Objective 3:** apply various analysis and valuation techniques using Excel
Objective 4: provide a format that enables students to learn the tools of the trade
Objective 5: define finance problems in a critical way such that a solution is more readily apparent, clearly identified, and presented

Course Outline/Schedule:
The course outline/schedule is tentative and may be changed over the course of the semester. I will notify you of any changes via email and a revised schedule on Blackboard. It can be found at the end of the syllabus in Appendix A.

Honor Code:
You are encouraged to work with other students to better understand the material. It is permissible for you to establish study groups to review case approaches and inputs. However, any assigned Case Analysis Reports to be turned in are to be your individual work. Students are expected to know and follow the GMU Honor Code which can be found at http://oai.gmu.edu/understanding-the-honor-code/. All cheating in any form will result in an honor code violation accusation. Please see Appendix C for the School of Business Recommendations for Honor Code Violations (Adopted by the faculty May 2012)

University Office of Disability Services:
If you have a disability or situation of which I need to be aware, please schedule a time to discuss this with me at the beginning of the semester. If any accommodations are to be made, disabilities must be documented with the Office of Disability Services (ODS). The mission of the ODS at George Mason University is to facilitate equal access for students with disabilities to university programs, events, and services. The ODS is located in the Student Union Building 1, Suite 2500, or consult their web site at http://ods.gmu.edu/resources.php

Communication:
Please use your GMU email account that identifies you by name for course work and correspondence. The easiest way to communicate with me outside of class is via email at scanterb@gmu.edu. You can generally expect a reply within one business day (defined as Monday through Friday). I may not respond to emails over the weekend.

The Use of Cases in the Course and Grades

Review and Preparation for a Case Discussion:
You will need to have carefully reviewed each case prior to class. For each case, I will post on the course website a set of suggested questions you should consider as you review the case. For each of the cases, I will also include some key assumptions that you may find useful in organizing your review and analysis of the case. I will also post an outline of how I plan to lead the discussion of the case. Each of these is intended as a guide to help you prepare and know how I will approach our discussion. For some cases I will post an Excel template that may be helpful in structuring your analysis. You will only learn from these cases if you take the time to prepare in advance. For most cases, it is helpful as you review a case to try and gain an understanding of the nature of the business or industry that in which a firm is operating. Most (if not all) cases focus on one or more valuation element.
Case Assignments:
You will each be given an assignment to prepare the analysis (see case analysis reports section) for two cases. Each of these two case assignments will represent 40% of your final grade in the course. The remaining 20% will be for participation in the discussion of the cases as well as the Blackstone-Celanese simulation we will be doing. Just attending and listening is not sufficient. I do record a class participation mark for all students following each class. In addition to the students assigned the responsibility for a case, I do expect everyone will have carefully reviewed the case in advance of class and contribute to the class discussion.

Submission of Case Reports:
Case analysis reports must be turned in no later than the class session when the case is presented and discussed in class. It is unfair to the other students in the class assigned a case to submit an assigned case report following the class discussion and presentation. There will be zero credit for late case analysis reports.

I will post on the course website a listing of assigned cases by individual student (after the add date of January 27th).

Grading Norms and Weights:
I review all of the case reports on a given case prior to assigning case grades. Grading is relative with the “best” case report receiving the highest mark and the poorest report the lowest mark. I do use + and – grades in addition to letter grades. An A or A+ grade is only assigned if the report is of a quality I would send to a consulting client.

Performance Evaluation:

<table>
<thead>
<tr>
<th>Course Component</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Case Assignment Report</td>
<td>40%</td>
</tr>
<tr>
<td>Second Case Assignment Report</td>
<td>40%</td>
</tr>
<tr>
<td>Case Discussion and Simulation Participation</td>
<td>20%</td>
</tr>
</tbody>
</table>

Class Case Presentation:
The analysis of these cases is much more effective if someone has carefully worked through the analysis and is prepared to lead everyone through this part of the case. I will designate one or more students to present their analysis of the case to the class. You should be prepared to take the class through your analysis. You may wish to present some of your analysis in Excel and/or PowerPoint if you feel this will help the rest of the class better understand how you have approached the problem. You must not miss the class session when you are assigned the responsibility to present your analysis to the class. If you should miss this session, you will receive zero credit for the case assignment.
Case Analysis Reports:
All of the case analyses reports should be concise and similar in style and content to a report intended for a firm’s senior management. The case analyses must be computer printed. I will grade these reports and return them to you. A suggested outline for a case analysis report follows:

1. Executive Summary (including your recommendation)
2. A statement of the problem(s) you see the firm or decision maker facing
3. Methodology or techniques (those that you believe are best for this problem and that you recommend employing)
4. Data requirement or sources (those necessary to employ your recommended technique)
5. Key assumptions (those you had to make to conduct your analysis)
6. Analysis
7. Conclusions and concerns

There is no formal limit on the length of the reports. As a business report, they do need to be effectively prepared and certainly the length will vary with the complexity of the case. There are two specific requirements for the reports; that is, 1) you must begin the report with an executive summary that includes your recommendation, and 2) you must include page numbers.

