



International Field Study Course: Technology,
Innovation, and Entrepreneurship in Israel
January 5th – January 15th 2012

# **Contents**

Introduction	2
Student Participants	3
Student Journals	4
Day 1 – Friday, January 6 <sup>th</sup>	4
Orientation and Safety Briefing	4
Day 2 – Saturday, January 7 <sup>th</sup>	4
Jerusalem Tour	4
Day 3 – Sunday, January 8 <sup>th</sup>	5
Tel Aviv Stock Exchange	5
Better Place	5
Liliyot	5
Day 4 – Monday, January 9 <sup>th</sup>	6
Itamar Medical	6
Iscar	7
Day 5 – Tuesday, January 10 <sup>th</sup>	7
Chiasma Panel and Facility Tour	7
Omrix Biopharmaceuticals	8
Day 6 – Wednesday, January 11 <sup>th</sup>	9
Ashkelon Water Desalinization Plant	9
Ormat Industries	9
Objet	10
MIT Enterprise Forum of Israel	10
Day 7 – Thursday, January 12 <sup>th</sup>	11
Discussion with Noam Band and Amir Milo	11
Tel Aviv University	12
Day 8 – Friday, January 13 <sup>th</sup>	12
Farewell Brunch	12

## Introduction

The focus of this first Lubin field study to visit Israel was technology innovation and entrepreneurship. On the agenda for the trip were visits to companies operation in the medical device, biopharmaceutical, biotechnology, alternative energy, and 3D printing industries, as well as attending several panel discussions on entrepreneurship. Ten graduate and undergraduate students in a variety of programs at Pace's Lubin School of Business participated in the field study.

Students enrolled in the course were required to attend a series of lectures on technology and entrepreneurship in Israel leading up to their trip. Participating in this lecture series were Yaron Galali, founder and CEO of Outbrain, Fredric Price, Chairman and CEO of Chiasma, Ran Harnevo, Co-founder and CEO of 5min Media, Nili Sharev, and Israel Economic Minister to North America.









In addition to regular class assignments and attendance at these lectures, students were also required to keep field journals detailing their thoughts and experiences throughout the trip. Quotes from these student journals are presented here as a narrative of the events of the trip.

# **Student Participants**

# Name (Major)

David Aschenbroich (Finance)
Anthony Davolos (Entrepreneurship)
Justine Dungo (Marketing)
Lotus Feliz (Human Resource Management)
Nikhil Kalyankar (Entrepreneurship)
Henry Kusjanovic (Management)
Eugene Lee (Financial Management)
Daniel Samandarov (Finance)
Eli Shulman (Management)
Julie Zhu (Strategic Management)

Led by Bruce Bachenheimer, Clinical Professor of Management Accompanied by Eric Kessler, Professor of Management



# **Student Journals**

# Day 1 – Friday, January 6<sup>th</sup>

## Orientation and Safety Briefing

As part of a field study for Pace University, myself along with 9 other classmates are staying and studying in Israel for 10 days. We departed from Newark airport on the 5th and just arrived in Tel Aviv this morning. The flight, although long, went pretty smoothly, and the crisp fall weather of Israel was much more welcoming than the 14 degree frost bite back in New York. Feeling a bit jet-lagged, we did not get a chance to discover too much just yet. We started off with a nice orientation and safety briefing from a previous Pace Alumni, Eric Klein, at our hotel, Dizengoff Suites, and continued the conversation at a cozy Israeli seafood restaurant on Dizengoff Blvd called Goocha. The service was extremely pleasant, and the pasta I ordered had just the right amount of spice. Although Tel Aviv is notorious for its nightlife, tonight will be an early night in as our bus departs for Jerusalem at 8am tomorrow. I am looking forward to our tour of the Old City!

# Day 2 – Saturday, January 7<sup>th</sup>

#### Jerusalem Tour

Today was our First Official group activity and we went to Jerusalem. In all the places that I have traveled to I never thought that I would make it there. I do not know why but it always seemed like a place I would never actually get to see. The bus ride from the Dizengoff Suites to Jerusalem was fun, it was a time for the students to get to know each other a little better. I was so excited to get to the Old City that last night I made sure my Camera and phone were fully charged so that I would not miss a thing.

