

# Business Analytics



# ITAO 70200 – Advanced Statistical Inference



### Instructor- Seth Berry

Group Assignments	Individual Assignments
0	3

Take-home Midterm	Final Presentation
1	1

# **Course Description**

Purpose is to understand and code basic statistical concepts such as linear regressions etc. in R.

Ability to use the general linear model, generalized linear models, and interpret results from both.

No strict deadlines for assignments

### **Applicability**

The material is interesting and focused on understanding R and deriving your own insights from data. It is good to get a hands on experience in coding and data analytics



# ITAO 70610 - Data Analytics with Excel VBA



Instructor -	Nicholas Berente	(2019)
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Group Work	Individual Work
0	100
	2 weekly deliverables
	One assignment weekly (6 total)
	One Lab weekly (6 total)
Projects/Assignments	Tests/Quizzes
60%	40%

# Course Description

This course exposes the students to how technology is being used to change the competitive landscape within industries and among corporations. By examining a set of cases, the students learn how some businesses have transformed their competitive environment through the use of technology.

The students then will be required to research how a specific company has used technology to enhance its competitiveness and how an emerging technology can potentially be used to provide a strategic advantage. The final project in the class involves examining the potential impact of such technology on the business models within a specific industry.

Labor intensive course! Something due every class – and need to understand concepts quickly and have working code (100% coding!)

# **Applicability**

Write your own Macros, learn Visual Basic – very useful for data analysis and excel proficiency



# ITAO 70220 – Data Exploration and Visualization



Instructor- Hong Guo
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Group Work	Individual Work
4 HW Assignments, 1 Midterm,	Final Exam
1 Data Viz Contest	
1 Data VIZ Contest	
Projects/Assignments	Tests/Quizzes
See above	Midterm is a group competition,
	Final is individual
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# **Course Description**

Tableau based course, all assignments and tests are done in Tableau

All assignments and the midterm are completed in groups, the final is an individual exercise done in Tableau

Spend a lot of class time working through problem sets, assignments are pretty similar to the in-class exercises

# **Applicability**

Beneficial for careers where you need to make good data visualizations, especially if you're going to be using Tableau



# ITAO 70240 – Data Management

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Instructor- Sharif Nijim (Fall), Fred Nwanganga (Spring)

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Group Work	Individual Work
Some group	100% (Nijim's class)
Projects/Assignments	Tests/Quizzes
60%	40%

# **Course Description**

Introduction to coding in SQL and R. This class helps you build a great baseline level of knowledge for both languages and is designed for students with no previous coding experience.

Good overview of how companies store/use their data.

4-5 individual coding assignments. Nwanganga's class includes quizzes, but Nijim's does not. Handwritten final exam, which includes light coding, concept reviews, and debugging (being given a string of code and asked to correct it).

### **Applicability**

This depends on how much you think you will be using SQL and R in future classes/jobs. However, even if you think you won't ever code in the future, it is useful to take this class so that you can converse with your tech and analytics teams at your job and understand what is possible for them to do.



# ITAO 70350 - Data Storytelling



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Group Assignments	Project Related HW Assignments
1	~ 3

Other Individual HW	Final Group Project and Presentation
1	1

# **Course Description**

Learn how to "tell a story" with your presentation/power point

Mod long group project is a majority of the work

Class is creatively designed, with lots of great resources that can be used in the future

Daily attendance

Technical skills aren't the focus

### **Applicability**

Good for anyone that wants to learn how to show data in a compelling way, or create a convincing presentation



# ITAO 70330 – Ethics of Data Analytics



#### Instructor – Scott Nestler

Group Work	Individual Work	
Weekly HW assignments,	Regular quizzes	
Capstone project		
Projects/Assignments	Tests/Quizzes	
Projects/Assignments See above	Tests/Quizzes Several quizzes,	
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# Course Description

Explores frameworks to address issues related to the proper roles of public law, government regulation, and ethics in performing and managing analytics activities.

Uses theory, recent examples and case studies to illustrate points.

# **Applicability**

Highly applicable to anyone who'll be involved in developing or deploying analytical models in the real world



# ITAO 70310 – Machine Learning



Instructor- Fred Nwanganga

<u>Course</u> I	<u>Description</u>
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Good overview of different predictive models (different machine learning methods)

Group Assignments	Individual Assignments
3	1

Some technical focus (learning how to create models) but also a heavy focus on the pros/cons of different methods and the theory about how they should be used

Quizzes	Tests
4	1

Utilize R for doing different models

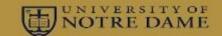
Weekly quizzes, group projects and a final exam

# **Applicability**

Good for people entering analytics roles



# MARK 70120 – Marketing Analytics



Instructor: Vamsi Kanuri

Assistant Professor - Marketing

Group Work 4 Case Studies, 1 (or 2) Case Presentations	Individual Work Midterm Exam, Final Exam
Projects/Assignments See above	Tests/Quizzes See above

#### **Course Description**

Combines statistical analysis, financial analysis, and operations research to analyze and model key marketing decisions such as forecasting demand, setting prices, determining ad spend, evaluating social media ad campaigns, etc.

Half lecture, half cases

No coding involved: all analysis done in Excel using Solver add-in

Involves some basic calculus (first and second order derivatives)

#### **Applicability**

This course is appropriate for individuals considering careers in brand management, product management, retail management, or consulting.

Fulfills Marketing, Business Analytics, Business Leadership concentrations



# ITAO 70210 – Predictive Analytics



#### Instructor- Daewon Sun

Group Work	Individual Work
20%	80%

Projects/Assignments

Series of individual and team assignments. Amount just depends on the professor's choosing.

Last Mod 4 there were two individual assignments and four team assignments Tests/Quizzes

Midterm and a final exam

# Course Description

This course will cover several techniques needed to capitalize on the unprecedented availability of information and to meet the growing demand for better and faster decision support from such information. This course material will provide an understanding of various methods used to extract knowledge from data, such as data mining, as well as with important tools to improve managerial decision-making.

A lot of class is spent using SAS and walking through using Machine Learning techniques within it. Cases from finance, management, marketing, and operations will be used as illustrations.

### **Applicability**

Machine learning techniques are useful to learn and apply to many industries, but the use of SAS is probably less applicable to most MBAs (as opposed to R or SQL)



# ITAO 70740 - Privacy and Security



### Instructor- Tawfiq Alashoor

Group Assignments	Individual Assignments
2 short group papers and 2 short presentations	2

Midterm	Final Paper
1	1 longer group paper

# Course Description

The purpose of this course is to help students understand privacy and security at a managerial level. Students will watch documentaries on privacy and security, study and write security policies, learn about various types of cyber attacks and defense methods, and examine business cases surrounding privacy and security.

# **Applicability**

This course is designed to help students think about important concerns every company faces regarding privacy and security. This course is more qualitative in nature, so students don't learn coding or "hacking techniques." Rather, students will learn how to make decisions for the safety of their company and its customers.



# ITAO 70260 – Python for Data Analytics



Instructor – >	Kiaojing	g Duan
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# Course Description

Course is aimed at giving you a foundation in Python - one of the world's most popular, flexible, and robust programming languages.

Group Work	Individual Work
unclear	unclear

Students will get familiarity with the core set of Python libraries that data scientists use to clean, transform, analyze, and present their findings.

Projects/Assignments	Tests/Quizzes
unclear	unclear

# **Applicability**

Python has become one of the most (if not the most) in-demand skills in data science and analytics.

# <u>Syllabus</u>

**Under revisions** 



# ITAO 70420 – Sports Analytics



#### Instructor – Scott Nestler

Group Work	Individual Work
30%	70%
Projects/Assignments	Tests/Quizzes
4-5 individual homework assignments	No quizzes. One final exam that is cumulative based on the slides and
One group project that consists of a paper and a presentation	textbook readings

# Course Description

Many industries are being created and transformed by using the techniques of business analytics. With the goal of studying these techniques in some depth, this course focuses on one such industry: sports. Topics for study in this course include how to evaluate players, rate teams, schedule leagues, and enhance coaching strategies. Assignments involve the hands-on use of a variety of techniques and tools, which are useful in most industries. Techniques and tools include data manipulation, probability, statistics, optimization, spreadsheets, and a powerful statistics package. A basic knowledge of Excel, statistics, and sports (in particular, baseball, basketball, and football) is assumed. (You do not have to be a sports fanatic.)

# **Applicability**

Definitely useful if you are pursuing a career in sports, but the skills you learn from the individual assignments can be used in other industries. More technical focused than people skills.



# ITAO 70230 – Spreadsheet Decision Modeling



### Instructor- David Hartvigsen

Group Assignments	Individual Assignments
5	0
Quizzes	Tests

2

### Course Description

Course Designed for Identification of problems that can be solved via optimization and simulation.

All Assignments can be completed in groups of up to three people or individually, but you are encouraged to do them as a group.

Class time is spent going through examples of problems that are very similar to the homework, and the homework is generally very straightforward.

Exams are on paper not excel

# **Applicability**

For Manufacturing and Process oriented career fields



# ITAO 70750 – Strategic Business Technology



Instructor - Nicholas Berente

Group Work	Individual Work
40% 50 min. presentation + 16 pg. paper	60% Four 2-pg. case analysis papers
Projects/Assignments	Tests/Quizzes
100%	0

### Course Description

This course exposes the students to how technology is being used to change the competitive landscape within industries and among corporations.

#### **Course Format**

Every Monday, turn in a case writeup (choose 4 out of 6) and discuss a case about a company that is trying to decide whether to implement a new, innovative technology.

Every Wednesday, two teams present for 50 min. each on various tech topics, including machine learning, AI, digital twinning, blockchain, IoT, DEVOps/Agile, and other tech topics. The presentation must include an overview of the topic, a hands-on demo of the tech, two business strategies for using this tech, and a fun activity. Though this sounds like a lot, the prof. gives a lot of useful guidelines and ideas.

# **Applicability**

This course is designed to help students (who may have no previous tech background) converse with tech teams and make strategic decisions.