Consultation regarding a case:
You may discuss a case and your thoughts regarding how you might organize your analysis with other students in the class. However, you should not collaborate and/or share your work with other students or anyone else. The work you submit should be your own. Using someone else’s work in the analysis and preparation of your case is unacceptable and will lead to an Honor Code Violation.

I am available to consult with you regarding your analysis of a specific case. This is more effective if you have begun the analysis and I am able to see how you are approaching the problem. Some students may prefer to come in with their analysis. Others may prefer emailing me their Excel file and after I have taken a look, we can discuss your analysis by telephone or email. If you email me regarding a case, I will do my best to respond within 24 hours except on weekends. During a weekend, it may be 48 hours before I am able to get back to you. I will be unable to assist you with a case during the 24 hour period prior to it being due. Please be sure to include in your email the title of the case you are working on.

Other Matters

Attendance:
Class participation is an important part of the learning process and with a case based course, it is vital. It is important that you attend class for two basic reasons. First, in the week or two leading up to a case assignment, we will be discussing and reviewing the issues, approaches, and methodologies that may be applicable to the case. Second with a case approach, all students are expected to contribute to the discussion of the case issues. Unless you are in class, you cannot contribute.

Software requirements:
You will need a recent, licensed version of Excel (2007, 2010, or 2013) for this course. If you are using a Mac, please make sure your version of Excel is fully supported. For most class sessions at least some of the presentation materials will be in Excel. Further, most of the detailed quantitative exhibits within the cases have been saved as Excel files and posted to the course website. You may download these directly. Some of the case assignments will be extraordinarily time consuming if not impossible without Excel.

**Crystal Ball Software Download:**
Crystal Ball is a Monte Carlo simulation software package that works with Excel. Once you have constructed your Excel analysis of a finance problem, Crystal Ball allows you to quickly simulate the analysis in order to develop a distribution of possible outcomes. Crystal Ball is an Oracle product. As some of the cases for this course involve simulation, the School of Business has acquired licenses for the students enrolled in this course to be able to download and install this software on their personal laptops (or desktops). There is a section on the course Blackboard site with information, details and exhibits related to Crystal Ball.

**Laptops:**
Bring your laptop to class. We will be working through the several valuation and return models during some of our class sessions. Being able to see the logic and links of an Excel models on your laptop does help in resolving a number of questions.

**Honor Code:**
I expect you to follow the University’s honor code as presented in the University’s publications. I consider it to be inappropriate and a violation of the University's honor code, to (i) use someone else’s work, including spreadsheet models, and submit them as your own or (ii) to use a purchased case solution.

**Course Grading:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>&gt;=97.5%</td>
<td>4.00</td>
</tr>
<tr>
<td>A</td>
<td>92.5% – 97.4%</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>89.5% – 92.4%</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>86.5% – 89.4%</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>82.5% – 86.4%</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>79.5% – 82.4%</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>76.5% – 79.4%</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>69.5% – 76.4%</td>
<td>2.00</td>
</tr>
<tr>
<td>D</td>
<td>59.5% - 69.4%</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>&lt;59.5%</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The grade you receive is entirely your responsibility. Weighted average final number grades will result in the associated letter grades noted above. Rounding to the nearest 1/10th of 1% or one decimal place will occur (e.g., 79.6 = B-). You are responsible for tracking your grade progress on Blackboard.