Our Guide met us at a hotel right outside of Jerusalem. We were then whisked away for a history and culture lesson unlike any before. She showed us all the different states and where all the different religious



quarters were in the old city. She showed us from afar first in order to give us a background of exactly what we were going to be seeing once we got into the old city. After quite a long lecture it was time to go see the Dead Sea Scrolls. It was amazing to believe that these are the oldest biblical scrolls left on this earth.

After the Museum in which the Dead Sea Scrolls were located it was time to move on into the Old City. The Old City was majestic and amazing. It felt like we had stepped into movie Aladdin one of the Students said during the tour. The part that was truly amazing for me was the energy

present in this city. It was almost a little bit eerie because it felt so powerful. I am not sure if it was the religious spirits all circled in this one area or the power of the believers all here on a religious pilgrimage. All I know is that it was extremely powerful! And unlike anything I have ever felt!!

The City was amazing and our Tour Guide really showed us everything we wanted to see and then some. In addition she took us to an amazing restaurant for lunch with truly authentic food. I think we were all little skeptical when we sat down but after we finished eating we were all believers that this food was really something special.

# Day 3 – Sunday, January 8<sup>th</sup>

## Tel Aviv Stock Exchange

This morning our first stop was the Tel Aviv Stock exchange. Much like the NYSE, the Tel Aviv exchange is now computerized so we were able to listen to a presentation on what was previously the floor of the exchange. It was given by Kobi Avramov who is "Head of Research" at the exchange and he gave an interesting talk about the Israeli stock market, the economy, and the exchange itself. There were many graphs and charts on the Israeli economy and I found it amazing how fast they have been growing over the past decade. Their economy is heavily reliant on international business and it is remarkable how well they have fared over such a tumultuous time. It seems as though the companies and businesspeople have hit their stride maturing into a strong developed economy with great potential, I am excited to see what they can accomplish in the future.



#### **Better Place**

From there we went to a revolutionary Israeli car company called Better Place. The creator of this con-



cept is an Israeli named Shai Agassi who thought up a system for electric rechargeable cars that run only on a battery with plugs to recharge the cars wherever the cars stays overnight, whether it be at a house or corporate office. There will also be stations around the country to exchange the battery in minutes for trips over approximately 100 miles because that is the maximum life of the lithium ion batteries. We were shown a video in their in-office theater about the potential of the system

which was great, then we were able to drive the cars which were actually quite powerful. I hope the company does well to help lead us down the path towards global oil independence, but they certainly have a lot of work ahead of them.

#### Liliyot

The final trip of the day was to another interesting company. This was a restaurant called Liliyot started by a hitech entrepreneur, turned VC, turned social entrepreneur. The restaurant employs young people who have dropped



out of school and need to gain a skill to make a living. Liliyot trains these people in how to run a restaurant with the hope of giving them the skill to go out and get other jobs in the industry. Social entrepreneurship is something that is also growing in Israel and throughout the world, it is great to know that we have people who put their time and effort into projects that will help others.

# Day 4 – Monday, January 9<sup>th</sup>

#### Itamar Medical

At Itamar Medical we were greeted and given a presentation by Giora Yaron, a co-founder. From his talk, it was evident that the culture of Israel has really helped the company develop into what it is. Although they are dealing with medical devices, the mechanisms, the operations, the engineering all still tie back to having the backbone and foundation from defense technology. Since every Israeli is required to join the



army after high school, they develop an understanding of things that others around the world do not; this strongly contributes to overall culture of the country. Due the constant battles they are fighting, they must invest heaviin defense 1y technology, but as

Giora had mentioned, this investment goes beyond just the development of arms, it is really an investment into the knowledge of its people. Many of the high tech companies now use their knowledge gained from working with engineering in the military and apply it to other business sectors, in this example it is the medical industry. Being a part of the defense industry is a large part of the evolutional phases of the Israeli High Tech sector.

