



2012–2013 Course Catalog





TABLE OF CONTENTS

PROGRAMS

- » INDUSTRIAL BIOTECHNOLOGY IMMERSION
- » LIFE SCIENCE IMMERSION
- » LIFE SCIENCE 101
- » BUSINESS ESSENTIALS FOR SCIENTISTS
- » PROJECT MANAGEMENT
- » MILITARY TRANSITION TO LIFE SCIENCES

INDUSTRIAL BIOTECHNOLOGY IMMERSION PROGRAM

UNDERSTANDING THE BUSINESS ENVIRONMENT pages 10–12

- Real World Business Environment Perspectives Video Series
- Introduction to Industrial Biotechnology
- Algae
- Biofeedstocks
- Biofuels
- Renewable Chemicals
- In The Beginning The Business Plan
- Business Ethics
- Say It Smart Across Styles
- Say It Smart in Emails
- Say It Smart in Meetings
- Say It Smart in Presentations
- Say It Smart in Times of Conflict I
- Say It Smart in Times of Conflict II
- Say It Smart to Influence (Without Title or Authority)
- Say It Smart to Customers
- The History of Teams
- Winning Formulas For Today's Teams



FINANCE page 13

- Real World Finance Perspectives Video Series
- Accounting 101
- Budgeting
- Financial Statements
- Raising Capital
- The Valuation of Intellectual Property

PROJECT, PRODUCT, & PROCESS DEVELOPMENT pages 14–15

- Real World Project & Product Perspectives Video Series
- Project Management: Introduction
- Project Management: Initiation
- Project Management: Planning A
- Project Management: Planning B
- Project Management: Developing Requirements
- Project Management: Implementation & Control
- Project Management: Close-out
- Economics of Industrial Biotechnology
- Biorefining Basics
- Regulatory Affairs & Quality Systems
- Purchasing & Supply Chain Management

MARKETING & SALES page 16

- Real World Marketing & Sales Perspectives Video Series
- Introduction to Marketing & Sales
- The Difference Between Traditional & Science Based Marketing & Sales
- Market Analysis
- Business Development: Growing the Business
- Intellectual Property
- Exit Strategies



LIFE SCIENCE IMMERSION PROGRAM

UNDERSTANDING THE BUSINESS ENVIRONMENT pages 18–20

- Real World Business Environment Perspectives Video Series
- Medical Applications: The First Wave of Biotechnology
- Agricultural Applications: The Second Wave of Biotechnology
- Environmental Applications: The Third Wave of Biotechnology
- Life Science Industry Organizational Structure
- Introduction to Biology: The Cell
- The Basics of Microbiology
- Introduction to Immunology
- Understanding Human Anatomy & Physiology
- In The Beginning The Business Plan
- Business Ethics
- Say It Smart Across Styles
- Say It Smart in Emails
- Say It Smart in Meetings
- Say It Smart in Presentations
- Say It Smart in Times of Conflict I
- Say It Smart in Times of Conflict II
- Say It Smart to Influence (Without Title or Authority)
- Say It Smart to Customers
- The History of Teams
- Winning Formulas For Today's Teams

FINANCE page 21

- Real World Finance Perspectives Video Series
- Accounting 101
- Budgeting
- Financial Statements
- Raising Capital
- The Valuation of Intellectual Property



PROJECT, PRODUCT, & PROCESS DEVELOPMENT pages 22–23

- Real World Project & Product Perspectives Video Series
- Project Management: Introduction
- Project Management: Initiation
- Project Management: Planning A
- Project Management: Planning B
- Project Management: Developing Requirements
- Project Management: Implementation & Control
- Project Management: Close-out
- Life Science Product Development
- Regulatory Environment
- Clinical Trials & Phases
- Manufacturing
- Commercialization
- Quality Systems
- Purchasing & Supply Chain Management

MARKETING & SALES page 24

- Real World Marketing & Sales Perspectives Video Series
- Introduction to Sales & Marketing
- The Difference Between Traditional & Science Based Marketing & Sales
- Market Analysis
- Reimbursement 101
- Business Development: Growing the Business
- Intellectual Property
- Exit Strategies



LIFE SCIENCE 101 PROGRAM

UNDERSTANDING THE BUSINESS ENVIRONMENT page 26

- Real World Business Environment Perspectives Video Series
- Medical Applications: The First Wave of Biotechnology
- Agricultural Applications: The Second Wave of Biotechnology
- Environmental Applications: The Third Wave of Biotechnology
- Introduction to Biology The Cell
- The Basics of Microbiology
- Introduction to Immunology
- Understanding Human Anatomy & Physiology
- Business Ethics

FINANCE pages 27

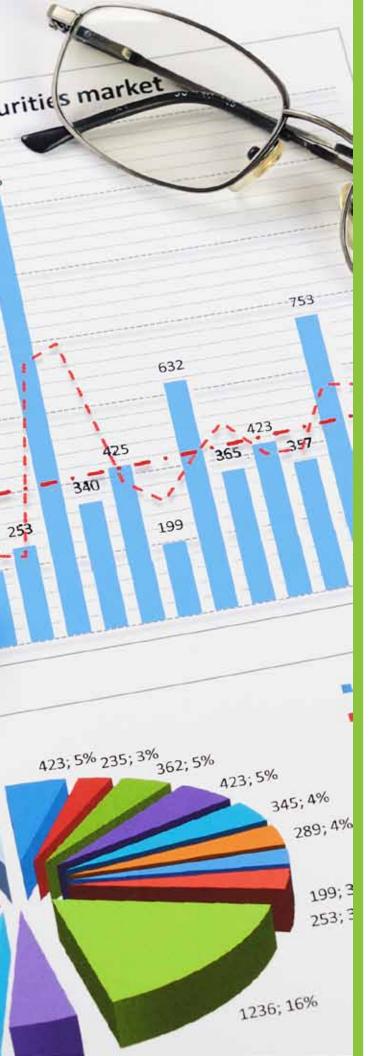
- Real World Finance Perspectives Video Series
- The Valuation of Intellectual Property
- Raising Capital