Final grades will not be posted on Blackboard. You can access Patriot Web for final grades approximately 48 hours after the class. I do not negotiate exam grades nor final grades. Once posted, they are final.
### SUMMARY OF IMPORTANT DATES:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First day of classes</td>
<td><strong>Tue Jan 20</strong></td>
</tr>
<tr>
<td>Last day to add classes</td>
<td><strong>Tues Jan 27</strong></td>
</tr>
<tr>
<td>Last day to drop with a 33% tuition penalty</td>
<td><strong>Tues Feb 10</strong></td>
</tr>
<tr>
<td>Final Drop Deadline (67% tuition penalty)</td>
<td><strong>Fri Feb 20</strong></td>
</tr>
<tr>
<td><strong>Selective Withdrawal Period (undergraduate students only)</strong></td>
<td>Mon Feb 23 – Fri Mar 27</td>
</tr>
<tr>
<td><strong>Spring Break</strong></td>
<td>Mon Mar 9 – Sun Mar 15</td>
</tr>
<tr>
<td>Last day of classes</td>
<td><strong>Mon May 4</strong></td>
</tr>
</tbody>
</table>
School of Business Community Standards of Behavior:
The mission of the School of Business at George Mason University is to create and deliver high quality educational programs and research. Students, faculty, staff, and alumni that participate in these educational programs contribute to the well-being of society. High quality educational programs require an environment of trust and mutual respect, free expression and inquiry, and a commitment to truth, excellence, and lifelong learning. Students, program participants, faculty, staff, and alumni accept these principles when they join the School of Business community. In doing so, they agree to abide by the following Community Standards of Behavior:

- Respect for the rights, differences, and dignity of others
- Honesty and integrity in dealing with all members of the community
- Accountability for personal behavior

Integrity is an essential ingredient of a successful learning community. Ethical standards of behavior help promote a safe and productive community environment, and ensure every member the opportunity to pursue excellence.

The School of Business can and should be a living model of these behavioral standards. To this end, community members have a personal responsibility to integrate these standards into every aspect of their experience at the School of Business. Through our personal commitment to these Community Standards of Behavior, we can create an environment in which all can achieve their full potential.
Appendix A

FNAN 491 COURSE OUTLINE - SPRING 2015

The schedule below reflects expected class progress in course subject matter and is considered tentative. The schedule is subject to change in content and scope at the instructor’s discretion.

<table>
<thead>
<tr>
<th>Date</th>
<th>All sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>T, 1/20</td>
<td>Syllabus, class schedule, intro to class</td>
</tr>
<tr>
<td>R, 1/22</td>
<td>Forecasting and Discounted Cash Flow Review (Teuer Furniture A)</td>
</tr>
<tr>
<td>T, 1/27</td>
<td>Forecasting and Discounted Cash Flow Review (Teuer Furniture A)</td>
</tr>
<tr>
<td>R, 1/29</td>
<td>Multiples Valuation (Teuer Furniture B)</td>
</tr>
<tr>
<td>T, 2/3</td>
<td>Multiples Valuation (Teuer Furniture B)</td>
</tr>
<tr>
<td>R, 2/5</td>
<td>Capital Structure (Marriott)</td>
</tr>
<tr>
<td>T, 2/10</td>
<td>Capital Structure (Marriott)</td>
</tr>
<tr>
<td>R, 2/12</td>
<td>Residual income valuation model (Coca Cola)</td>
</tr>
<tr>
<td>T, 2/17</td>
<td>Residual income valuation model (Coca Cola)</td>
</tr>
<tr>
<td>R, 2/19</td>
<td>Subscriber Model (Netflix)</td>
</tr>
<tr>
<td>T, 2/24</td>
<td>Subscriber Model (Netflix)</td>
</tr>
<tr>
<td>R, 2/26</td>
<td>Acquiring growth (Radio One)</td>
</tr>
<tr>
<td>T, 3/3</td>
<td>Acquiring growth (Radio One)</td>
</tr>
<tr>
<td>R, 3/5</td>
<td>Wall Street vs. Main Street (Coach)</td>
</tr>
<tr>
<td>T, 3/10</td>
<td>Spring break – no classes or office hours</td>
</tr>
<tr>
<td>R, 3/12</td>
<td>Spring break – no classes or office hours</td>
</tr>
<tr>
<td>T, 3/17</td>
<td>Start up, high growth valuation (LinkedIn)</td>
</tr>
<tr>
<td>R, 3/19</td>
<td>Start up, high growth valuation (LinkedIn)</td>
</tr>
<tr>
<td>T, 3/24</td>
<td>The Black-Scholes Pricing Model</td>
</tr>
<tr>
<td>R, 3/26</td>
<td>Mezzanine financing (Elephant Bar)</td>
</tr>
<tr>
<td>T, 3/31</td>
<td>Mezzanine financing (Elephant Bar)</td>
</tr>
<tr>
<td>R, 4/2</td>
<td>Leveraged Buyouts</td>
</tr>
<tr>
<td>T, 4/7</td>
<td>Leveraged Buyouts (Hertz Corporation)</td>
</tr>
<tr>
<td>R, 4/9</td>
<td>Leveraged Buyouts (Hertz Corporation)</td>
</tr>
<tr>
<td>T, 4/14</td>
<td>Accretion/Dilution</td>
</tr>
<tr>
<td>R, 4/16</td>
<td>Accretion/Dilution (SunTrust)</td>
</tr>
<tr>
<td>T, 4/21</td>
<td>Accretion/Dilution (SunTrust)</td>
</tr>
<tr>
<td>R, 4/23</td>
<td>Blackstone-Celenese Simulation (Introduction)</td>
</tr>
<tr>
<td>T, 4/28</td>
<td>Blackstone-Celenese Simulation (Rounds 1 and 2)</td>
</tr>
<tr>
<td>R, 4/30</td>
<td>Blackstone-Celenese Simulation (Debrief)</td>
</tr>
</tbody>
</table>
To: FNAN 491 Class