Giora Yaron also explained the importance and large recognition of the government. Without government support, even though the knowledge is there, many companies would never have been started. The government however, realizes the potential that has been created and have created various programs, many which have come from the Office of the Chief Scientist, to help put these skills their citizens learned from the army to use. From his own personal experience, Giora spoke to the fact that not only can technical skills come from the army, but management as well.

Itamar medical has developed technology that measures blood and can signal sleep apnea, a disease that can lead to coronary disease. The basic concept of their device is that they can detect this sleep apnea from the finger. A small device is fastened to the finger and a small sensor monitors activity. This compact machine allows the consumer to take the test conveniently in their very own home. The technical

terminology for this product is "Peripheral Arterial Tone (PAT)". It measures the volume changes in your finger's pulse.

Although the technology at Itamar is extremely high tech and innovative, the greatest thing I learned from Giora's talk is that "it requires 20 years of sweat to gain success over night". If it was not for the experience through the army, the years of learning, looking for investors, working with the government, developing management skills in other areas, the company would not be running in the same successful way that it is today.

#### Iscar

The second company that we visited was Iscar where their slogan is "Innovation never stops!" and according to this innovation is driven by their extensive R&D. Their mission is to keep the wheels of their industry turning by always having something new. At Iscar, they produce cutting tools for metalworking. It was founded by Stef Wertheimer and has now expanded to a multinational company present in over 50 countries. Today, 80% of the company is overseen and managed by Berkshire Hathaway. At this visit we were met by Moshe Goldberg. As we learned about Iscar and the values of the company, it became evident that the employees are one of their strongest assets. They believe that the key to success comes from academia and so they invest heavily in both their R&D and the people that work for them. With the success of their company, they believe that at this stage, they are competing against themselves. They create a benchmark against themselves and compete from there.



Yes, they have nanotechnology and robots that maximize their operations, but after visiting the company I have witnessed that their greatest asset is their culture and their people. They have developed a culture in which the employees are encouraged to thrive, and this is what keeps pushing the company forward.

# Day 5 - Tuesday, January 10<sup>th</sup>

Chiasma Panel and Facility Tour

Panel Participants:

- o Dalia Megiddo MD, Managing Partner, Expedio Ventures
- o Galit Zuckerman, CEO, Medasense
- o Steven Eitan, CEO, Exalenz
- o Dana Gelbaum, VP Commercial Planning, Chiasma
- o Daniel David, Commwell Mediacal

Today our first stop was Chiasma which is a biotech company outside Jerusalem. We went to a panel on the life science industry in Israel and there were a number of impressive speakers. Starting off was a

managing partner of a VC named Dalia Megiddo who is also an MD. She gave an interesting presentation on Israel and the life science industry. It is very impressive that from their 3.5 million person labor force they are leading the world in patents and Nobel Prizes for life sciences since 2000. Then was an entrepreneur named Galit Zuckerman who started a company called Medasense. They are designing a product that can check for imbalances in your blood by putting a sensor on your finger much like Itamar the day earlier. This product is designed to measure the amount of pain



felt by a patient. She did not explain what they are measuring but it sure seemed like a product of the future, much like all of the products presented on this panel.

Then Steven Eitan, the CEO of a company called Exalenz presented their product which can detect liver disease by simply measuring the different molecules in your breath with high tech imaging technologies. This provides for a very non-invasive way of diagnosing these problems. I found this to be extremely impressive once again and we had a great discussion. A presenter Dana Gelbaum from Chiasma gave us



a presentation on their company and products and how far they are along. They produce a pill release system that does not let out the medicine until the pill is in your small intestines to treat certain illnesses.

Shmulik Tuvia then presented on what it is like to be a scientist/inventor/entrepreneur and how much it takes to complete the entire process. This was another great presentation and he made it clear how disgruntled he was about the entire industry and how difficult it is to succeed as an entrepreneur.

We then went on to tour the Chiasma facilities where they test out all their drugs on rats. I had worked at home doing stem-cell research on rats before going to law school but that was academic and it was interesting to see the high tech industry side of research.