PROJECT, PRODUCT & PROCESS DEVELOPMENT page 27

- Real World Project & Product Perspectives Video Series
- Life Science Product Development
- Regulatory Environment
- Clinical Trials & Phases

MARKETING & SALES page 27

- Real World Marketing & Sales Perspectives Video Series
- The Difference Between Traditional & Science Based Marketing & Sales
- Reimbursement 101



BUSINESS ESSENTIALS FOR SCIENTISTS PROGRAM

UNDERSTANDING THE BUSINESS ENVIRONMENT pages 29–30

- Real World Business Environment Perspectives Video Series
- Business Ethics
- Say It Smart Across Styles
- Say It Smart in Emails
- Say It Smart in Meetings
- Say It Smart in Presentations
- Say It Smart in Times of Conflict I
- Say It Smart in Times of Conflict II
- Winning Formulas For Today's Teams

FINANCE page 31

- Real World Finance Perspectives Video Series
- Accounting 101
- Budgeting
- Financial Statements

PROJECT, PRODUCT, & PROCESS DEVELOPMENT pages 32–33

- Real World Project & Product Perspectives Video Series
- Project Management: Introduction
- Project Management: Initiation
- Project Management: Planning A
- Project Management: Planning B
- Project Management: Developing Requirements
- Project Management: Implementation & Control
- Project Management: Close-out
- Manufacturing
- Quality Systems



MARKETING & SALES page 34

- Real World Marketing & Sales Perspectives Video Series
- Introduction to Marketing & Sales
- The Difference Between Traditional & Science Based Marketing & Sales
- Market Analysis
- Intellectual Property

PROJECT MANAGEMENT PROGRAM

PROJECT MANAGEMENT FUNDAMENTALS page 36-37

- Real World Project Management Perspectives Video Series
- Project Management: Introduction
- Project Management: Initiation
- Project Management: Planning A
- Project Management: Planning B
- Project Management: Developing Requirements
- Project Management: Implementation & Control
- Project Management: Procurement
- Project Management: Quality
- Project Management: Close-out

ADVANCED PROJECT MANAGEMENT page 38

- Points of Pain Why Projects Fail
- The Initiation Phase A Deep Dive
- Developing Requirements Correcting Early
- Risk Mitigation How to Really Know Your Risks
- Broken Projects Diagnosis & Repair
- Duration & Cost Estimating Under Conditions of Uncertainty
- Advanced Project Leadership

MILITARY TRANSITION TO LIFE SCIENCES PROGRAMS

INFORMATION page 40



INDUSTRIAL BIOTECHNOLOGY IMMERSION PROGRAM

Understanding the Business Environment

- Real World Business Environment Perspectives | Video Series
- Introduction to Understanding the Business Environment
- Role of Ethics
- Overview of Industrial Biotechnology Industry
- Key Workplace Skills
- Business Environment Challenge & Solution
- Introduction to Industrial Biotechnology

The goal of industrial biotechnology is to develop biological processes that take elements from plants and animal matter to create sustainable manufacturing processes and products. This course gives an overview of the ways in which the industrial biotechnology industry is helping to create a more sustainable world.

+ Algae



Algae is an aquatic organism that has amazing potential as a biofeedstock. This course explores the different ways that algae can be cultivated and converted into a variety of end-use fuels and products.

Biofeedstocks

This course explores how biofeedstocks, like perennial grasses, crop residues, and municipal solid waste, can be used to establish a biobased economy that is economically viable, environmentally sustainable and socially responsible.

Biofuels

This course explores the different generations of biofuels and examines the benefits and disadvantages of each.

Renewable Chemicals

This course examines the process in which renewable chemicals are made, and describe general classifications, such as biopolymers and biocatalysts, as well as analyzes the impact of renewable chemicals on the environment.

In the Beginning – The Business Plan



When considering operations and the business environment, it helps to refer back to the organization's genesis – it's business plan. This course discusses the factors required for translating a great idea into a tangible business. From identifying and understanding financial considerations, to conducting a marketing analysis, to clarifying the potential viability of products – all of these elements become the organization's template for successful evolution.

♦ Business Ethics

The role of ethics plays an integral part in governing the organization's roadmap. The basis of a moral compass acts as the central point of reference when it comes to operational conduct. This course explores "Right vs. Wrong" concepts as well as "Right vs. Right."

* available 2013 ◆ core (required) class

Say It Smart Across Styles



One size fits one, not all. Learn how to adapt your communication style so that you can influence others who are different from you. Are you an out loud thinker or an internal percolator? Are you crazy about people or do people just plain make you crazy? What about a penchant for seeing the whole forest, or you more into examining each and every tree? Whatever your style, chances are, it's not exactly the same as those you work with. A downloadable

workbook accompanies this course.

• Say It Smart in Emails

More than 2 billion emails are sent globally each day. 92% of these are spam. Learn when to email and when not to. Get your email message across with the utmost clarity via striking subject headers, 'BLOT', bullet like text and other helpful tips and techniques to keep you from drowning in an email tidal wave. A downloadable workbook accompanies this course.

Say It Smart in Meetings

Meetings rank right up there with email when it comes to workplace interruptions. Learn how to go from mundane to exceptional meeting attendance and management by identifying the different types of meetings, ways to prepare for them, how to facilitate, when to attend and who to invite. A downloadable workbook accompanies this course.

+ Say It Smart in Presentations

When queried, most people say they fear public speaking more than anything else. Learn constructive ways to overcome your fears. Avoid 'Power-Pointitis' by identifying the 3 C's when influencing through your presentation: Clarity, Credibility, Connection. A downloadable workbook accompanies this course.

+ Say It Smart in Times of Conflict I



This two part series explores how to "say it smart" when confronting conflict in the workplace. Part 1 addresses ways to prevent conflict from occurring in the first place – the optimum strategic and beneficial approach. A downloadable workbook accompanies this course.