# ITAO 70950 – Supply Chain Analytics



# Instructor- Xuying Zhao

**Group Work** 

0	4 HW Assignments		
Projects/Assignments	Tests/Quizzes		
4 HW Assignments	1 Midterm, 1 Final		

Individual Work

# **Course Description**

- Analyze the key problems in supply chain management
- Recognize core tools within supply chain management and what those tools can (and cannot) change
- Apply tools learned in the course to improve some aspect of the supply chain
- Compare and contrast appropriate alternatives to improve a supply chain

# **Applicability**

Good for anyone going into supply chain or operations roles



# ITAO 70250 – Unstructured Data Analytics



# Instructor- Seth Berry

Group Work	Individual Work
-	4 HW Assignments, 7 In-Class Exercises, 1 Final Presentation
Projects/Assignments	Tests/Quizzes
4 HW Assignments, 7 In-Class Exercises	1 Final Presentation (3 minutes)

### **Course Description**

The course revolves around how to analyze and make sense of data that doesn't fit well into rows and columns. All assignments and analysis are completed in R.

A lot of time is spent listening to lectures and homework involves doing online coding assignments. There is a project and a final exam, but no midterm.

# **Applicability**

It is interesting but involves difficult analytical concepts. While knowing about these techniques is beneficial, using them in the real world requires a lot of extra practice.





# Business Leadership



# ITAO 70200 – Advanced Statistical Inference



# Instructor- Seth Berry

Group Assignments	Individual Assignments
0	3

Take-home Midterm	Final Presentation
1	1

### **Course Description**

Purpose is to understand and code basic statistical concepts such as linear regressions etc. in R.

Ability to use the general linear model, generalized linear models, and interpret results from both.

No strict deadlines for assignments

### **Applicability**

The material is interesting and focused on understanding R and deriving your own insights from data. It is good to get a hands on experience in coding and data analytics



# MGTO 70560 – Business Model Innovation



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Group Work	Individual Work
40%	60%

Projects/Assignments	Tests/Quizzes
40%	30%

#### **Course Description:**

This course is designed to study how organizations can achieve sustainable competitive advantages by creating new market spaces through business model innovation. The goal is to help students to think beyond how organizations can simply compete in widely contested market sectors to instead innovate in novel ways that allow a firm to generate superior returns in wide open spaces.

# Applicability:

- 1.Describe key theories of business model innovation.
- 2.Demonstrate an understanding of how to identify business model innovation opportunities.
- 3. Question prevailing business models effectively and critically.
- 4. Formulate new business model innovations that drive significant competitive advantage.
- 5. Evaluate the strategic value of new proposed business model innovations.



# MTGO 70305 – Business on the Front Lines



# Instructors - Viva Bartkus and Joe Sweeney

Group Work	Individual Work
80% weekly meetings and group projects	20% books to read, reflection papers, individual research
Projects/Assignments	Tests/Quizzes
Project deliverables (usually due every class)	0

# **Course Description**

This course is an extended overseas service project. The course is an entire semester long (two mods + interterm and spring break). Students will spend 7 weeks doing extensive research for their projects, conducting weekly phone calls with their incountry business partners, and preparing white papers, logistics, and plans for their in-country experience. Then, students will spend 2 weeks in-country serving onsite at the partners' location. Finally, students will spend the following mod writing follow up reports and presenting their findings.

# **Applicability**

This course is useful for anyone with a passion for service, along with an interest in consulting or project management. This course will stretch and challenge students, because projects are only done in countries that are either war-torn or poverty-stricken.

#### **Requirements**

This course has a very heavy workload, including 6 books to read (and summarize) over Christmas break, weekly project deliverables, and several personal reflection papers.

# MGTO 70110 – Competitive Growth Strategy



### Instructor- Joe Urbany

Group Work

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47.5%	52.5%	
Projects/Assignments	Tests/Quizzes	
75%	25%	

Individual Work

### **Course Description**

This is a project-driven course. We focus on application. The students will scope problems, gather data, analyze, design and prepare a plan for growth strategy for an existing organization.

# **Applicability**

You will learn about MM Canvas model, total product concept, revenue models, generic competitive strategies, customer POV / persona, customer journey, levels of competition, demand estimation, customer choice & multi-attribute analysis.

#### What does this mean?

You'll gain new practical skills, learn methodologies for analyzing firms, and have a hands-on experience working with a firm.



# ACCT 70120 - Corporate Financial Reporting



Instructor: Brad Badrester

Group Work	Individual Work	
25%	75%	
Projects/Assignments	Tests/Quizzes	
50%	50%	

# **Course Description**

The purpose of this course is to provide students with an in-depth look at difficult accounting and tax topics.

### **Applicability**

Most of the students in this class will be in the MSA program, so they will be more familiar with the material than most MBA students. However, this course would be good for anyone going into a corporate finance or finance-focused consulting role.

This course is essentially Accounting III. It covers all the topics where Miller said, "this is really detailed, so I'm going to give you the high-level overview."



# MGTO 70310 – International Management



#### Instructor – Gerard Pannekoek

Group Work	Individual Work
1 group paper	2 memos to a CEO in a country/company of your choice
Projects/Assignments	Tests/Quizzes
70%	30%
	1 final exam

### **Course Description:**

Ultimately, international business is conducted with and through people from various cultural backgrounds. Cultural differences, if not understood and bridged, can be significant barriers to the implementation and success of a business venture. Students completing this course will obtain an understanding of how to conduct business across borders and cultures.

Compared to International Operations, this course focuses more broadly on the culture and legal environment in several countries. The Operations class is narrower in focus, but there is some overlap between the two.

#### **Applicability**

- 1. Analyze and appraise the political, economic, legal and technological environments in which multinational corporations (MNCs) operate;
- 2. Identify the effect that national cultures have on international management;
- 3. Formulate and evaluate different entry strategies, organizational structures and issues of control and organization that MNCs can apply;
- 4. Manage and evaluate individual behavior within MNCs, such as motivation and leadership in a global context and international business careers.



# ITAO 70920 – International Operations



Instructor- J	lerry V	<b>Vei</b>
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Group Assignments	Individual Assignments
Two 30 min. group presentations, with accompanying 10 pg. group papers	0
Quizzes	Exams
7 (one for each case)	Open book, open note, open computer

midterm and final

### Course Description

This course introduces students to the issues surrounding multinational companies. Students will gain an understanding of how to build and improve global supply chains. This course uses the case method, so each week students will read 1-2 cases that explain important global business concepts, such as tariffs, shipping laws, foreign exchange rates, taxes, and other key concepts. This course includes very minor finance involving exchange rates but is primarily a qualitative course.

# **Applicability**

This course is useful for any students interested in understanding global business or the global economy. This course may also be helpful for students interested in Business on the Front Lines.



# MGTO 70510 - Innovation and Design



#### Instructor - Matt Bloom

Group Work

The whole class is an ongoing group project	0	
Projects/Assignments	Tests/Quizzes	
Four group project deliverables	0	_
Final group project and short presentation		

Individual Work

# **Course Description**

This course is an immersive introduction to design thinking. Students will engage the real world to learn, practice, and use the principles, methods, and attitudes of design thinking. In this course, students will learn to frame their questions, conduct research, synthesize ideas, create new designs, and refine these designs into a final product.

# **Applicability**

This course is useful for students interested in product management, marketing, and entrepreneurship.



# MTGO 70500 – Innovations in Health Care Transformation



#### Instructor – Dr. Jesse Hsieh

Group Work	Individual Work
0%	100%
Projects/Assignments	Tests/Quizzes
	1 midterm and 1 final
	10-12 pg. paper on your
	idea for something to
	reform in healthcare

# **Course Description**

- Understand the importance of health and health care to American life
- Understand some defining characteristics of U.S. health care delivery
- Identify major issues and concerns (cost, quality, variation, transparency)
- Identify key interest groups (stakeholders) Key to change (or no change)
- Understand the importance of engaging a new generation of health leaders

# **Applicability**

- This course is great for those who are interested in healthcare or are planning on entering a Healthcare-related discipline
- This course has many guest speakers, who range from health insurance executives and hospital administrators to healthcare tech VC fund managers.
   Several of these guest speakers have hired MBA students from Notre Dame in the past.

#### Requirements

This course is very reading heavy (about 60-100 pgs. per week), but it has no assignments except for the final paper.



# MGTO 70300 – Judgement



Instructor - Viva Bartkus (Mod 3 Only)

Group Work	Individual Work
%	%
Projects/Assignments	Tests/Quizzes
%	%

# **Course Description**

The objective of this course is to examine what lies at the foundation of good judgement.

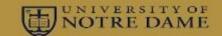
This involves an understanding how difficult judgements such as commissioning a diverse team, fostering a vigorous process, and wrestling with the difficult questions in an environment of honesty and trust impacts not only the organization and its employees, but ripples further the community, environment, and society.

### **Applicability**

Viva Bartkus is a former McKinsey & Company Partner (1993-2003) and is arguably one of the best consulting resources available at Notre Dame. Her classes are difficult and typically very work-heavy but always have real world applications.



# MARK 70120 – Marketing Analytics



Instructor: Vamsi Kanuri

Assistant Professor - Marketing

Group Work 4 Case Studies, 1 (or 2) Case Presentations	Individual Work Midterm Exam, Final Exam
Projects/Assignments See above	Tests/Quizzes See above

#### **Course Description**

Combines statistical analysis, financial analysis, and operations research to analyze and model key marketing decisions such as forecasting demand, setting prices, determining ad spend, evaluating social media ad campaigns, etc.

Half lecture, half cases

No coding involved: all analysis done in Excel using Solver add-in

Involves some basic calculus (first and second order derivatives)

#### **Applicability**

This course is appropriate for individuals considering careers in brand management, product management, retail management, or consulting.

Fulfills Marketing, Business Analytics, Business Leadership concentrations



# MARK 70100 – Marketing Research



Instructor- Joe Urbany Marketing Professor

Group Work	Individual Work
3 case write-ups ( 5 technical applications	•
Projects/Assignments	Tests/Quizzes
35%	50% - Midterm & Final
	Exams

Course Description: This course is a managerial introduction to marketing research that examines how additional information can be obtained and how to incorporate that information into decision-making. The course will provide hands-on experience doing statistical analysis using SPSS as a means of illustrating how uncertainty can be quantified, and as a bridge to discuss and introduce more advanced statistical techniques that are commonplace in marketing research. Specifically, students will learn a) to critically evaluate what information is necessary to make more informed decisions, b) the various approaches organizations use to obtain the information, and c) the most commonly used techniques necessary to analyze the data.

#### **Applicability:**

Fulfills Marketing, Business Leadership, Strategy concentrations



# MARK 70450 – New Products Development



### Instructor – Joseph Cherian

Group Work	Individual Work
50%	50%
Projects/Assignments	Tests/Quizzes
-Case Presentation Competition	Midterm and Final
-Group Paper and Presentation	

### **Course Description**

This course is designed to provide you with an awareness of the issues involved in new product development and with a basic understanding of the procedures and tools available for dealing with these issues.

