Course Description
Successful innovation requires more than just a great idea. It almost always involves convincing others to provide the resources needed to implement that idea. To do so, you will need to demonstrate that the investment will be well-rewarded. In this course we will develop the necessary skills to build a financial model for your project or innovation, and learn how to use that model to maximize the value created and the return to your investors.

The course assumes no prior finance background. We will start from scratch and give you the understanding you will need to understand key information a firm’s financial statements, how to assess the impact of an investment decision on the firm’s earnings and cash flows, and how to value a project using the discounted cash flow (DCF) and weighted average cost of capital (WACC) techniques. We will also cover the basics of financial modeling in Excel, so that you can easily implement these methodologies for your own projects.

We will then see how these techniques can be used to guide managerial decision making and enhance shareholder value. We’ll conclude by showing how they can be used to value a company, explore the relationship between earnings, growth and market capitalization, and look at how venture capitalists assess and value firms. By the end of the course you will have the skills you need to evaluate your own investment projects and convincingly present your findings to others.

Course Modules

1. **Earnings, Cash Flows, and Shareholder Value**
   In this module, we will learn the basics of financial statements, and see how we can assess the impact of an investment decision on the firm’s earnings and cash flows. We’ll then see how we can assess the value created, or NPV, of a risk-free investment. The module will cover:
   - Review of Financial Statements – what information do they contain, and what is missing?
   - Capital Budgeting and Financial Decision Making
   - Developing an Earnings Forecast
   - Cash Flows versus Earnings: How do they differ, and why does it matter?
   - Measuring Value Creation: NPV

2. **Risk and the Cost of Capital**
   In this module, we’ll gain an understanding of the determinants of an investment’s cost of capital – the expected return required by investors to entice them to invest. Along the way, we’ll learn about the dynamics of interest rates and the yield curve (and how it can be used to forecast the economy), as well as the main principles of stock market investing. As a final exercise, you will learn how to build your own financial model in Excel. The module will cover:
   - Interest Rates and the Time Value of Money
   - Risk versus Return
   - Measuring Market Risk: Beta
   - Building a DCF/WACC Model

Updated 11/18/14
3. **Creating Shareholder Value**

Now that we have built a financial model, we will see how we can use it to better understand our investment opportunity and optimize its value. We will also learn about real options and how we can increase the value of an opportunity by timing or staging our investment. The module will cover:

- Identifying Sources and Drivers of Value
- The Pitfalls of Return-Based Measures of Value
- Real Options and the Staging of Investment

4. **Valuing the Firm**

The techniques we have used to evaluate a project can also be used to value an entire company. In this module we will explore the main methods used to value firms in practice, and understand their strengths and weaknesses. We will conclude by develop a basic template that can be used to estimate a firm’s share price. The module will cover:

- The Use and Misuse of Comparables
- Dividends, Repurchases, and Fundamental Value
- P/E Multiples and Growth
- Estimating Share Prices using the DCF/WACC Model

5. **Venture Capital Valuation**

In our final model, we look at how to value a startup. Critical in that assessment is forecasting when and how much capital the firm will need to raise, and the implications of future funding rounds for the dilution of existing investors. We will learn the key terms VCs use when valuing a company, how their hurdle rates are determined, and how to forecast the share price they will be willing to pay. The module will cover:

- Valuing a Startup – what is new?
- Pre-money and Post-money Valuation
- Exit Values and Dilution
- Understanding VC Returns and Hurdle Rates

**Course Requirements**

Please watch all course videos and complete all course exercises. Submission of all exercises is required to unlock the link to the course examination in the “Final Steps” section of the user interface. The exam consists of 15 multiple choice questions and is administered online. A score of 86% or higher is required to pass.

To complete the course, students must successfully complete all exercises, pass the examination, and complete the course evaluation.

**Exercises**

Each exercise will be submitted directly via the user interface. Members of the course teaching team will provide feedback on selected exercises. Feedback on the selected exercises will be provided within 5 business days. You are encouraged to proceed with the course while awaiting feedback on submitted exercises.

Your responses to the exercises will be kept within the learning platform. However, you will not have access to the responses you submitted after 90-day course access has expired. If you would like to keep a copy for your records, please do so separately.

Any questions related to the exercises should be sent to ask-the-professor-innovation@lists.stanford.edu. Be sure to include your name, the course number, and exercise name/number along with your questions.

Failing to complete all of the required exercises (or submitting partial answers to the exercises) in a deliberate manner can lead to an unsuccessful completion of the course.
attempt to unlock the course exam prematurely is a violation of the Stanford University Honor Code. Information regarding your responsibilities as a student of the Stanford Innovation and Entrepreneurship Certificate, including a link to the Honor Code, is available at http://studentaffairs.stanford.edu/communitystandards/policy/honor-code.

Course Materials
All course materials are provided within the course’s user interface. These include the course videos, exercise instructions, and other course handouts.

Digital Records of Completion (ROC)
Within 5-7 business days of completion of all course exercises and the course exam with a score of 86% or higher, a digital Record of Completion will be sent to your preferred email address from your mystanfordconnection account. More information about the Record of Completion is available at http://scpd.stanford.edu/becomeAStudent/recordOfCompletion.jsp

Questions
For content-related questions, please contact ask-the-professor-innovation@lists.stanford.edu. Be sure to include your name, the course you are taking and your questions.

For questions relating to course materials, billing, testing, general program information, etc., please contact Student Services at stanford-innovation@stanford.edu or 650-741-1581. Available 8:00am-4:00pm PST, M-F.

For technical troubleshooting and questions related to the user interface, please send an e-mail to scpdsupport@stanford.edu. Please provide the name and version number of the browser you are using to access the course materials.