Say It Smart in Times of Conflict II

When conflict does occur, be the "adult in the room." In this second part of the conflict series, learn ways to effectively dismantle conflict and garner respect in the process. A downloadable workbook accompanies this course.

Say It Smart to Influence (Without Title or Authority)

Most organizations today are matrix in structure, implying that people are often called upon to influence others without relying on title or authority. This course points out ways with which to persuade co-workers to adopt an idea or course of action. A downloadable workbook accompanies this course.

Say It Smart to Customers

While the customer may not always be right, they are the ones who keep organizations afloat. This course explores ways to connect with your customer both logically and emotionally. Easy to reference tips and techniques provide practical tools for effectively listening to your customer as well as engaging through critical, but constructive conversation.

* available 2013 ◆ core (required) class

The History of Teams



In this session, you are provided with an overview of the history of teams as well as presented with the stages of team relationships and expected performance outcomes. There are several paradigm shifts in the workplace but none seemingly greater than that of moving from a traditional hierarchy in organizational and reporting structure. Today's mandate is not only that of interacting and engaging across functional silos through a team configuration, but quickly moving the

team to a stage of high performance.

Winning Formulas For Today's Teams

This course moves from the question of "What is a team?" to the question of "How are effective teams created and managed?" With today's organizations shifting from hierarchical, top down structure and communication to more virtual, collaborative and transparent interaction (information moving in all directions) – workers and managers alike are required to juggle a variety of tasks simultaneously via project team assignments. This session explores effective ways to work within this evolving work structure.

Finance

- ◆ Real World Finance Perspectives | Video Series
- Introduction to Finance
- Finance Challenge & Solution

♦ Accounting 101

Through this course, students learn basic accounting definitions and master accounting concepts.

Budgeting



This course explores and underscores the rationale behind budgeting, the more commonly created budgets used by organizations, and the key budget elements used to keep the company moving in the right direction.

Financial Statements

Financial statements are formal records of the financial activities of a company. This course clearly explains income statements, balance sheets, statements of cash flow, and statements of owner equity.

Raising Capital

Learn the details of financing mechanisms and how they impact the activities of companies.

The Valuation of Intellectual Property

Unlike many assets found in the organization, intangible assets (intellectual property) such as patents, trademarks and copyrights, are among the most difficult to quantify in terms of value. There are many approaches to the valuation of IP. This occurs because the licensee and the owner(s) of the IP may have different perceptions of value. For example, the acceptable valuation is essentially whatever the two parties can agree upon. This course takes a look at how the "tribal knowledge" in the company – the intellectual property – is valued.

Project, Product, & Process Development

- Real World Project & Product Perspectives | Video Series
- Introduction to Project, Product, & Process Development
- Project, Product, & Process Development Challenge & Solution
- + Project Management: Introduction



With the successful execution of projects often determining an organization's success or failure, many are increasingly adopting the principles, tools and techniques of project management. This course sets the stage and provides the rationale for becoming fluent in project management. A downloadable workbook accompanies this course.

Project Management: Initiation

There's an old adage that says "Time spent at the beginning makes for a better ending." The purpose of the initiation phase is to start the project (literally), providing the backdrop for all aspects of the effort, including any potential problems perceived by the customer. The initiation phase quantifies and defines a sometimes vague need into something tangible and actionable. A downloadable workbook accompanies this course.

◆ Project Management: Planning A

"No plan is a plan to fail." Planning gets people involved and gets them thinking through issues and areas that wouldn't be discussed otherwise. This course is aimed at discussing planning strategies, assigning resources and better defining project scope. Overall, the plan establishes the interpretation of the why, what, how, who, how much, and when of the project. A downloadable workbook accompanies this course.

◆ Project Management: Planning B

In this second part of Planning, you will learn more tools and techniques for effective project planning. A downloadable workbook accompanies this two-part course.

Project Management:
 Developing Requirements

Correctly gathering the specifications and requirements from the customer is critical to a successful project. This course examines ways with which to gather and assess requirements. A downloadable workbook accompanies this course.

 Project Management: Implementation & Control "How does a project get to be a year late? ... 1 day at a time." To avoid schedule delays or budget overages, project implementation is critical. It's this phase of the project (implementation and control) when real work is being completed, status meetings are held and reports are delivered to stakeholders on project progress. A downloadable workbook accompanies this course.

Project Management: Close-out



Closing out the project can be as critical as launching it. Learn how to ensure that all aspects of the project have been thoroughly addressed - from final paper work to lessons learned - all of which can be promulgated throughout the organization. Also, learn the steps of handing off the project to on-going management. Rewarding and celebrating project success goes a long way to ensuring that team members are likely to invest the same amount of energy and

passion in future endeavors.

- * available 2013 ◆ core (required) class
- Economics of Industrial Biotechnology

Students are able to view key business and economic drivers that affect the industrial biotechnology industry.

Biorefining Basics

Students walk through the basics of biorefining with regard to the processes that develop into commercial production.

Regulatory Affairs & Quality Systems



This course examines regulatory and quality issues that affect the life sciences industry. Students become acquainted with FDA regulations related to the approval of life science products and the concepts of biomedical quality systems as well as their practical application in an industry work environment.

 Purchasing & Supply Chain Management* Purchasing & Supply Chain Management explores everything from supplier selection and sourcing to managing quality and intellectual property. This high level summary is designed to give you a well-rounded view of all that is involved from the creation of an idea to the obsolescence of that product.

Marketing & Sales

- Real World Marketing & Sales
 Perspectives | Video Series
- Introduction to Marketing & Sales
- Marketing & Sales Challenge & Solution
- + Introduction to Marketing & Sales

An overview of the components of a marketing plan where students learn how to identify potential customers, and how to develop product distribution channels.

 The Difference Between Traditional & Science Based Marketing & Sales



There is a distinction between general product marketing and marketing and selling a science-related product. In general applications, marketing focuses on positioning the product for sales through advertising, business-to-business communication, sponsorship and brand building. In contrast, marketing on behalf of science based organizations places more emphasis on the scientists and researchers who developed the product, the scientists who

will buy the product, advertising and maintaining an expert reputation, gaining and maintaining visibility in the science environment and maintaining a trustworthy (and ethical) status. This course highlights the unique differences separating traditionally based marketing and sales with that of the science based organization.