#### **Omrix Biopharmaceuticals**

From there we went on to a company called Omrix Biopharmaceuticals where we were given a presentation on their business. What they do is make products that stop bleeding by filtering clotting factors out of blood to put them into their products. After the presentation and factory tour I know that this is much more difficult than it sounds. There is apparently a huge



market for their products and they are having a difficult time keeping up with the demand. This company was having issues with working on Shabbat, also known as Saturday which is the Jewish day of rest.

# Day 6 – Wednesday, January 11<sup>th</sup>

#### Ashkelon Water Desalinization Plant

Our first stop this day was the Ashkelon Desalination Plant. The most unbelievable thing about it is the location. The plant is a very strategic resource for the Israelis and it is only a few miles from the Gaza strip. In fact the last time they were attacked from this area bombs landed within a few miles from the plant. The students kept asking our guide Oshik what they do for security measures and he told us that there was nothing really that they could do. This was the best place for them to put the plant and they have to go about their lives without letting fear stop them from doing what they have to do. He basically said if they were to blow up the plant the Israelis would simply have to build it up again.

The construction of the plant is contracted out to private companies, one is IDE Technologies an Israeli company, and the other is Veolia, which I believe is French. Oshik gave us an introduction talk and explained how the plant works, in addition to answering all of our questions. I now even know that the steps to desalinate water are 1) intake 2) pretreatment 3) high pressure booster 4) sea water reverse osmosis 5) post treatment!! The guide was pretty funny and did a great job explaining the plant as we walked throughout the facilities.



Israel will have five plants and almost 80% of their water will eventually come from desalination. This will be a great resource for them as water continues to runs short in our overpopulated world.

#### **Ormat Industries**

From there we went to Ormat Industries which was a company that builds alternative energy plants all around the world. They make geothermal plants, solar, and "resource recovery" plants, which Chairman



Lucien Bronicki explained to be for biomass and industrial waste recovery to make electricity. He went through the company PowerPoint in a nice conference room talking about the business, their plants, their employees, the education program they have to train potential employees, and he answered questions. He even gave some good book recommendations at the end.

## **Objet**

Our last stop of the day, Objet, was probably the most interesting, and definitely the most entertaining. I always enjoy when we get to go into the factories where they make the products. Objet is a 3D printing company, and maybe the most advanced in the world. They build printers that can print 3D models and replicas in a number of different materials. We were given a great presentation and they let us pass around the prototypes they printed and explained how the printers work, he was also enthusiastic about answering Then we went all our questions.



downstairs to see the printers while they were printing, and also where they build them. It was really unbelievable to see them printing 16 micrometer layers halfway through a print.

# MIT Enterprise Forum of Israel Speakers

- Professor Ayla Matalon, executive director of MIT forum
- Dr. Ed Mlavsky, president emeritus and chairman of MIT forum; founding partner of Gemini Israel Funds; manager of BIRD for 13 years
- Zvi Yemini, co-founder and chairman of Hydro-Industries Ltd., an innovative consumer products company in the Hose Reel segment of the Outdoor Gardening market.
- Ofer Shoshan, co-founder and CEO of One Hour Translation
- Professor Bruce Bachenheimer, board member and past chapter chair, MIT Enterprise Forum of New York City; clinical professor of management, Pace University

A few of us accompanied Professors Bachenheimer and Kessler to the MIT Enterprise Forum event held in Tel Aviv University and chaired by Professor Ayla Matalon, our contact in Israel. Ayla graciously coordinated the timing of the event to accommodate our schedule and allow Professor Bachenheimer to speak at the event.

Before the program began we had an opportunity to mingle with Israeli entrepreneurs. I had the privilege of meeting Gavriel, who works at BioFeed, a compa-



ny which has come up with a way to remove pests from plants without using traditional pesticides. In today's ecologically-conscious environment people are wary of using any type of spray, and BioFeed has innovated a device which the insects feed off of and then are unable to harm the crop.

The lectures were in typical Israeli fashion: straightforward and blunt. The speakers appeared quite comfortable at the podium as evidenced by the constant maneuvering of the microphones and Ofer's jab at the placard which was supposed to display his name, but instead showed the name of the previous speaker.

