

Syllabus
SIE567 – Financial Modeling for Innovation
Fall 2017

Instructor: Larry Head

Office: Engineering 251

Phone: 621-2264

Email: klhead@email.arizona.edu

Office Hours*: MF 3-5 PM or by appointment (check my calendar at http://bit.ly/calendar_klhead).

Distance students: webex meetings available by appointment.

Description: Financial Modeling for Innovation (3 units):

This a graduate level course in the economics of technology development for students interested in commercializing research discovery. Topics include Pro Forma financial statements, the time value of money, valuation approaches, and entrepreneurship.

Prerequisites: Graduate Student Status in Engineering or Science. No prior knowledge of engineering economics required. Students are expected to be **reasonably proficient with Microsoft Excel**.

Reference: **Contemporary Engineering Economics, 5th Edition, by Chan S. Park.**
Note that 4th or 3rd Edition Textbooks are OK as well as any international (soft cover) editions. Note this text is NOT required.

D2L Course: This class will use web-based D2L (Desire to Learn) as the means of distributing class materials including class assignments. All assignments are expected to be uploaded into Dropboxes on or before the due dates. You will need a UANet ID to access D2L at the following site: <http://d2l.arizona.edu/>. Distance students (and all students) can access recorded lectures via D2L. Click on **UA Resources** then **Panopto**.

Course objectives: This course introduces students to concepts of economic analysis and profitability. Specific outcomes include:

1. Understanding concepts related to the time value of money.
2. Understanding of Pro Forma Income Statements, Cash Flow Statements and Balance Sheets.
3. Ability to create financial statements to evaluate the economic potential of research discovery.
4. Ability to determine the economic viability, financing required, and ownership outcomes of new ventures.

Grading: The grade for this course will be determined as follows:

20% - Homework

80% - Term Projects

16% - 1st Year Financial Model

16% - Forecasted Sales, Manufacturing, Inventory and Consulting Model

16% - 5 and 10 Year Financial Models

16% - Business Valuation

16% - Case Study

* I often have to travel, so please email to let me know that you would like to come to office hours and we can arrange a meeting time/location.