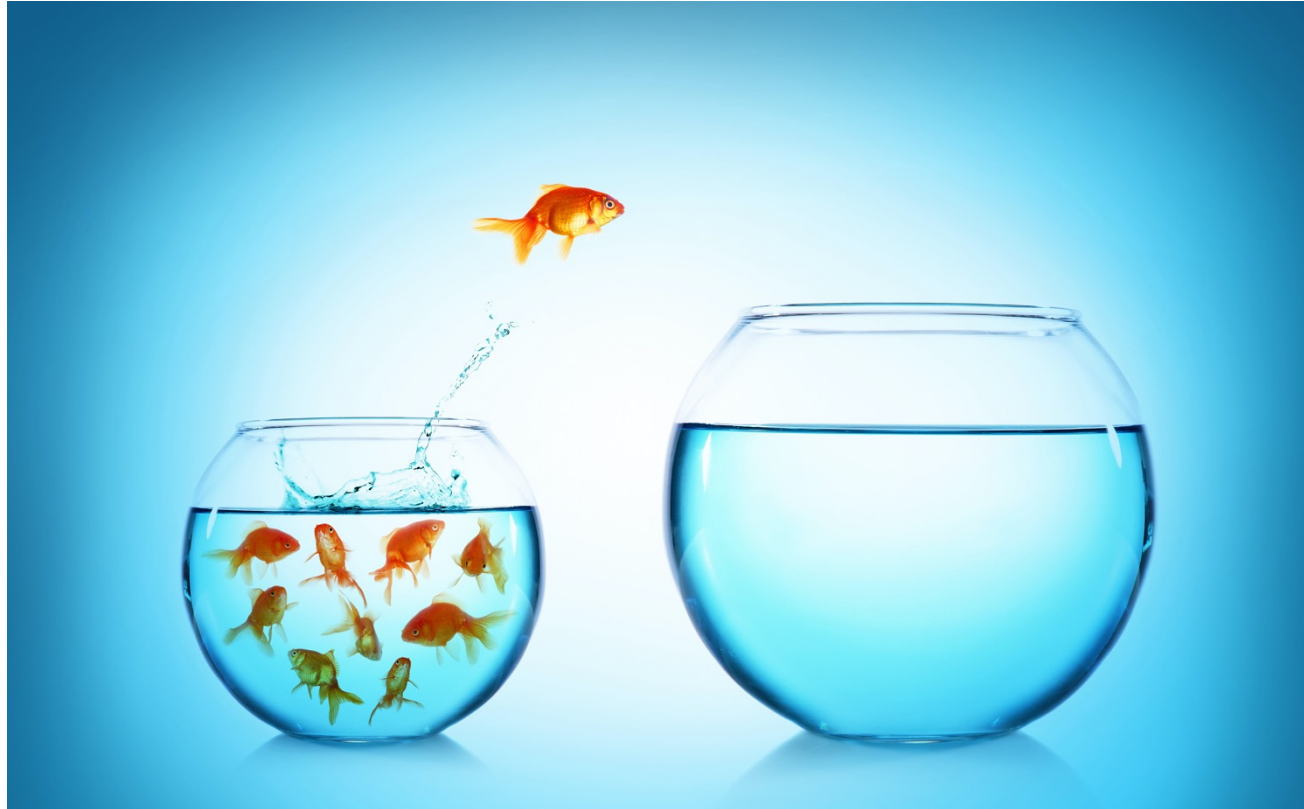


Course Overview



What should you expect to get out of this course?

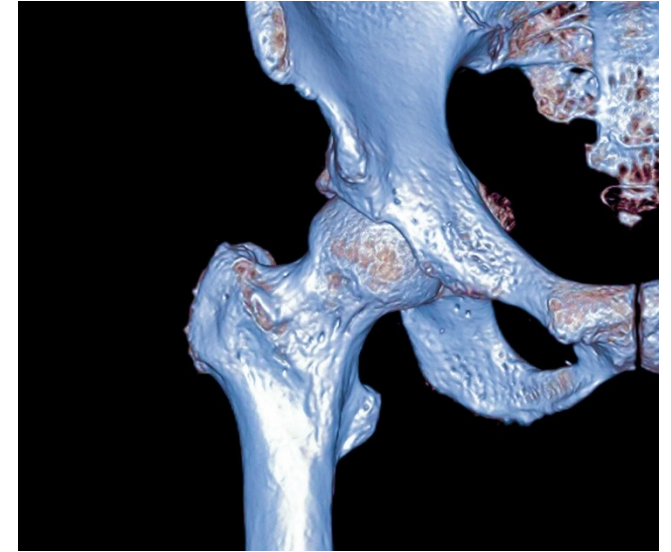
Medical Components Engineer...