Market Analysis



This course explores the advantage of completing a market analysis before launching a new product or company, and uses this analysis to construct a feasible business plan to attract corporate partners

Business Development: Growing the Business

An overview of business development, this course explores how a company can license its technology to other organizations and develop strategic alliances.

Intellectual Property

Explore the qualifications of intellectual property, the different ways that intellectual property can be protected and the methods in which intellectual property can be transferred to other organizations.

Exit Strategies

This course explores the different methods a company owner can use in order to "cash out" of an investment. This can be accomplished by selling the technology outright, through an initial public offering, via mergers and acquisitions, or through spin out companies.



LIFE SCIENCE IMMERSION PROGRAM

Understanding the Business Environment

- Real World Business Environment Perspectives | Video Series
- Introduction to the Business Environment
- Role of Ethics
- Key Workplace Skills
- Business Environment Challenge & Solution
- Medical Applications: The First Wave of Biotechnology

Embark on a general overview of how biotechnology is being used to improve the quality of human life and health through the use of diagnostics, combination and wireless medicine, medical devices and pharmaceuticals.

 Agricultural Applications: The Second Wave of Biotechnology



This course provides a general overview of how biotechnology, in the form of genetically modified crops and animals, is being used to improve agricultural practices.

 Environmental Applications: The Third Wave of Biotechnology

This course provides a general overview of how biotechnology is being used to achieve environmental sustainability by using biofeedstocks to create biobased products (e.g. renewable chemicals and biofuels), and as a source for enzymes and other biocatalysts.

+ Life Science Industry Organization Structure

This course provides an overview of research and development organizations and biotechnology company models, as well as support and other related industries that are pertinent to the biotechnology field.

Introduction to Biology - The Cell

The cell is the structural, functional and biological unit of all organisms. In this course, you will learn about the different cell types in the body, how they develop, and communicate with each other. This course will also review the components within the cell and how it functions.

The Basics of Microbiology



There is a thriving world out there that you can't see without the use of a microscope. This introduction to microbiology classifies cell types and their role in the environment specifically in human health. Conditions for optimal growth, microbial genetics, hostmicrobe relationships, disease, and antimicrobial therapy are also discussed.

Introduction to Immunology

Every day there is a battle occurring within our body. In this course, we will go over the way the body fights off infection, controls extra cell growth within the body and works to stop disease from occurring.

Understanding Human Anatomy& Physiology



In this session, the biological properties, processes, and functions of the human organism are discussed. We will discuss the various systems of the body, and the tissues and organs that make up those systems. The human body is carefully organized in increasing levels of complexity aggregating units from cells to form tissues, then organs, and finally the systems that create the whole living structure.

In The Beginning - The Business Plan

When considering operations and the business environment, it helps to refer back to the organization's genesis – it's business plan. This course discusses the factors required for translating a great idea into a tangible business. From identifying and understanding financial considerations, to conducting a marketing analysis, to clarifying the potential viability of products – all of these elements become the organization's template for successful evolution.

Business Ethics

The role of ethics plays an integral part in governing the organization's roadmap. The basis of a moral compass acts as the central point of reference when it comes to operational conduct. This course explores "Right vs. Wrong" concepts as well as "Right vs. Right."

Say It Smart Across Styles

One size fits one, not all. Learn how to adapt your communication style so that you can influence others who are different from you. Are you an out loud thinker or an internal percolator? Are you crazy about people or do people just plain make you crazy? What about a penchant for seeing the whole forest, or you more into examining each and every tree? Whatever your style, chances are, it's not exactly the same as those you work with. A downloadable workbook accompanies this course.

+ Say It Smart in Emails



More than 2 billion emails are sent globally each day. 92% of these are spam. Learn when to email and when not to. Get your email message across with the utmost clarity via striking subject headers, 'BLOT', bullet like text and other helpful tips and techniques to keep you from drowning in an email tidal wave. A downloadable workbook accompanies this course.

Say It Smart in Meetings

Meetings rank right up there with email when it comes to workplace interruptions. Learn how to go from mundane to exceptional meeting attendance and management by identifying the different types of meetings, ways to prepare for them, how to facilitate, when to attend and who to invite. A downloadable workbook accompanies this course.

♦ Say It Smart in Presentations



When queried, most people say they fear public speaking more than anything else. Learn constructive ways to overcome your fears. Avoid 'Power-Pointitis' by identifying the 3 C's when influencing through your presentation: Clarity, Credibility, Connection. A downloadable workbook accompanies this course.

- Say It Smart in Times of Conflict I

This two part series explores how to "say it smart" when confronting conflict in the workplace. Part 1 addresses on ways to prevent conflict from occurring in the first place - the optimum strategic and beneficial approach. A downloadable workbook accompanies this course.

◆ Say It Smart in Times of Conflict II

When conflict does occur, be the "adult in the room." In this second part of the conflict series, learn ways to effectively dismantle conflict and garner respect in the process. A downloadable workbook accompanies this course.

 Say It Smart to Influence (Without Title or Authority)



Most organizations today are matrix in structure, implying that people are often called upon to influence others without relying on title or authority. This course points out ways in which to persuade co-workers to adopt an idea or course of action. A downloadable workbook accompanies this course.

Say It Smart to Customers

While the customer may not always be right, they are the ones who keep organizations afloat. This course explores ways to connect with your customer both logically and emotionally. Easy to reference tips and techniques provide practical tools for effectively listening to your customer as well as engaging through critical, but constructive conversation.

The History of Teams

In this session, you are provided with an overview of the history of teams as well as presented with the stages of team relationships and expected performance outcomes. There are several paradigm shifts in the workplace but none seemingly greater than that of moving from a traditional hierarchy in organizational and reporting structure. Today's mandate is not only that of interacting and engaging across functional silos through a team configuration, but quickly moving the team to a stage of high performance.