# Day 7 – Thursday, January 12<sup>th</sup>

## Discussion with Noam Band and Amir Milo

In contrast to many of the places that we visited throughout the week, Carmel Ventures is situated in a multi-story office complex, the kind more usually associated with Manhattan than Israel. The sleek elevator whisked us up to the eleventh floor and as we stepped out into the plush foyer one of my classmates



commented, "You can smell the money in here." The view out the window of the conference room was a magnificent overlook of the city with the Mediterranean in the background. From our vantage point we saw many construction projects underway. These and the many others we had seen throughout the country prompted the observation that, "Israel is under construction."

Noam Band described his previous company, Dotomi. Dotomi specializes

in personal banners based on individual tastes and interests. For example, a consumer may see a message, "Steve, you have ten thousand miles, and a trip to the Bahamas will cost you \$300." The ad is generated on the individual's own computer and is not stored on any internet website. The class asked numerous questions about privacy concerns and Noam explained how the whole thing is based on ID numbers and the ads are only generated on each individual's computer, so the company has been given a certificate that they are not violating privacy rights.

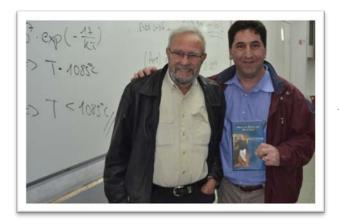
Dotomi's clients are corporate giants such as VISA, American Express, and several prominent airlines. The professor asked how a small Israeli software company managed to catch the attention of such big corporate giants. Noam replied that he used a good deal of Israeli chutzpah and did not give up. He then advised us to not feel shy or embarrassed by people we don't know and to feel comfortable sending an email even to top executives. "If relevant, you will get in."

Noam is now the CEO at Timest which assigns a Rollout Readiness Risk Rating to companies implementing new software. Corporate IT departments are proficient at developing and testing software, but are challenged by the implementation stage, because people don't like change. Timest performs various checks to test the readiness of the software deployment and advises the CEO on how to best position the company to buffer against people's stubbornness to change.

Amir Milo spoke about his company, Equivio: a software company focused on text analytics for ediscovery. Essentially, they handle the multitudes of data that besiege our generation. One way is by grouping similar documents to get rid of near duplicates. Another way is by reconstructing email threads. Interestingly, Amir suggested reading "Crossing the Chasm", which was discussed by Professor Matalon at the Tel Aviv University class we attended later that day.

#### Tel Aviv University

We attended a class on entrepreneurial studies together with 15-20 Tel Aviv University MBA students.



We got to meet some of the Israeli students, most of whom have been in the army! I sat next to David Glauber who works at CheckPoint, the famed security company started by ex-army buddies from Unit 8200, which offers firewall services to a majority of Fortune 100 companies.

Professor Matalon opened the class by talking about Jeffrey Moore's book, "Crossing the Chasm", which actually had been referred to us that morning by Amir Milo at Carmel Ventures. Dr. Ed Mlavsky then spoke about the various programs initiated by the government to spark entrepreneur-

ship. Professor Bachenheimer then closed with a look at current entrepreneurial needs. A lively discussion ensued over a much-needed update to the current pill bottle.

It was interesting to note that the lectures and discussions were all conducted in English. My new friend, David, explained to me that since Israel has such a small population and does not trade with its immediate neighbors, young entrepreneurs are taught in English because, "The market is in America".

It was a peaceful way to end the academic portion of the trip.

# Day 8 – Friday, January 13<sup>th</sup>

#### Farewell Brunch

I cannot believe that I am writing my final Academic Entry for this trip. While today is not a company visit it is a close on what has been an amazing field study. We as a class have learned so much and been so busy. I have enjoyed every minute of it because the companies have been all very interesting. I have to



say when you go on one of these trips you do not expect to enjoy every visit and I can honestly say I did.