Students will learn to forecast product demand, apply creative problemsolving techniques, and create an actual new product for a client or for your homework group.

# **Applicability**

The course is intended to serve students who anticipate careers in product management/product planning or who expect to be involved in the development of new products (goods or services), with emphasis on the marketing inputs to the product development process.

This course is recommended for students interested in marketing, product management, and entrepreneurship.

# MGTO 70200 - Organizational Consulting



#### Instructor- Pete Effler

Group Work	Individual Work
40%	60%
Projects/Assignments	Tests/Quizzes
100%	%

### **Course Description**

This course is intended to meet the needs of MBA students who are considering careers as business consultants or who have an interest in knowing about consulting, perhaps as future consumers of consulting services. It will lead you to an understanding of how consultants add value to the clients they serve and provide you with some of the foundational skills required to contribute on client engagements. This will be accomplished through a combination of case studies, relevant reading assignments, real-world examples, and some guest instructors / contributors. The course is organized around the following major themes:

- 1. The industry, the job, and the competencies of consulting
- 2. Analysis of problems, synthesis of strategy & tactics, and execution / implementation.
- 3. The challenges associated with changing a client organization, the governance of the process, and realization of benefits.
- 4. Innovation as it pertains to business models, lines of business, processes, and technology.

# <u>Applicability</u>

The course does a decent job explaining the workflow expected of a consulting team. This course is probably best for individuals with little to no consulting background but may be a frustrating course for someone that already has strong knowledge in this area.



# MGTO 70620 - Negotiation



#### Instructor- Joe Holt

Group Work	Individual Work
	10%
Projects/Assignments	Tests/Quizzes
80%	20%

#### Pros:

- practical (not just theory
- Flexible exam
- Apply your learnings immediately
- 3 final exam options including oral exam and written paper

#### Cons

- Lots of readings
- Can't miss class without at least a week of advance notice
- Negotiating with classmates which can feel very confrontational

# **Course Description**

This course covers best practices for negotiating in a way to "increase the size of the pie". It focuses on strategies to group problem solve, as opposed to figuring out how to take the biggest slice. Almost every other class there is a chance to practice your negotiating skills. You'll get the chance to negotiate one-on-one, in teams, and team-against-one.

# **Applicability**

Everything is a negotiation.

This class is currently taught by professor Holt. Holt gives excellent hands on negotiation. You will negotiate something new every class with a new opponent/partner (depending). He also give 3 options for a final including an oral exam. However, this class has a lot of reading and you are responsible for those readings for the exam.

# MGTO 70100 – Problem Solving



#### Instructor - Gerard Pannekoek

Group Work	Individual Work
100%	0%

Projects/Assignments	Tests/Quizzes	
100%	0%	

# **Course Description**

Course focuses on how you define a problem, create an issue tree, conduct research and make a recommendation

Course is based on group projects, with a final deliverable (executive memo and presentation)

Groups are selected at random at the beginning of class when projects are due

# **Applicability**

Good for most roles, structuring of problems is similar to the consulting process



# ITAO 70230 - Spreadsheet Decision Modeling



### Instructor- David Hartvigsen

Group Assignments	Individual Assignments
5	0
Quizzes	Tests

2

### Course Description

Course Designed for Identification of problems that can be solved via optimization and simulation.

All Assignments can be completed in groups of up to three people or individually, but you are encouraged to do them as a group.

Class time is spent going through examples of problems that are very similar to the homework, and the homework is generally very straightforward.

Exams are on paper not excel

# **Applicability**

For Manufacturing and Process oriented career fields



# ITAO 70750 – Strategic Business Technology



Instructor - Nicholas Berente

Group Work	Individual Work
40% 50 min. presentation + 16 pg. paper	60% Four 2-pg. case analysis papers
Projects/Assignments	Tests/Quizzes
100%	0

### Course Description

This course exposes the students to how technology is being used to change the competitive landscape within industries and among corporations.

#### **Course Format**

Every Monday, turn in a case writeup (choose 4 out of 6) and discuss a case about a company that is trying to decide whether to implement a new, innovative technology.

Every Wednesday, two teams present for 50 min. each on various tech topics, including machine learning, AI, digital twinning, blockchain, IoT, DEVOps/Agile, and other tech topics. The presentation must include an overview of the topic, a hands-on demo of the tech, two business strategies for using this tech, and a fun activity. Though this sounds like a lot, the prof. gives a lot of useful guidelines and ideas.

# **Applicability**

This course is designed to help students (who may have no previous tech background) converse with tech teams and make strategic decisions.



## ACCT 70200 – Strategic Cost Management



Instructor - Ramanan, Ramachandran

Group Work	Individual Work
25%	75%

Projects/Assignments	Tests/Quizzes
50%	50%

#### **Course Description**

The purpose of this course is the use of different cost information in the context of various decisions and understanding the incentives of the parties involved in the decision. It teaches how to both develop and use cost information to create, communicate, implement, and control strategies.

The course was taught by Ram Ramanan during spring semester 2018 and is now being taught Asis Martinez during fall 2018.

#### **Applicability**

If you have never used costs to understand decision-making outside of the typical accounting of Revenues - Costs = Profit, this course is a good way to learn that each situation will have multiple dimensions and issues both internally as well as externally for the business.





# Finance



## FIN 70450 - Bond Issue Process



Instructor: Howard Lanser

Group Work	Individual Work
80%	20%
Projects/Assignments	Tests/Quizzes
30%	70%

#### **Course Description**

This course will go through the same process major corporations use in issuing debt in the public markets, either U.S., European, or global. Covers the typical process for raising debt at a large firm. Covers how to model and assess a firm's credit and leverage.

#### **Applicability**

The class simulates working with a major investment bank in the process. This will include developing the financing strategy, looking at various alternatives in the market, negotiating standard documentation, and executing a swap as part of the process. Most semesters, this will be a "mock" issue, but on occasion, the class will work on a real time financing to be undertaken by the University.

#### **Requirements**

One credit model, a group debt issue presentation, midterm, and final



## FIN 70230 – Business Forecasting



Instructor: Barry Keating

Group Work	Individual Work
0%	100%

Projects/Assignments	Tests/Quizzes	
80%	20%	

#### **Course Description**

- Learn different forecasting methods, all in excel
- Predictive analytics in Excel, leverages XLMiner add on
- Includes non-termporal forecasting methods e.g., clustering

#### **Applicability**

- Helpful for careers like corporate finance, or analyticscareers
- Consulting and analytics where you regularly work with historical data
- Forecasting sales would be helpful for a lot of marketing roles

#### **Syllabus**

 Mostly assignments, with a midterm and final. Decent amount of work outside of class (homework due every class)



## FIN 70420 - Capital Allocation



Instructor: Katherine Spiess

Group Work	Individual Work	
TBD%	TBD%	
Projects/Assignments	Tests/Quizzes	
TBD%	TBD%	

#### \*NEW COURSE\*

#### **Course Description**

Firms with available cash must decide whether to distribute that cash to their shareholders or retain the cash to invest on their shareholders' behalf. Considers complex valuation decisions such as

- Choosing between mutually exclusive projects with unequal lives
- Setting contract bid prices
- Decisions that require real options analysis (e.g., early stage R&D investments, staged investments, project expansions, and project abandonment decisions).

#### **Applicability**

Anyone moving into financial services, consulting, and corporate finance



## FIN 70430 – Financing the Corporation



Instructor: Walt Clements

Group Work	Individual Work
25%	75%
Projects/Assignments	Tests/Quizzes
70%	30%

#### **Course Description**

Explores concepts such as capital structure, weighted average cost of capital, and venture capital. Additionally, upon completion, students will be able to:

- •Identify & evaluate key factors to determine firms' optimal debt & equity levels.
- •Apply key concepts & tools to assess different debt and equity financing options.
- •Determine appropriate nuances for financing of newer ventures.
- •Understand the criteria, pros and cons of public vs. private placements.
- Evaluate trade-offs of various short-term financing options.

#### **Applicability**

Gives you solid understanding of WACC, which is used later in corporate valuations.



## FIN 70440 – Financial Policy



Instructor: Paul Schultz

Group Work	Individual Work
0%	100%
Projects/Assignments	Tests/Quizzes
50%	50%

#### **Course Description**

Financial Policy covers three topics

- How firms raise capital to make investments
- How and when firms should return capital to shareholders
- Corporate restructuring (mergers, spin-offs, and carve-outs)

One case is assigned per class period. Students are expected to read through the cases and either, 1) participate in class discussion, or 2) turn in a one-page summary of the case, addressing the main issues.

#### **Applicability**

Financial Policy is applicable to anyone in the MBA program, as it is very relevant to current topics, provides useful knowledge to take forward in one's career, and does not require prior financial experience or involve heavy math.



## FIN 70400 – Mergers & Acquisitions



Instructor: TBD (possibly

Katherine Spiess)

Group Work	Individual Work
10%	90%
Projects/Assignments	Tests/Quizzes
70%	30%

#### **Course Description**

Answers the questions WHY and HOW do firms buy or sell companies? What are the situations where value is added or destroyed? Course content covers M&A strategy, the process of buying/selling a company, and the math behind measuring value.

Classroom discussion of current M&A related activities will be used to reinforce key concepts. The structure of the class is a combined lecture/class discussion format with a great deal of emphasis on active learning. We will rely heavily upon case studies of past events and news articles of current events to illustrate how financial theory can be applied in an actual business environment.

#### **Applicability**

Valuation (intrinsic and extrinsic), transaction feasibility and execution. Quintessential for anyone considering consulting, corporate strategy, financial planning & analysis, investment banking, and private equity.



## FIN 70410 – M&A Practicum



Instructor: Howard Lanser

Group Work	Individual Work
80%	20%

Projects/Assignments	Tests/Quizzes
90%	10%

#### **Course Description**

The objective of this course is to develop an understanding of the valuation methodologies used in M&A from the point of view of an Investment Banker. The central theme of the course will be evaluating a specific M&A transaction using DCF, Comparable Companies, Precedent Acquisitions, and LBO analysis. Students will apply what they've learned to the valuation of a specific company and will make a recommendation

#### **Applicability**

This course helps students to: (i) Develop a better understanding of M&A from both the buy and sells side (ii) Create the financial models used in the core M&A valuation methodologies, namely comparable companies analysis, comparable transaction analysis, DCF,LBO, and merger consequences (accretion/dilution model). (iii) Understand how transactions are financed by strategic buyers and financial sponsors, and challenges in the current market environment. (iv) Have a fundamental understanding of due diligence and transaction mechanics.