New-Hip Orthopedics Inc. Hip Implant System



- Your job is to manufacture a highly reliable titanium-based hip implant system.
- The current process requires extensive machining out of a block of titanium.
- Your idea is to use 3D Printing, directly from a CT scan.

How do you propose this idea to upper management and secure the funding to develop and implement it?



Your Job as an Electric Vehicle Engineer...



- Your job is to design and engineer the battery packs on the company's new model.
- Your boss asks you to determine the costs of two battery packs: one designed for 500-mile range and a second designed for 300-mile range.

How do you determine the costs of each alternative?

About the Course...

It's budgeting time, and your company has \$1M to spend on projects...

Project A
\$800K

*You propose this one,
representing Engineering.*

Project B
\$800K

*Manufacturing
proposes this one.*

Project C
\$800K

*Marketing
proposes this one.*



*How does management
decide which one to pick?*

About the Course...

*And if you understand the time value of money,
compounding interest and rates of return, then...*

*...you can apply the same tools
to your own personal finances,
especially retirement planning!*



About the Course...

Or maybe you're an entrepreneur and want to start your own business...

...you need to know a lot about cash flow.

We will learn what “cash flow” means, and the financial tools to manage it during your startup.



Financial Management...

Evaluating historical financial data and future economic trends to make sound investment decisions.



Financial Management:
managing a firm's money
to achieve its desired
financial objectives.

Financial Management...

Readey's Definition: Financial Management is...

- ➡ *a lot of interesting number crunching, that...*
- ➡ *identifies the optimum path among many alternatives...*
- ➡ *using equations that are not terribly complex...*
- ➡ *and input values based on historical performance...*
- ➡ *to make your best estimate of the future outcomes!*

What we'll cover in this course...

**Types of Costs & How
to Estimate Them**

**Product & Process
Cost Analysis**

**Time Value of
Money (TVM)**

**Discounted Cash
Flow Analysis**

**Personal Finances &
Your Retirement Plan**

Our Ultimate Goal...

By the end of this course, you will be able to:

- ✓ Know how product costs are determined;
- ✓ Understand and apply the principles of Time Value of Money;
- ✓ Communicate with your financial colleagues with confidence, using the language of business;
- ✓ Develop a long-term investment strategy to achieve your personal financial goals.

Our Ultimate Goal...



Are you ready?

Next Time...

Course Mechanics



Credits & References

Slide 1: Goldfish jumping from glass aquarium by Africa Studio, Adobe Stock (93713656.jpeg).

Slide 2: Hip replacement implant by frog, Adobe Stock (77422712.jpeg). CT Scan of pelvic bone with both hip joint 3D rendering image for diagnosis fracture of hip joint, by samunella, Adobe Stock (66936257.jpeg). Metal 3D printer by chesky, Adobe Stock (89355491.jpeg).

Slide 3: Electric car parked in front of home by Herr Loeffler, Adobe Stock (281077073.jpeg).

Slide 4: Confident businesswoman and two colleagues by Flamingo Images, Adobe Stock (222509492.jpeg).

Slide 5: Human Hand Drawing Retirement Plan Growth Concept by Andrey Popov, Adobe Stock (168285586.jpeg).

Slide 6: Start own business by adrian_ilie825, Adobe Stock (57975888.jpeg).

Slide 7: Businesswoman standing at crossroads by jozefmicic, Adobe Stock (206033418.jpeg).

Slide 11: Successful business team by Lumos sp, Adobe Stock (303597321.jpeg).

Slide 12: Looking through lecture notes by pressmaster, Adobe Stock (131199774.jpeg).