The brunch today was nice and in a beautiful area. It is Friday and that is the day by the port that they have the open air markets. When we walked into the restaurant we were seated at a long table. Pace Alumni slowly trickled in and we all took our seats. I was lucky enough to be sitting near Ayla for the beginning of brunch

who is responsible for helping Prof. Bachenheimer with some of the great visits. She is a very interesting person. It was nice to have a little time to chat with her on a more casual basis.

All the Alumni we met were interesting but it was especially neat to meet a General in the Israeli Army. Especially since most Israeli's do not make a career out of the army. It was interesting to meet someone who has made a career out of it and achieved such a high rank.

#### The Alumni Present were:

- Ilan Aisic, Co-Founder & Development Manager at PTech HM
- Eran Frenkel, Founder & CEO at Jexp Media Ltd.
- Yoram Levinson, Founder & CEO, Majestic Gemstone Ltd.
- General Avi Mizrahi, Major General, Israel Defense Forces

I would like to take this forum to personally thank them all for coming and making our farewell brunch a success.

# **Pace University**

## **Lubin School of Business**

# Department of Management and Management Science

## Course Syllabus for the International Field Study Course to Israel

Subject: Technology Innovation and Entrepreneurship in Israel

Level: Graduate (MBA/MS degree candidates)

Undergraduate (BBA degree candidates in the Lubin Business

**Honors Program)** 

Course #s: MGT 630 (73454) – Seminar in Strategic Management Issues

Prerequisite: permission of instructor

INB 670 (73455) – International Entrepreneurship Field Study

Prerequisite: permission of instructor

MGT 347 (73446) - International Management Field Study:

Israel

Prerequisite: permission of instructor

Destination: State of Israel (Tel Aviv, Jerusalem, Haifa, Ashkelon)

Semester: Fall 2011

Travel Period: January 2012 Intersession – January 5<sup>th</sup> to 15<sup>th</sup> 2012

Travel Cost: \$3,300 (approximate and subject to change) - scholarships

available, plus 3 credits tuition. Payment Due by October 3,

2011.

Class Meetings: Four (on Tuesday evening, 6:00 pm – 8:45 pm): 9/13/11,

10/11/11, 11/15/11, & 12/13/11

Class Location: Midtown Center – 551 Fifth Avenue, New York, NY 10176

Instructors: Bruce Bachenheimer, Clinical Professor of Management

Assisted by: Eric H. Kessler, Ph.D., Professor of Management

Academic Associate in Israel: Ayla Matalon, Executive

**Director, MIT Enterprise Forum of Israel** 

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### **COURSE OVERVIEW**

Israel has the largest number of NASDAQ-listed companies outside the United States, more than all of Europe or all of Asia (including China, India and Japan) combined. Per capita, Israel has the largest government and private sector investments in R&D and number of engineers in the world. The nation has produced firms such as Teva Pharmaceutical Industries Ltd. (valued at \$37 billion), ISCAR (the first enterprise that Warren Buffett ever bought overseas), and Check Point Software (used by 100% of Global 100 companies). Technology giants such as IBM, Microsoft, Intel, HP, Motorola, Cisco, GE, Google, Alcatel, Samsung, LG, Phillips, Siemens, and Nokia have R&D and regional business centers in Israel. All of this in a country of 7 million

people, only 60 years old, with no virtually natural resources. This course will examine the critical factors that have lead to this phenomenal success, as well as the current state of technology entrepreneurship in Israel.

Students will have a unique opportunity to meet with political, business, academic, and scientific leaders. They will visit a number of governmental offices, large technology firms, entrepreneurial ventures, and facilities for academic and scientific research, directly experiencing many of the concepts they will have studied. Students will also be challenged to examine and assess what they observe in the broader context of globalization.

In addition to attending a series of four pre-departure lectures, a post-trip debriefing, and actively participating in all field activities; students will be expected to provide an overview and analysis of the required readings, maintain a journal of field study activities, and submit a comprehensive business plan, a publishable case study, or a detailed research paper. The business plan may be created for an entirely new technology venture that would be suitable in Israel, or prepared for an existing venture encountered during the trip. The case study would examine an innovative technology developed in Israel or a compelling entrepreneurial venture founded in Israel. The topic and structure of the research paper would be agreed upon prior to departure.