## FIN 70500 – Multinational Finance



Instructor: Gianna Bern

Group Work	Individual Work
30%	70%
Projects/Assignments	Tests/Quizzes
30%	70%

#### **Course Description**

By application only. For second year and one-year MBAs, The objective of this course is to develop a detailed understanding of the tools used by market professionals and corporate managers to analyze the value of companies and stocks. The central theme of the course will be the pricing of equity securities using discounted cash flow and relative valuation procedures. Students will apply what they've learned to the valuation of a specific company, with the goal of becoming an expert on that firm.

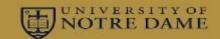
#### **Applicability**

After completing this course, students should be able to: (i) Develop quantitative models for firm and equity valuation based on DCF and multiples. (ii) Identify and interpret accounting and non-accounting information necessary for valuation. (iii) Identify and interpret the key value drivers for a firm or industry. (iv) Critically analyze firm and equity valuation models and assumptions developed by others.(v) Present valuation analyses and assumptions in a professional manner.

Assignments: Group case work, midterm, final



## FIN 70620 – Options & Futures



Instructor: Benjamin Golez

Group Work	Individual Work
70%	30%
Projects/Assignments	Tests/Quizzes
Several case studies and problem sets	Midterm and Final

#### **Course Description**

The objective of this course is to familiarize students with options, futures, and swaps. While the course requires a certain degree of mathematical rigor, the emphasis is on the practical use of derivatives in asset management, banks, and corporations. Classes typically include both a lecture and a discussion. The course features short assignments using real data. The standard topics include pricing of derivatives, strategies involving derivatives, and risk management.

#### **Applicability**

Students will learn how derivatives work and how companies use them for hedging.

#### <u>Syllabus</u>



## FIN70470 – Strategic Finance & Valuation



Instructor: John Affleck-Graves

Croup Work

40%

Group Work	individuai vvoik	
40%	60%	
Projects/Assignments	Tests/Quizzes	

Individual Mark

60%

#### **Course Description**

The purpose of this course is to provide a framework for the evaluation of strategic financial decisions. Topics covered include:

- Value Driver Analysis (EVA)
- Valuation
- Capital Structure
- Leveraged Buyouts
- Security Issuance

#### **Applicability**

Throughout, emphasis will be placed on practical applications in corporate finance, consulting, valuation, and the use of financial methods in decision-making.

#### **Syllabus**

Four team case studies, two pop quizzes on cases, final exam



## FIN 70460 – Working Capital Management



Instructor: Walter Clements

Group Work	Individual Work
50%	50%
Projects/Assignments	Tests/Quizzes
30%	70%

#### **Course Description**

Emphasizes the set of decisions and problems that financial and operating managers face in determining short-term financial policy vetting terms when structuring contracts and deals, and managing business processes of the company.

Major topics include:

- Identifying working capital elements and their relationships to company operations
- Financial analysis
- Cash forecasting
- Banking relations
- Cash-flow systems
- Short-term investment and borrowing strategies

#### **Applicability**

Corporate treasury, financial planning & analysis, valuation

#### **Requirements**





## Investments



## FIN 70470 – Applied Investment Management



Instructor: Jason Reed

Group Work	Individual Work
30%	70%

Projects/Assignments	Tests/Quizzes	
30%	70%	

#### **Course Description**

By application only. For second year and one-year MBAs, The objective of this course is to develop a detailed understanding of the tools used by market professionals and corporate managers to analyze the value of companies and stocks. The central theme of the course will be the pricing of equity securities using discounted cash flow and relative valuation procedures. Students will apply what they've learned to the valuation of a specific company, with the goal of becoming an expert on that firm.

#### **Applicability**

After completing this course, students should be able to: (i) Develop quantitative models for firm and equity valuation based on DCF and multiples.

(ii) Identify and interpret accounting and non-accounting information necessary for valuation. (iii) Identify and interpret the key value drivers for a firm or industry. (iv) Critically analyze firm and equity valuation models and assumptions developed by others.(v) Present valuation analyses and assumptions in a professional manner.

#### **Syllabus**

Ongoing analysis of an equity currently in portfolio and presentation (pitch) of a new security for the endowment fund to add



## FIN 70990 - Behavioral Finance



Instructor: Kelly

Group Work	Individual Work
30%	70%

Projects/Assignments	Tests/Quizzes
30%	70%

#### **Course Description**

The traditional framework for thinking about financial markets assumes that all market participants are fully rational. The past three decades have seen the emergence of an important new paradigm, behavioral finance, which argues that many financial phenomena are the result of less than fully rational thinking. In this course, you will cover the building blocks of behavioral finance (limits to arbitrage, psychology) and then move onto applications

#### **Applicability**

This course is useful for those hoping to gain a better understanding of the field of finance and how psychology impacts the financial decisions both companies and individuals make

#### **Syllabus**

Take home exam, group project of topic of choice, final exam



## FIN 70610 - Equity Valuation



Instructor: Howard Lanser

Group Work	Individual Work
70%	30%

Projects/Assignments	Tests/Quizzes	
30%	70%	

#### **Course Description**

The objective of this course is to develop a detailed understanding of the tools used by market professionals and corporate managers to analyze the value of companies and stocks. The central theme of the course will be the pricing of equity securities using discounted cash flow and relative valuation procedures. Students will apply what they've learned to the valuation of a specific company, with the goal of becoming an expert on that firm.

#### **Applicability**

After completing this course, students should be able to: (i) Develop quantitative models for firm and equity valuation based on DCF and multiples. (ii) Identify and interpret accounting and non-accounting information necessary for valuation. (iii) Identify and interpret the key value drivers for a firm or industry. (iv) Critically analyze firm and equity valuation models and assumptions developed by others.(v) Present valuation analyses and assumptions in a professional manner.

#### **Syllabus**

Midterm, final, and a security valuation recommendation project with 5 milestones

## FIN 70670 – Fixed Income Securities



Instructor: Zhi Da

Group Work	Individual Work
100%	0%

Projects/Assignments	Tests/Quizzes	
35%	65%	

#### **Course Description**

This course covers basic fixed income valuation, hedging and arbitrage. A sample of fixed income securities covered include: Treasury securities, corporate bonds, leveraged finance, credit default swaps, convertible bonds, and interest rate derivatives. Because this class does not require a previous experience with derivatives classes (e.g., FIN 70620 or FIN 70630), interest rate derivatives will not be covered in depth despite their importance.

#### **Applicability**

This course will be most useful for students planning a career in portfolio management, sales and trading, or banking. In addition, this course will be extremely instructive to students preparing for the debt instrument section of the CFA@ exams.

#### **Syllabus**

Group homework assignments (problem sets), midterm, and final



## FIN 70670 - Investments



Instructor: Zhi Da

Group Work	Individual Work
100%	0%

Projects/Assignments	Tests/Quizzes	
30%	70%	

#### **Course Description**

This course is intended to be a first course in investments following one or more basic finance courses. You will cover a broad range of topics including the market structure, basics of stocks, bonds and financial derivatives, market efficiency, behavioral finance, performance evaluation and the debate between actively managed and passive managed funds.

#### **Applicability**

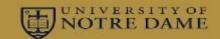
This course will be useful to both students planning a career in financial industry and students making personal investment decisions. In addition, this course will be instructive to students preparing for the CFA exams. There is strong overlap with Fixed Income course.

#### **Syllabus**

Two group homework assignments (problem sets), midterm, and final



## FIN 70620 – Options & Futures



Instructor: Benjamin Golez

Group Work	Individual Work
70%	30%
Projects/Assignments	Tests/Quizzes
Several case studies and problem sets	Midterm and Final

#### **Course Description**

The objective of this course is to familiarize students with options, futures, and swaps. While the course requires a certain degree of mathematical rigor, the emphasis is on the practical use of derivatives in asset management, banks, and corporations. Classes typically include both a lecture and a discussion. The course features short assignments using real data. The standard topics include pricing of derivatives, strategies involving derivatives, and risk management.

#### **Applicability**

Students will learn how derivatives work and how companies use them for hedging.

#### <u>Syllabus</u>



## FIN 70980 - Private Equity



Instructor: Sophie Shive

Group Work	Individual Work
70%	30%
Projects/Assignments	Tests/Quizzes
30%	70%

#### **Course Description**

This course will expose students to investments in privately-held companies that do not trade on organized exchanges, at all stages of a firm's life cycle from venture capital through growth and mezzanine capital and leveraged buyouts.

#### **Applicability**

Topics include deal sourcing and structure, contract design, valuation, and returns to holders of private equity securities and publicly traded private equity firms. Recent developments, the impact of private equity on society and ethical issues surrounding each topic will also be discussed (e.g., social investing).

#### **Syllabus**



## FIN 70710 - Real Estate Valuation



Instructor: Dave Hutchison

Group Work	Individual Work
70%	30%
Projects/Assignments	Tests/Quizzes
20%	80%
2 case studies	midterm and final

#### **Course Description**

The fundamental objectives of this course are: 1) to expose you to the language, topics, and issues associated with real estate as an economic asset, and: 2) to give you the basic skills and intuition you need to begin to evaluate a variety of real estate investments. The course will introduce students to the methods of valuation and investment analysis used in residential and commercial real estate. Emphasis will be placed on commercial real estate applications. We will consider traditional valuation methods used in appraisal: market comparables, cost methods, and income based methods, in both residential and commercial real estate valuation analysis. Real estate's role in the broader investment portfolio will be discussed.

#### **Applicability**

Relevant for anyone interested in real estate or commercial development.

#### **Syllabus**



## FIN 76040 – Seed Investor Practicum

Individual Work



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**Group Work** 

~80%	~20%	
Projects/Assignments	Tests/Quizzes	
~90%	10%	

#### Course Description

Complete review of an investment opportunity. The class is divided into two tracks. The classroom phase will introduce an investment opportunity and walk through all of the processes in that investment consideration, including due diligence, competitive analysis, discussions with the company executive team, development of the term sheet, negotiations on the terms of the investment and final close of the transaction. In the second (clinic) phase, small teams of students will work with VCs or Angel Groups on one of their ongoing company reviews, investments opportunities, due diligence requirements or other tasks presently being conducted.

\*\*Required classroom phase in Washington, DC, from ~January 7-11\*\*

#### **Applicability**

Anyone interested in starting their own venture, VC, or investing in early-stage companies.