 Winning Formulas For Today's Teams



This course moves from the question of "What is a team?" to the question of "How are effective teams created and managed?" With today's organizations shifting from hierarchical, top down structure and communication to more virtual, collaborative and transparent interaction (information moving in all directions) - workers and managers alike are required to juggle a variety of tasks simultaneously via project team assignments. This session explores

effective ways to work within this evolving work structure.

Finance

- Real World Finance Perspectives **Video Series**
- Introduction to Finance
- Finance Challenge & Solution

+ Accounting 101

Through this course, students learn basic accounting definitions and master accounting concepts.

Budgeting

This course explores and underscores the rationale behind budgeting, the more commonly created budgets used by organizations, and the key budget elements used to keep the company moving in the right direction.

Financial Statements

Financial statements are formal records of the financial activities of a company. This course clearly explains income statements, balance sheets, statements of cash flow, and statements of owner equity.

Raising Capital

Learn the details of financing mechanisms and how they impact the activities of companies.

The Valuation of Intellectual **Property**



Unlike many assets found in the organization, intangible assets (intellectual property) such as patents, trademarks and copyrights, are among the most difficult to quantify in terms of value. There are many approaches to the valuation of IP. This occurs because the licensee and the owner(s) of the IP may have different perceptions of value. For example, the acceptable valuation is essentially whatever the two parties can agree upon. This course takes a look

at how the "tribal knowledge" in the company - the intellectual property - is valued.

Project, Product, & Process Development

- Real World Project & Product Perspectives | Video Series
- Introduction to Project, Product, & Process Development
- Project, Product, & Process Development Challenge & Solution
- + Project Management: Introduction

With the successful execution of projects often determining an organization's success or failure, many are increasingly adopting the principles, tools and techniques of project management. This course sets the stage and provides the rationale for becoming fluent in project management. A downloadable workbook accompanies this course.

Project Management: Initiation



There's an old adage that says "Time spent at the beginning makes for a better ending." The purpose of the initiation phase is to start the project (literally), providing the backdrop for all aspects of the project, including any potential problems perceived by the customer. The initiation phase quantifies and defines a sometimes vague need into something tangible and actionable. A downloadable workbook accompanies this course.

Project Management: Planning A

"No plan is a plan to fail." Planning gets people involved and gets them thinking through issues and areas that wouldn't be discussed otherwise. This course is aimed at discussing planning strategies, assigning resources and better defining project scope. Overall, the plan establishes the interpretation of the why, what, how, who, how much, and when of the project. A downloadable workbook accompanies this course.

→ Project Management: Planning B

In this second part of Planning, you will learn more tools and techniques for effective project planning. A downloadable workbook accompanies this two-part course.

Project Management:
 Developing Requirements

Correctly gathering the specifications and requirements from the customer is critical to a successful project. This course examines ways with which to gather and assess requirements. A downloadable workbook accompanies this course.

 Project Management: Implementation & Control



"How does a project get to be a year late? ... 1 day at a time." To avoid schedule delays or budget overages, project implementation is critical. It's this phase of the project (implementation and control) when real work is being completed, status meetings are held and reports are delivered to stakeholders on project progress. A downloadable workbook accompanies this course.

Project Management: Close-out

Closing out the project can be as critical as launching it. Learn how to ensure that all aspects of the project have been thoroughly addressed - from final paper work to lessons learned - all of which can be promulgated throughout the organization. Also, learn the steps of handing off the project to on-going management. Rewarding and celebrating project success goes a long way to ensuring that team members are likely to invest the same amount of energy and passion in future endeavors.

Life Science Product Development

Take a closer look at the stages of life science product development, from early discovery to product launch.

Regulatory Environment

This course examines regulatory issues that affect the life sciences industry. Students become acquainted with FDA regulation related to the approval of life science products and their practical application in an industry work environment.

Clinical Trials & Phases

Clinical trials are biomedical or health-related research studies in human beings that follow a pre-defined protocol. This course walks the student through a general overview of the types and phases of clinical trial research.

Manufacturing



Manufacturing is the large scale production of an approved pharmaceutical or device for the consumer market. This course explores the difference between substance and a product, and how outsourcing is utilized by life science companies.

Commercialization*

Students will extend their knowledge of the life and timeline of a new life science product to include commercialization, the final stage of the product or drug development process. Through case studies and examples, students will discover how product and drug development elements interact with commercialization, as well as how the commercialization process uniquely relates to the life sciences industry.

Quality Systems

This course examines quality issues that affect the life sciences industry. The need for product quality, good practice quality standards (GxPs), and the role of the FDA in quality regulations is explored.

Purchasing & Supply Chain Management*

Purchasing & Supply Chain Management explores everything from supplier selection and sourcing to managing quality and intellectual property. This high level summary is designed to give you a well-rounded view of all that is involved from the creation of an idea to the obsolescence of that product.

Marketing & Sales

- Real World Marketing & Sales
 Perspectives | Video Series
- Introduction to Marketing & Sales
- Marketing & Sales Challenge & Solution
- + Introduction to Marketing & Sales

An overview of the components of a marketing plan where students learn how to identify potential customers, and how to develop product distribution channels.

 The Difference Between Traditional & Science Based Marketing & Sales



There is a distinction between general product marketing and marketing and selling a science-related product. In general applications, marketing focuses on positioning the product for sales through advertising, business-to-business communication, sponsorship and brand building. In contrast, marketing on behalf of science based organizations places more emphasis on the scientists and researchers who developed the product, the scientists who

will buy the product, advertising and maintaining an expert reputation, gaining and maintaining visibility in the science environment and maintaining a trustworthy (and ethical) status. This course highlights the unique differences separating traditionally based marketing and sales with that of the science based organization.

Market Analysis

This course explores the advantage of completing a market analysis before launching a new product or company, and uses this analysis to construct a feasible business plan to attract corporate partners.

Reimbursement 101

Learn the basics of reimbursement, including coverage, coding and payment.