## **COURSE OBJECTIVES**

Students will be able to describe the key economic and social drivers of technology development and entrepreneurial activity in Israel. Students will also develop an understanding of how international business and globalization has impacting this country. Students will demonstrate their understanding of a this nation's economy, the role of innovation and entrepreneurship, and the impact of globalization, by preparing either a detailed research paper examining a critical aspect of these issues, a comprehensive business plan for a new or existing Israeli venture, or a publishable case study that examines an innovative technology or compelling venture in Israel.

## **COURSE REQUIREMENTS**

FOR UNDERGRADUATE (MGT 347) AND GRADUATE (MGT 630/INB670) STUDENTS:

- Full attendance and active participation in the four pre-departure lectures
- A written overview and analysis of the required reading prior to departure
- Full participation in all overseas field study activities
- Maintain a comprehensive journal during the overseas field study portion of the course

#### FOR UNDERGRADUATE STUDENTS (MGT 347)

- Submission of a term paper examining one of the organizations that class is scheduled to visit (10 page minimum with no less than 3 referenced sources).

#### FOR GRADUATE STUDENTS (MGT 630/INB670)

 Submission of a complete business plan, publishable case study, or a detailed research paper (the case study and business plan may be prepared individually of by teams of two or three students with prior permission of the instructor. The research paper must be completed individually).

#### **REQUIRED LECTURE SESSIONS**

- Pre-trip meeting dates: 9/13/11, 10/11/11, 11/15/11, & 12/13/11

Time: 6:00 pm to 8:45 pmLocation: Midtown Center

#### **REQUIRED READING**

- 1. Dan Senor and Saul Singer, <u>Start-Up Nation: the Story of Israel's Economic Miracle</u>. Hachette Book Group, New York, 2009 (ISBN 978-0-446-54146-6).
- 2. Kawasaki, Guy, <u>The Art of the Start: the time-tested, battle-hardened guide for anyone starting anything</u>. Penguin Books, New York, 2004 (ISBN 978-1-591-84056-5).

A number of briefings, reports, articles, case studies, and/or business plans will also be included in the required reading. This material will be posted in the Course Documents section of Blackboard or on the library's Electronic Reserves.

## **Additional Recommended Reading**

Israel's Economic Overview 2007, Israeli Government Publication, 2008

Doing Business in Israel: A Country Commercial Guide for US Companies, US Dept. of Commerce, 2004

Developing a Source of Competitive Advantage: Israel's Version, by Elad Mardix, Darden Business Publishing Case UVA-BP-0483, 2005

Rafael Development Corporation – Converting Military Technology to Civilian Technology in Israel, by Henry Chesbrough, Harvard Business Case, 2002

Teva Pharmaceutical Industries, Ltd, by Khanna, Palepu & Madras, Harvard Business Case, 2006

Venture Capital in Israel: Emergence and Globalization, by Ezra Zuckerman, Stanford University, 2003

Israel in the World: Changing Lives Through Innovation, by H. Davis and D. Davis, W & N Press, London England, 2005.

The Take-off of Israeli High-Tech Entrepreneurship During the 1990's: A Strategic Management Research Perspective, by Avi Fiegenbaum, Elsevier Ltd., Amsterdam, 2007 (ISBN 978-0-080-45099-5).

Milk and Honey and High Tech, by Ed Mlavsky, Ph.D., Weill Publishers, 2009 (ISBN 978-9657405017)

# Recommended Software for Students Preparing a Business Plan Business Plan Pro Ordering Instructions

### For the commercial version:

- 1. Go to: http://www.paloalto.com/
- 2. Standard Edition (\$99.95) or Premier Edition (\$199.95)

#### For the academic version:

- 1. Go to: <a href="http://www.paloalto.com/academic/students/">http://www.paloalto.com/academic/students/</a>
- 2. \$49.95 (Standard Edition) or \$89.95 (Premier Edition)

Basically, the academic version only includes 68 sample business plans instead of 500+ and displays the watermark "Academic Version" on every printed page.