## FIN 70470 – Strategic Finance & Valuation



Instructor: John Affleck-Graves

Group Work	Individual VVork
40%	60%

Projects/Assignments	Tests/Quizzes
40%	60%

#### **Course Description**

The purpose of this course is to provide a framework for the evaluation of strategic financial decisions. Topics covered include:

- Value Driver Analysis (EVA)
- Valuation
- Capital Structure
- Leveraged Buyouts
- Security Issuance

#### **Applicability**

Throughout, emphasis will be placed on practical applications in corporate finance, consulting, valuation, and the use of financial methods in decision-making.

#### **Syllabus**

Four team case studies, two pop quizzes on cases, final exam





# Innovation & Entrepreneurship



## MGTO 70560— Business Model Innovation



Instructor- Mike Mannor

Group Work	Individual Work
40%	60%

Projects/Assignments	Tests/Quizzes
40%	30%

#### **Course Description:**

This course is designed to study how organizations can achieve sustainable competitive advantages by creating new market spaces through business model innovation. The goal is to help students to think beyond how organizations can simply compete in widely contested market sectors to instead innovate in novel ways that allow a firm to generate superior returns in wide open spaces.

#### Applicability:

- 1. Describe key theories of business model innovation.
- 2.Demonstrate an understanding of how to identify business model innovation opportunities.
- 3. Question prevailing business models effectively and critically.
- 4. Formulate new business model innovations that drive significant competitive advantage.
- 5. Evaluate the strategic value of new proposed business model innovations.



## MGTO – Competitive Growth Strategy



#### Instructor- Joe Urbany

Group Work

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47.5%	52.5%
Projects/Assignments	Tests/Quizzes
75%	25%

Individual Work

#### Course Description

This is a project-driven course. We focus on application. The students will scope problems, gather data, analyze, design and prepare a plan for growth strategy for an existing organization.

#### **Applicability**

You will learn about MM Canvas model, total product concept, revenue models, generic competitive strategies, customer POV / persona, customer journey, levels of competition, demand estimation, customer choice & multi-attribute analysis.

#### What does this mean?

You'll gain new practical skills, learn methodologies for analyzing firms, and have a hands-on experience working with a firm.



## MGTO 70560- Entrepreneurship



#### Instructor- Dean Shepherd

Group Work	Individual Work	
20%	80%	
Projects/Assignments	Tests/Quizzes	
55%	45%	

#### Course Description:

Organizations must be adaptable, strategically flexible, fast acting, and entrepreneurial if they are to survive in times of increased globalization and tremendous product-market and technological change. These environmental conditions provide opportunities for new ventures. Managers of new ventures face a number of challenges that managers of established organizations do not. This course focuses on these unique managerial challenges and in particular making strategic decisions in environments that are dynamic, highly uncertain and complex.

#### Applicability:

Leadership and International roles, Entrepreneurship, VC



## MGTO 70510 - Innovation and Design



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Group Work

Group work	individual vvork	
The whole dass is an ongoing group project	0	
Projects/Assignments	Tests/Quizzes	
Projects/Assignments Four group project deliverables	Tests/Quizzes 0	

Individual Work

#### **Course Description**

This course is an immersive introduction to design thinking. Students will engage the real world to learn, practice, and use the principles, methods, and attitudes of design thinking. In this course, students will learn to frame their questions, conduct research, synthesize ideas, create new designs, and refine these designs into a final product.

#### **Applicability**

This course is useful for students interest in product management, marketing, and entrepreneurship.



## MGTO70530 - Intro to Early Stage Funding



Instructor-Gale Bowman, Jim Hunt

Group Work

Individual Work

Projects/Assignments

Tests/Quizzes

#### **Course Description**

This course examines methods that an entrepreneur would consider for financing an early stage venture. Specific topics include angel investment and venture capital funding. Students learn how to formulate a funding strategy for an early stage business, prepare financial projections, create a plan for use of funds, and pitch for an equity investment. Students will also learn about the due diligence process and standard structures and terms for early stage investments.

#### **Applicability**

Anyone interested in starting their own venture, VC, or investing in early-stage companies.



## MGTO 70540 - Launching New Ventures



#### Instructor-Nicholas Berente

Group Work	Individual Work
62%	38%

Projects/Assignments	Tests/Quizzes
100%	0%

#### Course Description

This course is focuses upon launching a new venture. Topics to be examined include growth and cash management, sustaining the differentiated/competitive advantage of the venture, crisis management and new venture human resources issues. This course will use an action learning pedagogy. Students will be expected to apply what they learn in real business situations.

#### **Applicability**

Anyone interested in starting their own venture, VC, or investing in early-stage companies.

You pitch ideas starting week one and mold them until a final presentation in front of Idea Center judges.



## FIN 76040 – Seed Investor Practicum

Individual Work



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**Group Work** 

~80%	~20%	
Projects/Assignments	Tests/Quizzes	
~90%	10%	

#### Course Description

Complete review of an investment opportunity. The class is divided into two tracks. The classroom phase will introduce an investment opportunity and walk through all of the processes in that investment consideration, including due diligence, competitive analysis, discussions with the company executive team, development of the term sheet, negotiations on the terms of the investment and final close of the transaction. In the second (clinic) phase, small teams of students will work with VCs or Angel Groups on one of their ongoing company reviews, investments opportunities, due diligence requirements or other tasks presently being conducted.

\*\*Required classroom phase in Washington, DC, from ~January 7-11\*\*

#### **Applicability**

Anyone interested in starting their own venture, VC, or investing in early-stage companies.



## MGTO 70550 - Social Innovation



#### Instructor - Dr. Charlice Hurst

Group Work	Individual Work
85%	15%
Projects/Assignments	Tests/Quizzes
100%	0%

#### **Course Description**

Whatever your specific reason for joining this class, the reason we're all here (presumably) is that we want to work on making the world a better place to live and, hopefully, we believe it's possible. I assume you're looking for some tools to do that. I know some tools. Our time is pretty limited. Thirteen class sessions to figure out how to change the world? Tall order.

- To equip you to be informed donors and board members.
- To build skills and provide tools for analyzing social issues from a systems perspective.
- To provide you with the knowledge and skills to implement social innovation directly, as a founder or employee, if that's the path you want to follow.

#### **Applicability**

Allows each student to form groups around a topic they deeply care about and interested in researching/solving. This class focuses design thinking on social issues and how you can relate the framework to social issues and innovation in the social sector.

## MGTO 70505 – Strategic Foresight

Individual Work



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**Group Work** 

<u></u>		
~80%	~20%	
Projects/Assignments	Tests/Quizzes	
100%	0%	

#### Course Description

In a world of accelerating change, anticipation and resilience are critical components of strategic decision making. They can be the difference between capitalizing on change and getting left behind. The Strategic Foresight course gives students first hand experience with methods for sensing weak signals of emergent change, processes for imagining implications of change, and frameworks for creating strategic resilience in an uncertain future. Upon completion of the course, students will have a working knowledge of proven foresight processes for asking and answering ambiguous strategic questions, enabling them to better lead their organizations amid turbulent change.

#### **Applicability**

Entrepreneurs, consultants, and strategists.



## MGTO 70555 – Venture Capital Fundamentals



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Group Work	Individual Work
25%	75%

Projects/Assignments	Tests/Quizzes	
75%	25%	

#### **Course Description**

Look at how venture capital funds are formed, how VC's source opportunities, and then screen them to determine whether they present suitable investments for their LP's, and how the terms of investment can be critical for the entrepreneur.

There will be several guest speakers, including investors and entrepreneurs.

#### <u>Applicability</u>

- 1. Gain an appreciation for the basic fundamentals of venture capital
- Develop an understanding for why Investment Managers include venture capital in many/most of their allocation models
- 3. Learn why some types of business might be suitable for venture funding while others are not
- 4. Analyze new ventures holistically, giving consideration for the People, Product and Market dynamics which drive outcomes





# Marketing



# MARK 70501 – Advertising Management



Instructor - Phil Koesterer

Adjunct Professor &
Senior Vice President, Planning
Director, Edelman

Group Work	Individual Work
0%	100%
Projects/Assignments	<b>Tests/Quizzes</b>
80%	20%

### **Course Description:**

Advertising Management provides an opportunity to learn the management process through which organizations, taking a collaborative approach to consumers, develop and present messages of value that engage targeted audiences and encourage attitudinal, emotional, and behavioral responses. In cases, we explore advertising decision-making in corporations that take a consumer-centered approach to marketing.

### **Applicability:**

This course is intended to serve students who anticipate careers as brand managers, marketing managers, or are interested in working in ad agencies.



# MARK 70300 – Brand Strategy



Group Work	Individual Work
30% - 1 large group capstone	70% - 3 2-page papers
Projects/Assignments	Tests/Quizzes
90%	10% - 1 final exam

### Course Description

Brand Strategy provides an in-depth dive into the field as well as guidance and platforms for brand-building. The course is geared almost entirely towards project work rather than memorization.

### **Applicability**

This course is most beneficial for individuals seeking roles as Associate Brand Managers, Digital Marketing Managers and Marketing Managers



### MARK 70150 – Channeling Customer Experience



Instructor - John Sherry
Raymond W. & Kenneth G. Herrick
Professor of Marketing

Group Work	Individual Work
1 large term project with data sets, presentations, and a paper	No individual work turned in, but prof. estimates 8 hrs./wk/person for group project
Projects/Assignments	Tests/Quizzes

100% 0%

#### **Course Description**

This course is designed to help you distinguish the actual lived experience of consumers from the assumptions of the firm. That is, you will seek authentic consumer insight. Our emphasis is on the managerial implications of prolonged engagement with consumers. You will analyze and interpret the experiential and functional dimensions of product/ service/brand essence. You will learn to conduct rapid appraisals using qualitative methods, and to supervise diagnostic research into marketing problems. The class will observe a seminar-workshop format, and depend for its energy upon discussion of ongoing field research projects that student teams will conduct in naturalistic settings.

#### **Applicability**

This course will be immediately useful to careers in consulting and entrepreneurship, technology, category and brand management, new product development, advertising and marketing research.



## MARK 70110 – Competitive Growth Strategy



Instructor- Joe Urbany Marketing Professor

Group Work	Individual Work
90% - 1 large group project	10% - 2 smaller assignments
Projects/Assignments	Tests/Quizzes
60%	25% - Midterm Exam

#### **Course Description**

This is a project-driven course. We focus on application. The students will scope problems, gather data, analyze, design and prepare a plan for growth strategy for an existing organization. The goal is have you learn a process for customer-aligned growth strategy design, while exposing you to contemporary topics in marketing strategy and technology platforms.