Business Development: Growing the Business

An overview of business development, this course explores how a company can license its technology to other organizations and develop strategic alliances.

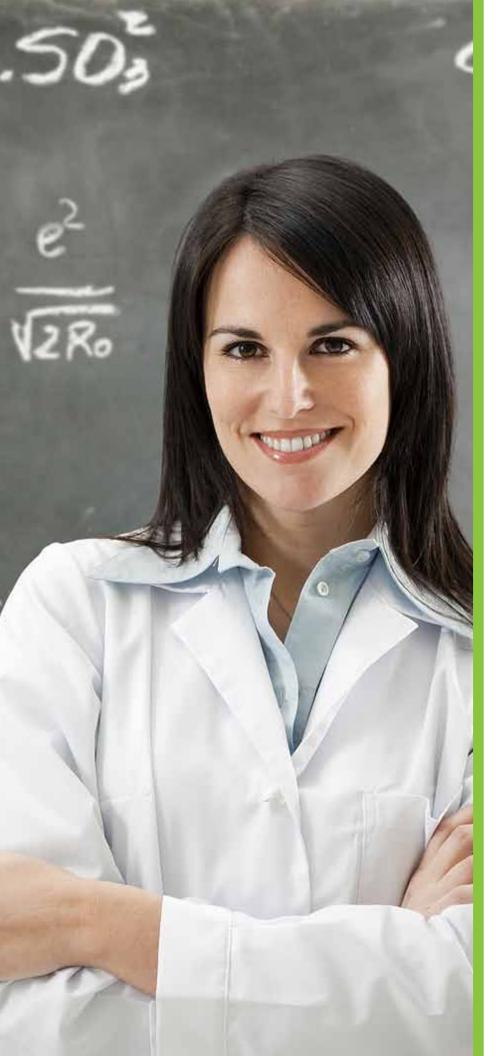
Intellectual Property

Explore the qualifications of intellectual property, the different ways that intellectual property can be protected, and the methods in which intellectual property can be transferred to other organizations.

Exit Strategies



This course explores the different methods a company owner can use in order to "cash out" of an investment. This can be accomplished by selling the technology outright, through an initial public offering, via mergers and acquisitions, or through spin out companies.



LIFE SCIENCE 101 PROGRAM

Understanding the Business Environment

- Real World Business Environment Perspectives | Video Series
- Introduction to the Business Environment
- Role of Ethics
- Key Workplace Skills
- Business Environment Challenge & Solution
- Medical Applications: The First Wave of Biotechnology

Embark on a general overview of how biotechnology is being used to improve the quality of human life and health through the use of diagnostics, combination and wireless medicine, medical devices and pharmaceuticals.

 Agricultural Applications: The Second Wave of Biotechnology This course provides a general overview of how biotechnology, in the form of genetically modified crops and animals, is being used to improve agricultural practices.

 Environmental Applications: The Third Wave of Biotechnology This course provides a general overview of how biotechnology is being used to achieve environmental sustainability by using biofeedstocks to create biobased products (e.g. renewable chemicals and biofuels), and as a source for enzymes and other biocatalysts.

+ Introduction to Biology - The Cell

The cell is the structural, functional and biological unit of all organisms. In this course, you will learn about the different cell types in the body, how they develop, and communicate with each other. This course will also review the components within the cell and how it functions.

The Basics of Microbiology

There is a thriving world out there that you can't see without the use of a microscope. This introduction to microbiology classifies cell types and their role in the environment specifically in human health. Conditions for optimal growth, microbial genetics, host-microbe relationships, disease, and antimicrobial therapy are also discussed.

Introduction to Immunology

Every day there is a battle occurring within our body. In this course, we will go over the way the body fights off infection, controls extra cell growth within the body and works to stop disease from occurring.

Understanding Human AnatomyPhysiology

In this session, the biological properties, processes, and functions of the human organism are discussed. We will discuss the various systems of the body, and the tissues and organs that make up those systems. The human body is carefully organized in increasing levels of complexity aggregating units from cells to form tissues, then organs, and finally the systems that create the whole living structure.

Business Ethics

The role of ethics plays an integral part in governing the organization's roadmap. The basis of a moral compass acts as the central point of reference when it comes to operational conduct. This course explores "Right vs. Wrong" concepts as well as "Right vs. Right."

Finance

- ◆ Real World Finance Perspectives | Video Series
- Introduction to Finance
- Finance Challenge & Solution
- The Valuation of Intellectual Property

Unlike many assets found in the organization, intangible assets (intellectual property) such as patents, trademarks and copyrights, are among the most difficult to quantify in terms of value. There are many approaches to the valuation of IP. This occurs because the licensee and the owner(s) of the IP may have different perceptions of value. For example, the acceptable valuation is essentially whatever the two parties can agree upon. This course takes a look at how the "tribal knowledge" in the company – the intellectual property – is valued.

Project, Product, & Process Development

- Real World Project & Product Perspectives | Video Series
- Introduction to Project, Product, & Process Development
- Project, Product, & Process Development Challenge & Solution

Life Science Product Development

Take a closer look at the stages of life science product development, from early discovery to product launch.

*** Regulatory Environment**

This course examines regulatory issues that affect the life sciences industry. Students become acquainted with FDA regulation related to the approval of life science products and their practical application in an industry work environment.

Clinical Trials & Phases

Clinical trials are biomedical or health-related research studies in human beings that follow a pre-defined protocol. This course walks the student through a general overview of the types and phases of clinical trial research.

Marketing & Sales

- Real World Marketing & Sales
 Perspectives | Video Series
- Introduction to Marketing & Sales
- Marketing & Sales Challenge & Solution
- The Difference Between Traditional & Science Based Marketing & Sales

There is a distinction between general product marketing and marketing and selling a science-related product. In general applications, marketing focuses on positioning the product for sales through advertising, business-to-business communication, sponsorship and brand building. In contrast, marketing on behalf of science based organizations places more emphasis on the scientists and researchers who developed the product, the scientists who will buy the product, advertising and maintaining an expert reputation, gaining and maintaining visibility in the science environment and maintaining a trustworthy (and ethical) status. This course highlights the unique differences separating traditionally based marketing and sales with that of the science based organization.