From: Shelly Canterbury

Re: Bloomberg Terminals

In the fall of 2011, Bloomberg terminals were installed in Enterprise Hall, room 176 for use by undergraduate and graduate students enrolled in SOM.

Bloomberg provides a subscription to high-performance financial, regulatory, and market databases. Analysts and investors can access, crunch, analyze, and store information on companies, bonds, mortgages, currencies, etc., as well as monitor news releases, stock and bond markets, and any number of activities in the financial world.

Enterprise Hall is generally accessible throughout the day and evening (Monday – Sunday). FNAN302 will have a separate access code for security reasons. If the equipment is damaged or missing, we will be able to monitor who had last use of the lab. The School of Business will prosecute students for damage or theft.

There will be assignments throughout the semester which will require the use of the Bloomberg terminal and databases. These assignments will be to help students complete their analysis in support of exams and homework.

There are some basic rules that I would like for you to follow so that we can continue the use of Bloomberg in SOM. Theft or misuse of the terminals could result in the School of Business NOT renewing our licenses.

1. Use only your access code to get into the Bloomberg terminal room and do not share your code with others.
2. The terminals are for Bloomberg use only.
3. Log out when you have finished using the system.
4. The terminals are for academic use only (in other words, you are not to do work for an employer).
5. Be respectful of the computers, keyboards, and monitors. If damaged, they will not be replaced.
6. Do not eat or drink while using the Bloomberg terminals.
7. Keep the Bloomberg lab clean (throw away your trash) and do not move the terminals or furniture.
8. Report misuse or theft to either the Dean’s office or me.
9. Use the calendar to schedule time on the terminal. If someone has signed up after you, please be respectful and sign off when your time is over.

These are simple rules to have access to one of the most powerful research tools in finance. Take advantage of this resource and opportunity. It is an invaluable tool for demonstrating your understanding of research and valuation to prospective employers.
## School of Business Recommendations for Honor Code Violations

*Adopted by the faculty May 2012*

### UG-Non Freshman Students (including transfer students)

<table>
<thead>
<tr>
<th>Type of Violation</th>
<th>First Offense</th>
<th>Second Offense</th>
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<tbody>
<tr>
<td>Plagiarism—failure to cite/attribute sources</td>
<td>An F in the class; multiple visits to the Writing Center required;</td>
<td>An F in the class; multiple visits to the Writing Center required;</td>
</tr>
<tr>
<td></td>
<td>and Academic Integrity Seminar Attendance</td>
<td>Academic Integrity Seminar Attendance; dismissal from the program; and possible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>suspension or expulsion</td>
</tr>
<tr>
<td>Plagiarism—representing someone else’s work as the student’s own</td>
<td>An F in the class; multiple visits to the Writing Center required;</td>
<td>An F in the class; multiple visits to the Writing Center required;</td>
</tr>
<tr>
<td></td>
<td>and Academic Integrity Seminar Attendance</td>
<td>Academic Integrity Seminar Attendance (at times of hearing and reenrollment if</td>
</tr>
<tr>
<td></td>
<td></td>
<td>relevant); dismissal from the program; and possible suspension or expulsion</td>
</tr>
<tr>
<td>Cheating on an assignment, homework, class participation, or minor project</td>
<td>An F in the class; and Academic Integrity Seminar Attendance</td>
<td>Expulsion</td>
</tr>
<tr>
<td>Cheating on a major project, test, or exam</td>
<td>An F in the class; Academic Integrity Seminar Attendance; and at least one</td>
<td>Expulsion</td>
</tr>
<tr>
<td></td>
<td>semester suspension</td>
<td></td>
</tr>
<tr>
<td>Egregious Violation [e.g., stealing an exam; submitting coursework from another</td>
<td>Dismissal from the program; at least one year suspension; and attendance at</td>
<td>Expulsion</td>
</tr>
<tr>
<td>class as original work; lying to an employer about academic performance]</td>
<td>Academic Integrity Seminar at the time of hearing and just prior to reenrollment</td>
<td></td>
</tr>
</tbody>
</table>

Appendix C