**UNIVERSITY OF MARY WASHINGTON -- NEW COURSE PROPOSAL**

Electronically submit this completed form with attachments in one file to the Chair of the College Curriculum Committee.

<table>
<thead>
<tr>
<th>COLLEGE (check one):</th>
<th>Arts and Sciences</th>
<th>Business</th>
<th>X</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Title:</td>
<td>Financial Modeling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department/discipline and course number*:</td>
<td>BUAD411</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This course number must be approved by the Office of the Registrar before the proposal is submitted.

Number of credits proposed: | 3 | Prerequisites: | BUAD381 |
|---------------------------|---|---------------|---------|

Will this be a new, repeatable "special topics" course? (Do you want students to be able to take this new course more than once if the topic changes?)

<table>
<thead>
<tr>
<th>YES</th>
<th>X</th>
<th>YES</th>
</tr>
</thead>
</table>

Date of first offering of this new course: FALL SEMESTER, year | Fall 2015 |

Proposed frequency of offering of the course: | Annual |

List the faculty who will likely teach the course: | Rachel Graefe-Anderson |

Are ANY new resources required? | NO | X | YES |
|-----------------------------|---|---|---------------|

### Catalog Description:
This course introduces students to technology supporting financial modeling and decision making. Students will learn to apply and extend the concepts they have learned in the introductory finance course into a spreadsheet model framework of Microsoft Excel. The course will examine modeling in four primary areas: (1) corporate finance models, (2) fixed income securities models, (3) portfolio models, and (4) option pricing models.

### COURSE HISTORY

<table>
<thead>
<tr>
<th>Was this course taught previously as a topics or experimental course?</th>
<th>YES</th>
<th>X</th>
<th>NO</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Course Number and Title of Previous Course</th>
<th>Semester Offered</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 471A5: Financial Modeling</td>
<td>Spring 2014</td>
<td>16</td>
</tr>
</tbody>
</table>

| CHECK HERE if the proposed course is to be equated with the earlier topics or experimental offerings. This means that students who took the earlier "topics" course will only be able to take the new course if they made a C- grade or lower in the earlier course. |

**NOTE:** If the proposed course has not been previously offered as a topics or experimental course, explain in the attached rationale statement why the course should be adopted even though it has not been tried out.

### REQUIRED ATTACHMENTS:

1. **Rationale Statement** (Why is this course needed? What purposes will it serve?)
2. **Impact Statement** (Provide details about the Library, space, budget, and technology impacts created by adding this new course. Include supporting statements from the Library, IT Department, etc. as needed.)
3. **Sample Syllabus**

Department Chair Approval: ___________________________ Date: ____________

CCC Chair Approval: ___________________________ Date: ____________

UCC Chair Approval: ___________________________ Date: ____________
Rationale Statement

This course provides students interested in Finance with an opportunity for further study that has not previously been available. The students study more advanced topics in the field of Finance with a specific focus on problem-solving using technology (specifically Microsoft Excel). Many of our business students will benefit from enhancing Microsoft Excel skills through coursework relevant to their major. Such skills are highly marketable and valued on the job market. This course enhances students’ preparation for entering the job market in multiple areas of the business world as valued employees while also providing significantly more depth (than currently reached in the Principles of Finance course) in the actual field of study. Students specifically interested in pursuing careers in the field of Finance also gain enhanced preparation for that specific job market. Students learn how to solve advanced and complex Capital Budgeting problems. They learn how to analyze and devise option trading strategies, how to solve the portfolio optimization problem, how to build models that forecast financial statements and use those forecasts to estimate corporate values, etc. All of these tasks build a stronger foundational base in the field of Finance for students interested in careers in that area, add to the students’ marketable skill set. Importantly, all of these tasks also enhance students’ analytical and critical thinking skills, which are key elements to successful completion of a Liberal Arts curriculum. Lastly, as further support of the Liberal Arts curriculum at the University, the students are asked to synthesize the results of each task into a report, which enhances written communication skills.