27



BUSINESS ESSENTIALS FOR SCIENTISTS PROGRAM

Understanding the Business Environment

- Real World Business Environment Perspectives | Video Series
- Introduction to the Business Environment
- Role of Ethics
- Key Workplace Skills
- Business Environment Challenge & Solution

Business Ethics



The role of ethics plays an integral part in governing the organization's roadmap. The basis of a moral compass acts as the central point of reference when it comes to operational conduct. This course explores "Right vs. Wrong" concepts as well as "Right vs. Right."

Say It Smart Across Styles

One size fits one, not all. Learn how to adapt your communication style so that you can influence others who are different from you. Are you an out loud thinker or an internal percolator? Are you crazy about people or do people just plain make you crazy? What about a penchant for seeing the whole forest, or you more into examining each and every tree? Whatever your style, chances are, it's not exactly the same as those you work with. A downloadable workbook accompanies this course.

Say It Smart in Emails

More than 2 billion emails are sent globally each day. 92% of these are spam. Learn when to email and when not to. Get your email message across with the utmost clarity via striking subject headers, 'BLOT', bullet like text and other helpful tips and techniques to keep you from drowning in an email tidal wave. A downloadable workbook accompanies this course.

◆ Say It Smart in Meetings



Meetings rank right up there with email when it comes to workplace interruptions. Learn how to go from mundane to exceptional meeting attendance and management by identifying the different types of meetings, ways to prepare for them, how to facilitate, when to attend and who to invite. A downloadable workbook accompanies this course.

Say It Smart in Presentations

When queried, most people say they fear public speaking more than anything else. Learn constructive ways to overcome your fears. Avoid 'Power-Pointitis' by identifying the 3 C's when influencing through your presentation: Clarity, Credibility, Connection. A downloadable workbook accompanies this course.

Say It Smart in Times of Conflict I

This two part series explores how to "say it smart" when confronting conflict in the workplace. Part 1 addresses on ways to prevent conflict from occurring in the first place - the optimum strategic and beneficial approach. A downloadable workbook accompanies this course.

Say It Smart in Times of Conflict II

When conflict does occur, be the "adult in the room." In this second part of the conflict series, learn ways to effectively dismantle conflict and garner respect in the process. A downloadable workbook accompanies this course.

 Winning Formulas For Today's Teams



This course moves from the question of "What is a team?" to the question of "How are effective teams created and managed?" With today's organizations shifting from hierarchical, top down structure and communication to more virtual, collaborative and transparent interaction (information moving in all directions) - workers and managers alike are required to juggle a variety of tasks simultaneously via project team assignments. This session explores

effective ways to work within this evolving work structure.

BUSINESS ESSENTIALS

* available 2013 ◆ core (required) class

Finance

- Real World Finance Perspectives | Video Series
- Introduction to Finance
- Finance Challenge & Solution

+ Accounting 101

Through this course, students learn basic accounting definitions and master accounting concepts.

Budgeting



This course explores and underscores the rationale behind budgeting, the more commonly created budgets used by organizations, and the key budget elements used to keep the company moving in the right direction.

Financial Statements

Financial statements are formal records of the financial activities of a company. This course clearly explains income statements, balance sheets, statements of cash flow, and statements of owner equity.

Project, Product, & Process Development

- Real World Project & Product Perspectives | Video Series
- Introduction to Project, Product, & Process Development
- Project, Product, & Process Development Challenge & Solution
- Project Management: Introduction



With the successful execution of projects often determining an organization's success or failure, many are increasingly adopting the principles, tools and techniques of project management. This course sets the stage and provides the rationale for becoming fluent in project management. A downloadable workbook accompanies this course.

Project Management: Initiation

There's an old adage that says "Time spent at the beginning makes for a better ending." The purpose of the initiation phase is to start the project (literally), providing the backdrop for all aspects of the project, including any potential problems perceived by the customer. The initiation phase quantifies and defines a sometimes vague need into something tangible and actionable. A downloadable workbook accompanies this course.

Project Management: Planning A



"No plan is a plan to fail." Planning gets people involved and gets them thinking through issues and areas that wouldn't be discussed otherwise. This course is aimed at discussing planning strategies, assigning resources and better defining project scope. Overall, the plan establishes the interpretation of the why, what, how, who, how much, and when of the project. A downloadable workbook accompanies this course.

Project Management: Planning B

In this second part of Planning, you will learn more tools and techniques for effective project planning. A downloadable workbook accompanies this two-part course.

 Project Management: Implementation & Control "How does a project get to be a year late? ... 1 day at a time." To avoid schedule delays or budget overages, project implementation is critical. It's this phase of the project (implementation and control) when real work is being completed, status meetings are held and reports are delivered to stakeholders on project progress. A downloadable workbook accompanies this course.

Project Management: Close-out



Closing out the project can be as critical as launching it. Learn how to ensure that all aspects of the project have been thoroughly addressed - from final paper work to lessons learned - all of which can be promulgated throughout the organization. Also, learn the steps of handing off the project to on-going management. Rewarding and celebrating project success goes a long way to ensuring that team members are likely to invest the same amount of

energy and passion in future endeavors.

* available 2013 ◆ core (required) class

Manufacturing



Manufacturing is the large scale production of an approved pharmaceutical or device for the consumer market. This course explores the difference between substance and a product, and how outsourcing is utilized by life science companies.

Quality Systems

This course examines quality issues that affect the life sciences industry. The need for product quality, good practice quality standards (GxPs), and the role of the FDA in quality regulations is explored.

Marketing & Sales

- Real World Marketing & Sales
 Perspectives | Video Series
- Introduction to Marketing & Sales
- Marketing & Sales Challenge & Solution
- + Introduction to Marketing & Sales

An overview of the components of a marketing plan where students learn how to identify potential customers, and how to develop product distribution channels.