#### **Applicability**

This course provides an understanding of the challenges to growth in competitive markets and gives you tools to build strategy to overcome them Fulfills Marketing, Business Leadership, Innovation & Design, Strategy concentrations



### MARK 60550 – Consumer Behavior



Instructor - Emily Garbinsky
Assistant Professor - Marketing

Group Work	Individual Work
Ongoing research project and consumer interviews	Book summary and presentation
Projects/Assignments	Tests/Quizzes
1 group project, 1 individual project	midterm and final

Course Description: This course explores all phases of the consumer journey. While most marketers focus on the shopping experience (namely the point of purchase), the course explores how marketers can positively impact their business by developing strategies for both the pre purchase and the post purchase phases of the consumer journey.

<u>Applicability:</u> This course is helpful in developing a broader perspective in marketing techniques, especially when it comes to targeting consumers.



### MARK 70350 - Customer Valuation and Management



Instructor: Shankar Ganesan
The John Cardinal O'Hara, C.S.C. Professor
of Business and Chair of the Marketing

<sup>-</sup>Department

Group Work	Individual Work
80% - 4 Case write-ups	20% - 1 reflection assignment
Projects/Assignments	Tests/Quizzes
45%	50% - Midterm & Final Exam

#### **Course Description:**

The overarching principles of this course are:

- 1) estimating customer lifetime value (CLV) and managing customers based on their CLV
- 2) deciding on which customers to acquire and how to acquire them
- 3) clarifying the importance of customer retention and developing ideas to increase retention
- 4) expanding the existing customer relationships and increasing the share of wallet through cross-selling and up-selling
- 5) linking CLV to organizational-level concepts such as firm valuation.

#### **Applicability**

Extremely important for anyone who is looking into a career in marketing or who really wants to understand how customer value impacts the firm

#### Requirements

The course requirements and format include lectures, case analyses, simulations, student-led discussions, and short papers.



# MARK 70500 - Digital Marketing



Instructor: Tim Bohling
Marketing Professor
Chief Marketing and Graduate
Enrollment Officer, and Teaching

#### Professor

Group Work	Individual Work
30% - 1 large group capstone	70% - 5 short reading summaries; 1 individual assignment
Projects/Assignments	Tests/Quizzes
40%	50% - Midterm, Final & Hootsuite Certification

#### **Course Description:**

This course will analyze and evaluate Digital Marketing frameworks that enable firms to deeply understand and engage with each of their customers and prospects across their buyer's journey. In this class, we will review and apply digital marketing strategies to build social media eminence, effectively engage customers and prospects, and successfully promote brands, products and services with data-driven tools and techniques. We will design a digital-first integrated marketing strategy with a measurement system to sense and respond to in-market performance indicators to improve business performance.

#### **Applicability**

Fulfills Marketing Concentration



# MARK 63900 – Exploring the Frontiers of Marketing Thought



Instructor: William L. Wilkie
Nathe Professor of Marketing Strategy

Group Work	Individual Work
Projects/Assignments	Tests/Quizzes

#### **Course Description**

Full semester course - 3 credit hours (meets 1 day/week for 2.5hrs)

Limited seats - have to apply

We're interested in exploring the vast, dynamic world of thought about the field of Marketing. How can I keep up with developments when I'm out working again? How can I develop my talents over the longer run? Where does research fit in the scheme of things? We learn that the marketing thought world is actually approachable, and provides us with new powers.

#### **Applicability**

This course will help you put what you've been learning in the classroom into a real-world context, as you examine ideas and trends that marketing executives are exploring.

#### **Special Note**

You need to attend EVERY class to receive course credit.



### MARK 70120 – Marketing Analytics



Instructor: Vamsi Kanuri

Assistant Professor - Marketing

Group Work 4 Case Studies, 1 (or 2) Case	Individual Work Midterm Exam, Final Exam
Presentations Projects/Assignments See above	Tests/Quizzes See above

#### **Course Description**

Combines statistical analysis, financial analysis, and operations research to analyze and model key marketing decisions such as forecasting demand, setting prices, determining ad spend, evaluating social media ad campaigns, etc.

Half lecture, half cases

No coding involved: all analysis done in Excel using Solver add-in

Involves some basic calculus (first and second order derivatives)

#### **Applicability**

This course is appropriate for individuals considering careers in brand management, product management, retail management, or consulting.

Fulfills Marketing, Business Analytics, Business Leadership concentrations



# MARK 70100 - Marketing Research



Instructor- Joe Urbany Marketing Professor

Group Work	Individual Work
3 case write-ups (individual only) 5 technical applications (individual or group)	
Projects/Assignments	Tests/Quizzes
35%	50% - Midterm & Final Exams

Course Description: This course is a managerial introduction to marketing research that examines how additional information can be obtained and how to incorporate that information into decision-making. The course will provide hands-on experience doing statistical analysis using SPSS as a means of illustrating how uncertainty can be quantified, and as a bridge to discuss and introduce more advanced statistical techniques that are commonplace in marketing research. Specifically, students will learn a) to critically evaluate what information is necessary to make more informed decisions, b) the various approaches organizations use to obtain the information, and c) the most commonly used techniques necessary to analyze the data.

#### **Applicability:**

Fulfills Marketing, Business Leadership, Strategy concentrations



### MARK 70450 – New Products Development



#### Instructor – Joseph Cherian

Group Work	Individual Work
50%	50%
Projects/Assignments	Tests/Quizzes
-Case Presentation Competition	Midterm and Final
-Group Paper and Presentation	

#### **Course Description**

This course is designed to provide you with an awareness of the issues involved in new product development and with a basic understanding of the procedures and tools available for dealing with these issues.

Students will learn to forecast product demand, apply creative problemsolving techniques, and create an actual new product for a client or for your homework group.

### **Applicability**

The course is intended to serve students who anticipate careers in product management/product planning or who expect to be involved in the development of new products (goods or services), with emphasis on the marketing inputs to the product development process.

This course is recommended for students interested in marketing, product management, and entrepreneurship.

### MARK 70600 - Social Media



Instructor - Christian Hughes
Assistant Professor - Marketing

Group Work	Individual Work
Projects/Assignments	Tests/Quizzes

#### **Course Description**

Participation in the social media "egosystem" requires digital literacy, an authentic voice and a high level of trust. MBA students that complete this course will acquire a deeper understanding of what makes social media technology so persuasive and develop the human skills necessary to foster co-creative relationships with connected consumers.

#### **Applicability**

A thorough examination of marketing communication research and case studies from industry professionals will provide MBA students with a solid conceptual foundation for building successful brands and positive consumer experiences with the aid of social media.





# Strategy



# MARK 70300 – Brand Strategy



Group Work	Individual Work
30% - 1 large group capstone	70% - 3 2-page papers
Projects/Assignments	Tests/Quizzes
90%	10% - 1 final exam

### Course Description

Brand Strategy provides an in-depth dive into the field as well as guidance and platforms for brand-building. The course is geared almost entirely towards project work rather than memorization.

### **Applicability**

This course is most beneficial for individuals seeking roles as Associate Brand Managers, Digital Marketing Managers and Marketing Managers



# FIN 70230 – Business Forecasting



Instructor: Barry Keating

Group Work	Individual Work
0%	100%

Projects/Assignments	Tests/Quizzes	
80%	20%	

#### **Course Description**

- Learn different forecasting methods, all in excel
- Predictive analytics in Excel, leverages XLMiner add on
- Includes non-termporal forecasting methods e.g., clustering

#### **Applicability**

- Helpful for careers like corporate finance, or analyticscareers
- Consulting and analytics where you regularly work with historical data
- Forecasting sales would be helpful for a lot of marketing roles

#### **Syllabus**

 Mostly assignments, with a midterm and final. Decent amount of work outside of class (homework due every class)



### MTGO 70305 – Business on the Front Lines



# Instructors - Viva Bartkus and Joe Sweeney

Group Work	Individual Work
80% weekly meetings and group projects	20% books to read, reflection papers, individual research
Projects/Assignments	Tests/Quizzes
Project deliverables (usually due every class)	0

### **Course Description**

This course is an extended overseas service project. The course is an entire semester long (two mods + interterm and spring break). Students will spend 7 weeks doing extensive research for their projects, conducting weekly phone calls with their incountry business partners, and preparing white papers, logistics, and plans for their in-country experience. Then, students will spend 2 weeks in-country serving onsite at the partners' location. Finally, students will spend the following mod writing follow up reports and presenting their findings.

### **Applicability**

This course is useful for anyone with a passion for service, along with an interest in consulting or project management. This course will stretch and challenge students, because projects are only done in countries that are either war-torn or poverty-stricken.

#### **Requirements**

This course has a very heavy workload, including 6 books to read (and summarize) over Christmas break, weekly project deliverables, and several personal reflection papers.

## MARK 70110 – Competitive Growth Strategy



Instructor- Joe Urbany Marketing Professor

Group Work	Individual Work
90% - 1 large group project	10% - 2 smaller assignments
Projects/Assignments	Tests/Quizzes
60%	25% - Midterm Exam

#### **Course Description**

This is a project-driven course. We focus on application. The students will scope problems, gather data, analyze, design and prepare a plan for growth strategy for an existing organization. The goal is have you learn a process for customer-aligned growth strategy design, while exposing you to contemporary topics in marketing strategy and technology platforms.

#### **Applicability**

This course provides an understanding of the challenges to growth in competitive markets and gives you tools to build strategy to overcome them Fulfills Marketing, Business Leadership, Innovation & Design, Strategy concentrations



# ACCT 70120 - Corporate Financial Reporting



Instructor: Brad Badrester

Group Work	Individual Work	
25%	75%	
Projects/Assignments	Tests/Quizzes	
50%	50%	

### **Course Description**

The purpose of this course is to provide students with an in-depth look at difficult accounting and tax topics.

### **Applicability**

Most of the students in this class will be in the MSA program, so they will be more familiar with the material than most MBA students. However, this course would be good for anyone going into a corporate finance or finance-focused consulting role.

This course is essentially Accounting III. It covers all the topics that Miller said "this is really detailed, so I'm going to give you the high-level overview."