Impact Statement

There are no new resources required for this course. The College of Business plan is for me to teach one elective each Fall and Spring in the area of Finance. This proposal is being submitted with another new course proposal with the intention of teaching Financial Modeling in the Fall semester each year and Advanced Corporate Finance in the Spring semester each year (beginning 2015-2016).
INSTRUCTOR: Rachel Graefe-Anderson, Ph.D.

OFFICE: George Washington 210

OFFICE HOURS: M/W 2-4pm
By Appointment

EMAIL: rgraefea@umw.edu

PHONE: 540-654-1704 (office)
814-470-1135 (cell) *Emergencies ONLY

CANVAS:
Information about the course including the syllabus, tentative schedule, and class notes can be found on Canvas.

REQUIRED MATERIALS:
Simon Benninga, Financial Modeling, 3ed
Supplemental Text (not required): At times, you may want to have access to a “deeper” coverage of the topics we will discuss. At those times, the textbook used for FINC 303 should be a good reference.

COURSE OVERVIEW: The course introduces students to technology supporting financial modeling and decision making. Students will learn to apply the concepts they have learned in the introductory finance courses into a spreadsheet model framework of Microsoft Excel. The course will examine modeling in four primary areas: (1) corporate finance models, (2) fixed income securities models, (3) portfolio models, and (4) option pricing models. The course relies on quantitative analysis and use of Internet and is, thus, application oriented.

GENERAL LEARNING OBJECTIVES
1. To gain proficiency with Excel’s tools and functions.
2. To learn how to apply spreadsheets to various financial problems, such as pro forma statement analysis, valuation, portfolio analysis, and testing of the CAPM.
3. To use Internet as a resource for financial problem-solving and decision making.
4. To learn how to summarize data, and interpret and communicate the results.

SPECIFIC MODELING OBJECTIVES:
At a minimum, completion of this course will ensure students have a working knowledge of the following financial models:

- basic financial calculations
- cost of capital calculation
- financial statement analysis
- duration calculation
- term structure of interest rates
- efficient portfolio creation
- estimating beta and the security market line
- the Black-Scholes model

LEARNING OUTCOMES:
Upon successful completion of this course, students should be able to use Excel to perform the following tasks:

- Analyze financial statements and create a report regarding the financial health of an organization based on this analysis.
- Forecast financial statements and cash flows.
- Perform valuation of investment opportunities incorporating time-value of money.
- Determine the optimal portfolio for a given set of investments.
- Evaluate and compare capital investment opportunities.
- Estimate option values and evaluate option strategies.

CONDUCT OF COURSE: The material will be covered through lecture, discussion, problem solving, and computer simulation. Student comprehension and understanding of the material will be measured through exams.

GRADING:

<table>
<thead>
<tr>
<th>Activities</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>15</td>
</tr>
<tr>
<td>Participation/In class Exercises</td>
<td>10</td>
</tr>
<tr>
<td>In Class Exams (2 x 15)</td>
<td>30</td>
</tr>
<tr>
<td>Projects</td>
<td>15</td>
</tr>
<tr>
<td>Take Home Exam</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

GRADING SCALE:
The following grading scale will be used as a guideline in assigning grades.
<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100%</td>
</tr>
<tr>
<td>A-</td>
<td>90-92%</td>
</tr>
<tr>
<td>B+</td>
<td>87-89%</td>
</tr>
<tr>
<td>B</td>
<td>83-86%</td>
</tr>
<tr>
<td>B-</td>
<td>80-82%</td>
</tr>
<tr>
<td>C+</td>
<td>77-79%</td>
</tr>
<tr>
<td>C</td>
<td>73-76%</td>
</tr>
<tr>
<td>C-</td>
<td>70-72%</td>
</tr>
<tr>
<td>D+</td>
<td>67-69%</td>
</tr>
<tr>
<td>D</td>
<td>60-66%</td>
</tr>
<tr>
<td>F</td>
<td>less than 60%</td>
</tr>
</tbody>
</table>

PARTICIPATION/IN-CLASS EXERCISES:

I will monitor class participation and attendance on a daily basis. An in-class activity will be assigned in every class. For each in-class activity, you will be graded out of 2 points. If I find that you made satisfactory progress in the class, you will earn full 2 points. If not, you will earn 1 point. You earn zero points if you are absent for the class. To accommodate for extraordinary circumstances that may prevent you from attending a few classes, I will drop three of your lowest scores. The total points of all class activities will be scaled down to 10% of your final grade.