The Difference Between
Traditional & Science Based
Marketing & Sales

There is a distinction between general product marketing and marketing and selling a science-related product. In general applications, marketing focuses on positioning the product for sales through advertising, business-to-business communication, sponsorship and brand building. In contrast, marketing on behalf of science based organizations places more emphasis on the scientists and researchers who developed the product, the scientists who will buy the product, advertising and maintaining an expert reputation, gaining and maintaining visibility in the science environment and maintaining a trustworthy (and ethical) status. This course highlights the unique differences separating traditionally based marketing and sales with that of the science based organization.

Market Analysis

This course explores the advantage of completing a market analysis before launching a new product or company, and uses this analysis to construct a feasible business plan to attract corporate partners.

Intellectual Property



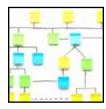
Explore the qualifications of intellectual property, the different ways that intellectual property can be protected, and the methods in which intellectual property can be transferred to other organizations.



PROJECT MANAGEMENT PROGRAM

Project Management Fundamentals

- Real World Project & Product Perspectives | Video Series
- Introduction to Project Management
- Project Management Challenge & Solution
- Project Management: Introduction



With the successful execution of projects often determining an organization's success or failure, many are increasingly adopting the principles, tools and techniques of project management. This course sets the stage and provides the rationale for becoming fluent in project management. A downloadable workbook accompanies this course.

Project Management: Initiation

There's an old adage that says "Time spent at the beginning makes for a better ending." The purpose of the initiation phase is to start the project (literally), providing the backdrop for all aspects of the project, including any potential problems perceived by the customer. The initiation phase quantifies and defines a sometimes vague need into something tangible and actionable. A downloadable workbook accompanies this course.

+ Project Management: Planning A



"No plan is a plan to fail." Planning gets people involved and gets them thinking through issues and areas that wouldn't be discussed otherwise. This course is aimed at discussing planning strategies, assigning resources and better defining project scope. Overall, the plan establishes the interpretation of the why, what, how, who, how much, and when of the project. A downloadable workbook accompanies this course.

Project Management: Planning B

In this second part of Planning, you will learn more tools and techniques for effective project planning. A downloadable workbook accompanies this two-part course.

Project Management:
 Developing Requirements

Correctly gathering the specifications and requirements from the customer is critical to a successful project. This course examines ways with which to gather and assess requirements. A downloadable workbook accompanies this course.

 Project Management: Implementation & Control "How does a project get to be a year late? ... 1 day at a time." To avoid schedule delays or budget overages, project implementation is critical. It's this phase of the project (implementation and control) when real work is being completed, status meetings are held and reports are delivered to stakeholders on project progress. A downloadable workbook accompanies this course.

 Project Management: Procurement* Some projects may require a "make or buy decision" to be made. This course explores ways the project manager works with purchasing when scope includes contracts and external vendors.

- * available 2013 ◆ core (required) class
- Project Management: Quality*

The cost of poor quality can be felt for years and by all parts of the organization. This course explains the processes used to set quality policies, objectives and responsibilities as well as how to properly apply and track this important dimension in projects.

◆ Project Management: Close-out



Closing out the project can be as critical as launching it. Learn how to ensure that all aspects of the project have been thoroughly addressed - from final paper work to lessons learned - all of which can be promulgated throughout the organization. Also, learn the steps of handing off the project to on-going management. Rewarding and celebrating project success goes a long way to ensuring that team members are likely to invest the same amount of

energy and passion in future endeavors.

Advanced Project Management

◆ Points of Pain - Why Projects Fail*



In this advanced project management course, we explore the points of pain leading to project failure as a way to learn how to better manage outsourced projects and exercise extreme project leadership. Also, learn what it takes to facilitate a portfolio of program management under the umbrella of a Project Management Office.

◆ The Initiation Phase - A Deep Dive*

There's initiation, and then there's the project launch in which no large stone has been left un-turned. This advanced project management course goes beyond the average course on initiation, walking you through the finer points of setting the stage, conducting process planning, and setting scope boundaries early.

 Developing Requirements - The Benefits of Correcting Early* This advanced project management course focuses on examining critical systems, business needs, and non-functional specifications when developing requirements. The benefits of correcting early are stressed.

 Risk Mitigation - How To Really Know Your Risks* Risks are inherent in any project, but non more so than those large commercial endeavors in which budget, schedule and output are hefty factors. This advanced project management course explores ways to identify your risks from the beginning and mitigate for them early.

 Broken Projects - Diagnosis & Repair*



Learning to recognize problems early avoids the weighty consequences associated with a broken project down the road. This advanced project management course points out ways to recognize problems as well as leverage the earned value approach, proactive communication, and the adoption of project recovery phases.

 Duration & Cost Estimating Under Conditions of Uncertainty* How do you estimate with so many unknown variables? This course uses statistical and probability analysis to provide meaningful cost and time estimates within projects.

Advanced Project Leadership*

Extreme project require advanced project leadership. This course explores effective ways to build an agile project team by raising awareness and providing tools to garner stakeholder involvement early on. A focus is also placed on adopting genuine leadership characteristics vs. relying solely on traditional management techniques.



MILITARY
TRANSITION TO
LIFE SCIENCES
PROGRAMS

Information

Free Tuition

The BioCollaborative is pleased to announce that for every paid enrollment from an individual or sponsoring company into either the Life Science Immersion or Industrial Biotechnology Immersion Program, an active duty soldier or military veteran is provided free access to the program of their choice.

Programs

Qualified military personnel can choose from the **Industrial Biotechnology Immersion** program or the **Life Science Immersion** program.

These programs provide our military men and women with a robust catalog of courses to help them make the transition into the life science or industrial biotechnology fields. Upon completion of their program, servicemen and women join non-military members in the BioCollaborative Alumni Community.

More Information

For more information on these programs, or to apply for complimentary tuition as an active duty or veteran military student, please contact info@biocollaborative.com or call 760–444–9469.

40





©2012. All Rights Reserved. www.biocollaborative.com



biocominstitute.org

powered by