### MARK 70350 - Customer Valuation and Management



Instructor: Shankar Ganesan The John Cardinal O'Hara, C.S.C. Professor of Business and Chair of the Marketing

<sup>-</sup>Department

Group Work	Individual Work
80% - 4 Case write-ups	20% - 1 reflection assignment
Projects/Assignments	Tests/Quizzes
45%	50% - Midterm & Final
	Exam

#### Course Description:

The overarching principles of this course are:

- 1) estimating customer lifetime value (CLV) and managing customers based on their **CLV**
- 2) deciding on which customers to acquire and how to acquire them
- 3) clarifying the importance of customer retention and developing ideas to increase retention
- 4) expanding the existing customer relationships and increasing the share of wallet through cross-selling and up-selling
- 5) linking CLV to organizational-level concepts such as firm valuation.

#### Applicability

Extremely important for anyone who is looking into a career in marketing or who really wants to understand how customer value impacts the firm

#### Requirements

The course requirements and format include lectures, case analyses, simulations, student-led discussions, and short papers.



# FIN 70430 – Financing the Corporation



Instructor: Walt Clements

Group Work	Individual Work
25%	75%
Projects/Assignments	Tests/Quizzes
70%	30%

### **Course Description**

Explores concepts such as capital structure, weighted average cost of capital, and venture capital. Additionally, upon completion, students will be able to:

- •Identify & evaluate key factors to determine firms' optimal debt & equity levels.
- •Apply key concepts & tools to assess different debt and equity financing options.
- •Determine appropriate nuances for financing of newer ventures.
- •Understand the criteria, pros and cons of public vs. private placements.
- Evaluate trade-offs of various short-term financing options.

#### **Applicability**

Gives you solid understanding of WACC, which is used later in corporate valuations.



# FIN 70440 - Financial Policy



Instructor: Paul Schultz

Group Work	Individual Work
0%	100%
Projects/Assignments	Tests/Quizzes
50%	50%

#### **Course Description**

Financial Policy covers three topics

- How firms raise capital to make investments
- How and when firms should return capital to shareholders
- Corporate restructuring (mergers, spin-offs, and carve-outs)

One case is assigned per class period. Students are expected to read through the cases and either, 1) participate in class discussion, or 2) turn in a one-page summary of the case, addressing the main issues.

#### **Applicability**

Financial Policy is applicable to anyone in the MBA program, as it is very relevant to current topics, provides useful knowledge to take forward in one's career, and does not require prior financial experience or involve heavy math.



## ITAO 70920 – International Operations



Instructor-	<b>Jerry</b>	Wei
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Group Assignments	Individual Assignments
Two 30 min. group presentations, with accompanying 10 pg. group papers	0
Quizzes	Exams
7 (one for each case)	Open book, open note,

open computer

midterm and final

### **Course Description**

This course introduces students to the issues surrounding multinational companies. Students will gain an understanding of how to build and improve global supply chains. This course uses the case method, so each week students will read 1-2 cases that explain important global business concepts, such as tariffs, shipping laws, foreign exchange rates, taxes, and other key concepts. This course includes very minor finance involving exchange rates but is primarily a qualitative course.

### **Applicability**

This course is useful for any students interested in understanding global business or the global economy. This course may also be helpful for students interested in Business on the Front Lines.



# MGTO 70510 - Innovation and Design



#### Instructor - Matt Bloom

Group Work

The whole class is an ongoing group project	0	
Projects/Assignments	Tests/Quizzes	
Four group project deliverables	0	_
Final group project and short presentation		

Individual Work

### **Course Description**

This course is an immersive introduction to design thinking. Students will engage the real world to learn, practice, and use the principles, methods, and attitudes of design thinking. In this course, students will learn to frame their questions, conduct research, synthesize ideas, create new designs, and refine these designs into a final product.

### **Applicability**

This course is useful for students interested in product management, marketing, and entrepreneurship.



# MTGO 70500 – Innovations in Health Care Transformation



#### Instructor- Dr. Jesse Hsieh

Group Work	Individual Work
0%	100%
Projects/Assignments	Tests/Quizzes
	1 midterm and 1 final
	10-12 pg. paper on your
	idea for something to
	reform in healthcare

### **Course Description**

- Understand the importance of health and health care to American life
- Understand some defining characteristics of U.S. health care delivery
- Identify major issues and concerns (cost, quality, variation, transparency)
- Identify key interest groups (stakeholders) Key to change (or no change)
- Understand the importance of engaging a new generation of health leaders

### **Applicability**

- This course is great for those who are interested in healthcare or are planning on entering a Healthcare-related discipline
- This course has many guest speakers, who range from health insurance executives and hospital administrators to healthcare tech VC fund managers.
   Several of these guest speakers have hired MBA students from Notre Dame in the past.

#### Requirements

This course is very reading heavy (about 60-100 pgs. per week), but it has no assignments except for the final paper.



# MGTO 70300 – Judgement



Instructor - Viva Bartkus (Mod 3 Only)

Group Work	Individual Work
%	%
Projects/Assignments	Tests/Quizzes
%	%

### **Course Description**

The objective of this course is to examine what lies at the foundation of good judgement.

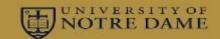
This involves an understanding how difficult judgements such as commissioning a diverse team, fostering a vigorous process, and wrestling with the difficult questions in an environment of honesty and trust impacts not only the organization and its employees, but ripples further the community, environment, and society.

#### **Applicability**

Viva Bartkus is a former McKinsey & Company Partner (1993-2003) and is arguably one of the best consulting resources available at Notre Dame. Her classes are difficult and typically very work-heavy but always have real world applications.



## ITAO 70930 – Lean Six Sigma



#### Instructor – Carol Mullaney

Group Work	Individual Work
One major project (~12 assignments)	~9 individual assignments
Projects/Assignments	Tests/Quizzes
See above	Final exam, Final deliverables (presentation)

### Course Description

Uses online learning, classroom lecture, and discussion to teach the DMAIC (define-measure-analyze-improve-control) methodology of Lean Six Sigma.

Offers you the opportunity to earn a Lean Six Sigma Green Belt Certification

Has both online simulation and real-world applications of core concepts.

NOTE: This course is a full semester.

### **Applicability**

Useful for anyone going into operations or any role that is heavily process reliant



# MARK 70100 - Marketing Research



Instructor- Joe Urbany Marketing Professor

Group Work	Individual Work	
3 case write-ups (individual only) 5 technical applications (individual or group)		
Projects/Assignments	Tests/Quizzes	
35%	50% - Midterm & Final	
	Exams	

Course Description: This course is a managerial introduction to marketing research that examines how additional information can be obtained and how to incorporate that information into decision-making. The course will provide hands-on experience doing statistical analysis using SPSS as a means of illustrating how uncertainty can be quantified, and as a bridge to discuss and introduce more advanced statistical techniques that are commonplace in marketing research. Specifically, students will learn a) to critically evaluate what information is necessary to make more informed decisions, b) the various approaches organizations use to obtain the information, and c) the most commonly used techniques necessary to analyze the data.

#### **Applicability:**

Fulfills Marketing, Business Leadership, Strategy concentrations



# FIN 70400 – Mergers & Acquisitions



Instructor: TBD (possibly

Katherine Spiess)

Group Work	Individual Work
10%	90%
Projects/Assignments	Tests/Quizzes
70%	30%

### **Course Description**

Answers the questions WHY and HOW do firms buy or sell companies? What are the situations where value is added or destroyed? Course content covers M&A strategy, the process of buying/selling a company, and the math behind measuring value.

Classroom discussion of current M&A related activities will be used to reinforce key concepts. The structure of the class is a combined lecture/class discussion format with a great deal of emphasis on active learning. We will rely heavily upon case studies of past events and news articles of current events to illustrate how financial theory can be applied in an actual business environment.

### **Applicability**

Valuation (intrinsic and extrinsic), transaction feasibility and execution. Quintessential for anyone considering consulting, corporate strategy, financial planning & analysis, investment banking, and private equity.



# MGTO 70620 - Negotiation



#### Instructor- Joe Holt

Group Work	Individual Work
	10%
Projects/Assignments	Tests/Quizzes
80%	20%

#### Pros:

- practical (not just theory
- Flexible exam
- Apply your learnings immediately
- 3 final exam options including oral exam and written paper

#### Cons

- Lots of readings
- Can't miss class without at least a week of advance notice
- Negotiating with classmates which can feel very confrontational

### **Course Description**

This course covers best practices for negotiating in a way to "increase the size of the pie". It focuses on strategies to group problem solve, as opposed to figuring out how to take the biggest slice. Almost every other class there is a chance to practice your negotiating skills. You'll get the chance to negotiate one-on-one, in teams, and team-against-one.

### **Applicability**

Everything is a negotiation.

This class is currently taught by professor Holt. Holt gives excellent hands on negotiation. You will negotiate something new every class with a new opponent/partner (depending). He also give 3 options for a final including an oral exam. However, this class has a lot of reading and you are responsible for those readings for the exam.

## MGTO 70200 - Organizational Consulting



#### Instructor- Pete Effler

Group Work	Individual Work
40%	60%
Projects/Assignments	Tests/Quizzes
100%	%

### **Course Description**

This course is intended to meet the needs of MBA students who are considering careers as business consultants or who have an interest in knowing about consulting, perhaps as future consumers of consulting services. It will lead you to an understanding of how consultants add value to the clients they serve and provide you with some of the foundational skills required to contribute on client engagements. This will be accomplished through a combination of case studies, relevant reading assignments, real-world examples, and some guest instructors / contributors. The course is organized around the following major themes:

- 1. The industry, the job, and the competencies of consulting
- Analysis of problems, synthesis of strategy & tactics, and execution / implementation.
- 3. The challenges associated with changing a client organization, the governance of the process, and realization of benefits.
- 4. Innovation as it pertains to business models, lines of business, processes, and technology.

### **Applicability**

The course does a decent job explaining the workflow expected of a consulting team. This course is probably best for individuals with little to no consulting background but may be a frustrating course for someone that already has strong knowledge in this area. .



# MGTO 70100 – Problem Solving



#### Instructor - Gerard Pannekoek

Group Work	Individual Work
100%	0%

Projects/Assignments	Tests/Quizzes	
100%	0%	

### **Course Description**

Course focuses on how you define a problem, create an issue tree, conduct research and make a recommendation

Course is based on group projects, with a final deliverable (executive memo and presentation)

Groups are selected at random at the beginning of class when projects are due

### **Applicability**

Good for most roles, structuring of problems is similar to the consulting process



# ITAO 70910 – Project Management



#### Instructor-Todd Hill and Scott Siler

Group Work	Individual Work
80%	20%

#### Projects/Assignments

One Semester long group project with a client. It consists of four short deliverables throughout the mod, culminating in a presentation at the end of the mod to your client.