PROJECTS:

This class will involve several projects designed to enhance understanding of the subject matter. The projects will be done in groups, to be determined the first week of class. A detailed outline of instructions and project requirements will be provided within the first few weeks of class.

EXAMS:

Exams are intended to measure your understanding of the topic areas and subject matter in the field being studied. Your ability to solve problems similar to those found in the text represents only a small, but important, portion of this understanding. Concepts and theories are an integral part of your education. When you are working in business and industry, you will rarely encounter problems presented precisely as they are in class or in the textbook. Therefore, the ability to transfer knowledge is essential. This ability is tested on exams. Exams are only to be taken by students who are enrolled in the course. Any student who drops the class or is not enrolled in the class should not sit for an exam. Violations of this policy will be reported to the Honor Court.

There will one comprehensive take-home final exam in this class.

ADDITIONAL POLICIES FOR EXAMS:

- Attendance at tests is mandatory.
- There will be no makeup exams. If you miss a test due to an excused absence, the grade on your final examination will be considered your grade for the missed test. An absence is considered unexcused unless and until it is classified as excused through the Office of the Dean of Undergraduate Studies. If you miss any test due to an unexcused absence, a grade of zero (“0”) will be assigned for that test.
- During the exam, I will only answer clarification questions.
• Cell phones must be turned off and put away in book bags, back packs, or purses.

HOMEWORK:

Tasks will be assigned with specific requirements for completion throughout the course. **Students are encouraged to work together on the homework problems. However, it is unacceptable to have another student complete your assignment for you or to submit a copy of another student’s homework.**

HONOR SYSTEM:

The following policy is an expansion of my support for the honor system and is offered as a reminder to the student.

  o Study groups are encouraged for chapter coverage and problem solving.
  
  o Students should not discuss examinations until after examinations are covered in class. Telling students in other classes or section what is covered on an exam is considered helping improve the grades of others and will be treated as an honor violation.
  
  o Unpledged work will not be graded.

DISABILITY STATEMENT:

The Office of Disability Resources has been designated by the University as the primary office to guide, counsel, and assist students with disabilities. If you receive services through the Office of Disability Services and require accommodations for this class, make an appointment with me as soon as possible to discuss your approved accommodation needs. Bring your accommodation letter with you to the appointment. I will hold any information you share with me in strictest confidence unless you give me permission to do otherwise. If you have not made contact with the Office of Disability Services and need accommodations, (note taking assistance, extended time for tests, etc.), I will be happy to refer you. The office will require appropriate documentation of disability. Their phone number is 540-654-1266.

ADDITIONAL POLICIES:

• Always bring your books to class. I will refer to figures or questions in the book during class.
• Please turn off your cell phones at the beginning of class.
• I will schedule appointments with students outside of my regularly scheduled office hours if they have a conflict with my scheduled hours, as long as I will be on campus and don't have a scheduling conflict. The more notice I have for an appointment, the better the chance that I can be available.
• I will not provide scores for any assignment, exam, or quiz via the telephone or by email. The Family Educational Rights and Privacy Act (http://www.ed.gov/offices/OII/fpco/ferpa/) prohibits me from discussing your grades in this course with your parents, with other members of your family, or with your friends.
• No "extra credit" assignments will be given. All grades will be based on the grading criteria established in this syllabus.
• This class will contribute to you becoming a respected professional; therefore, I fully expect you to behave professionally. Do not sleep in class, talk in class, monopolize class time or make disrespectful comments. I do not expect you to be perfect, but if your behavior is obvious enough to distract me, then it is obvious enough to distract others.

REMINDER:

This syllabus may be changed at any time by sole discretion of the instructor.