#### Tests/Quizzes

1 Final Exam based on class lecture material

### Course Description

No matter what career you go into, it will be helpful for you to have project management skills. Projects are the way a lot of business gets done, yet many people and organizations find themselves lacking project management skills. As such, it probably comes as no surprise that more projects fail than succeed. The purpose of this course is to provide you some frameworks, concepts, and tools that you can use to manage projects.

### **Applicability**

The course is a little different from most analytical courses in that you will not be crunching numbers or coding in this class. Most of the "analytics" comes from the frameworks you are taught in-class that you then apply to the project with your client. However, the skills you learn in this class can be applied to any managerial role in any industry.

Both Todd and Scott are exceptional project managers, running very elaborate and difficult projects for the entire university through OIT.



# ITAO 70230 - Spreadsheet Decision Modeling



#### Instructor- David Hartvigsen

Group Assignments	Individual Assignments
5	0
Quizzes	Tests

2

#### Course Description

Course Designed for Identification of problems that can be solved via optimization and simulation.

All Assignments can be completed in groups of up to three people or individually, but you are encouraged to do them as a group.

Class time is spent going through examples of problems that are very similar to the homework, and the homework is generally very straightforward.

Exams are on paper not excel

### **Applicability**

For Manufacturing and Process oriented career fields



# ITAO 70750 – Strategic Business Technology



Instructor - Nicholas Berente

Group Work	Individual Work
40% 50 min. presentation + 16 pg. paper	60% Four 2-pg. case analysis papers
Projects/Assignments	Tests/Quizzes
100%	0

#### Course Description

This course exposes the students to how technology is being used to change the competitive landscape within industries and among corporations.

#### **Course Format**

Every Monday, turn in a case writeup (choose 4 out of 6) and discuss a case about a company that is trying to decide whether to implement a new, innovative technology.

Every Wednesday, two teams present for 50 min. each on various tech topics, including machine learning, AI, digital twinning, blockchain, IoT, DEVOps/Agile, and other tech topics. The presentation must include an overview of the topic, a hands-on demo of the tech, two business strategies for using this tech, and a fun activity. Though this sounds like a lot, the prof. gives a lot of useful guidelines and ideas.

### **Applicability**

This course is designed to help students (who may have no previous tech background) converse with tech teams and make strategic decisions.



# ACCT 70200 – Strategic Cost Management



Instructor - Ramanan, Ramachandran

Group Work	Individual Work
25%	75%

Projects/Assignments	Tests/Quizzes
50%	50%

### **Course Description**

The purpose of this course is the use of different cost information in the context of various decisions and understanding the incentives of the parties involved in the decision. It teaches how to both develop and use cost information to create, communicate, implement, and control strategies.

The course was taught by Ram Ramanan during spring semester 2018 and is now being taught Asis Martinez during fall 2018.

### **Applicability**

If you have never used costs to understand decision-making outside of the typical accounting of Revenues - Costs = Profit, this course is a good way to learn that each situation will have multiple dimensions and issues both internally as well as externally for the business.





# Supply Chain



### ITAO 70920 – International Operations



#### Instructor- Jerry Wei

Group Assignments	Individual Assignments
Two 30 min. group presentations, with accompanying 10 pg. group papers	0
Quizzes	Exams
7 (one for each case)	Open book, open note,

open computer

midterm and final

#### **Course Description**

This course introduces students to the issues surrounding multinational companies. Students will gain an understanding of how to build and improve global supply chains. This course uses the case method, so each week students will read 1-2 cases that explain important global business concepts, such as tariffs, shipping laws, foreign exchange rates, taxes, and other key concepts. This course includes very minor finance involving exchange rates but is primarily a qualitative course.

### **Applicability**

This course is useful for any students interested in understanding global business or the global economy. This course may also be helpful for students interested in Business on the Front Lines.



# ITAO 70930 - Lean Six Sigma



#### Instructor – Carol Mullaney

Group Work	Individual Work
One major project (~12 assignments)	~9 individual assignments
Projects/Assignments	Tests/Quizzes
See above	Final exam, Final deliverables (presentation)

### Course Description

Uses online learning, classroom lecture, and discussion to teach the DMAIC (define-measure-analyze-improve-control) methodology of Lean Six Sigma.

Offers you the opportunity to earn a Lean Six Sigma Green Belt Certification

Has both online simulation and real-world applications of core concepts.

NOTE: This course is a full semester.

### **Applicability**

Useful for anyone going into operations or any role that is heavily process reliant



# MGTO 70620 - Negotiation



#### Instructor- Joe Holt

Group Work	Individual Work
	10%
Projects/Assignments	Tests/Quizzes
80%	20%

#### Pros:

- practical (not just theory
- Flexible exam
- Apply your learnings immediately
- 3 final exam options including oral exam and written paper

#### Cons

- Lots of readings
- Can't miss class without at least a week of advance notice
- Negotiating with classmates which can feel very confrontational

### **Course Description**

This course covers best practices for negotiating in a way to "increase the size of the pie". It focuses on strategies to group problem solve, as opposed to figuring out how to take the biggest slice. Almost every other class there is a chance to practice your negotiating skills. You'll get the chance to negotiate one-on-one, in teams, and team-against-one.

### **Applicability**

Everything is a negotiation.

This class is currently taught by professor Holt. Holt gives excellent hands on negotiation. You will negotiate something new every class with a new opponent/partner (depending). He also give 3 options for a final including an oral exam. However, this class has a lot of reading and you are responsible for those readings for the exam.

## ITAO 70210 – Predictive Analytics



#### Instructor- Daewon Sun

Group Work	Individual Work
20%	80%

Projects/Assignments

Series of individual and team assignments.
Amount just depends on the professor's choosing.

Last Mod 4 there were two individual assignments and four team assignments Tests/Quizzes

Midterm and a final exam

### **Course Description**

This course will cover several techniques needed to capitalize on the unprecedented availability of information and to meet the growing demand for better and faster decision support from such information. This course material will provide an understanding of various methods used to extract knowledge from data, such as data mining, as well as with important tools to improve managerial decision-making.

A lot of class is spent using SAS and walking through using Machine Learning techniques within it. Cases from finance, management, marketing, and operations will be used as illustrations.

### **Applicability**

Machine learning techniques are useful to learn and apply to many industries, but the use of SAS is probably less applicable to most MBAs (as opposed to R or SQL)



# ITAO70910 – Project Management



#### Instructor-Todd Hill and Scott Siler

Group Work	Individual Work
80%	20%

#### Projects/Assignments

One Semester long group project with a client. It consists of four short deliverables throughout the mod, culminating in a presentation at the end of the mod to your client.

#### Tests/Quizzes

1 Final Exam based on class lecture material

### **Course Description**

No matter what career you go into, it will be helpful for you to have project management skills. Projects are the way a lot of business gets done, yet many people and organizations find themselves lacking project management skills. As such, it probably comes as no surprise that more projects fail than succeed. The purpose of this course is to provide you some frameworks, concepts, and tools that you can use to manage projects.

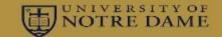
### **Applicability**

The course is a little different from most analytical courses in that you will not be crunching numbers or coding in this class. Most of the "analytics" comes from the frameworks you are taught in-class that you then apply to the project with your client. However, the skills you learn in this class can be applied to any managerial role in any industry.

Both Todd and Scott are exceptional project managers, running very elaborate and difficult projects for the entire university through OIT.



# ITAO 70230 – Spreadsheet Decision Modeling



#### Instructor- David Hartvigsen

Group Assignments	Individual Assignments
5	0
Quizzes	Tests

2

#### Course Description

Course Designed for Identification of problems that can be solved via optimization and simulation.

All Assignments can be completed in groups of up to three people or individually, but you are encouraged to do them as a group.

Class time is spent going through examples of problems that are very similar to the homework, and the homework is generally very straightforward.

Exams are on paper not excel

#### **Applicability**

For Manufacturing and Process oriented career fields



# ITAO 70750 – Strategic Business Technology



#### Instructor - Nicholas Berente

Group Work	Individual Work
40% 50 min. presentation + 16 pg. paper	60% Four 2-pg. case analysis papers
Projects/Assignments	Tests/Quizzes
100%	0

### Course Description

This course exposes the students to how technology is being used to change the competitive landscape within industries and among corporations.

#### **Course Format**

Every Monday, turn in a case writeup (choose 4 out of 6) and discuss a case about a company that is trying to decide whether to implement a new, innovative technology.

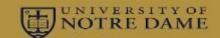
Every Wednesday, two teams present for 50 min. each on various tech topics, including machine learning, AI, digital twinning, blockchain, IoT, DEVOps/Agile, and other tech topics. The presentation must include an overview of the topic, a hands-on demo of the tech, two business strategies for using this tech, and a fun activity. Though this sounds like a lot, the prof. gives a lot of useful guidelines and ideas.

### **Applicability**

This course is designed to help students (who may have no previous tech background) converse with tech teams and make strategic decisions.



# ACCT 70200 – Strategic Cost Management



Instructor - Ramanan, Ramachandran

Group Work	Individual Work
25%	75%

Projects/Assignments	Tests/Quizzes
50%	50%

#### **Course Description**

The purpose of this course is the use of different cost information in the context of various decisions and understanding the incentives of the parties involved in the decision. It teaches how to both develop and use cost information to create, communicate, implement, and control strategies.

The course was taught by Ram Ramanan during spring semester 2018 and is now being taught Asis Martinez during fall 2018.

#### **Applicability**

If you have never used costs to understand decision-making outside of the typical accounting of Revenues - Costs = Profit, this course is a good way to learn that each situation will have multiple dimensions and issues both internally as well as externally for the business.



# ITAO 70950 – Supply Chain Analytics



### Instructor- Xuying Zhao

**Group Work** 

0	4 HW Assignments
Projects/Assignments	Tests/Quizzes
4 HW Assignments	1 Midterm, 1 Final

Individual Work

### **Course Description**

- Analyze the key problems in supply chain management
- Recognize core tools within supply chain management and what those tools can (and cannot) change
- Apply tools learned in the course to improve some aspect of the supply chain
- Compare and contrast appropriate alternatives to improve a supply chain

### **Applicability**

Good for anyone going into supply chain or operations roles