## **SPECIAL REQUIREMENTS**

In addition to normal course registration, additional requirements include:

- Fees: total travel payment is due by 10/03/11
- Forms: completed WAIVER AND RELEASE form and MEDICAL INFORMATION form
- Passport: all visitors to Israel must hold a passport that is valid for at least six months from the date they enter the country.
- Visa: a tourist Visa is not required for US Passport holders or those from approximately 78 other countries. For Visa requirements, please see <a href="http://www.israelemb.org/consular-Visa.html">http://www.israelemb.org/consular-Visa.html</a>)
- Vaccinations: in general, no special immunizations or medications are necessary for travel to Israel.

## **KEY LECTURE TOPICS**

- 1. Introduction to Israel:
  - History and Culture Overview
  - Demographics and Social Development
  - Key Economic Sectors, Resources, and Infrastructure
  - Political Structure, Law, Taxation, and Finance
- 2. The Nature and Importance of Entrepreneurship
  - An Overview of Entrepreneurship
  - Opportunity Identification and Analysis
  - Entrepreneurial Strategy (Management, Marketing, and Finance)
  - The Business Plan
- 3. Technology and Innovation
  - The Role of Universities
  - The Role of Technology Incubators
  - The Role of the Israeli Defense Forces
  - The Role of Foreign Research & Development Facilities
- 4. International Business and Globalization
  - Foundations of International Trade and Trade Theory
  - Foreign Direct Investment and the Global Monetary System
  - The Impact of Globalization on Developing Nations
  - Business Ethics and Corporate Social Responsibility in the Global Environment

#### **GRADING STRUCTURE**

Attendance, participation, and contribution 15% Written overview and analysis of the required reading 20% Field study activities journal 20%\* Business plan, case study, or research paper 45% TOTAL = 100%

#### Attendance, participation, and contribution (15%)

This is your unique contribution to the course - the net value you add to the classroom and field study experience. Attending class is not a form of contribution. Answering questions and participating in discussions is what is expected of you as a student, not a unique value-adding activity. Speaking in class, simply to make your presence known, or in a manner that is overly antagonistic, hostile, or intimidating to other students may be detrimental to your grade.

<sup>\*</sup> This assignment will be assessed on a Pass/Fail basis.

Examples of quality class contribution include: asking insightful questions that probe deeper into the topic being discussed or challenge conventional thinking; citing current news events or actual business examples that relate to the material being covered; and relating your own professional experience to further a discussion, answer a question, or help explain a difficult issue.

Students are expected to participate in the class discussion of all assigned readings. To perform well at this activity, you must be present and prepared. In each class, one or more students may be asked to present an oral summary of a topic before being presented by the instructor, or to summarize a class discussion after it has been concluded. Students are expected to have finished all assigned readings before each session, and to be able to offer informed and thoughtful comments in class discussion. You should also strive to be a critical listener to the comments of your fellow students. If you disagree with what someone has said, speak up and explain how and why your viewpoint differs.

Attendance is an integral part of the learning experience in this international field study course. Simply reading the material and preparing assignments cannot make up for much of the material covered in class through lecture, and can certainly not substitute for any field activities. Consequently, there will be grade penalties for unwarranted absences. Missing a significant portion of the class sessions or field activities will be considered grounds for failure.

## Written overview and analysis of the required reading (20%)

Students will prepare written reports for the two required books: <u>Start-Up Nation</u> and <u>The Art of the Start</u>. This assignment should not be viewed as a standard 'book report'. Rather, an assessment of the influence each book had on your perception of technology innovation and entrepreneurship and an indication of how it might impact your decisions as an entrepreneur.

Each report should be three or four pages in length and must be typed (12 point font, double spaced, with one-inch margins, and printed only on one side of 8 1/2 x 11 inch paper). All reports must be electronically submitted to the Assignments section on Blackboard and a printed copy should be handed in by the fourth class session. Each of the reports will be worth 10% and they are due by December 13, 2011.

#### Field Studies Activity Journal (20%)\*

Students will be required to maintain a detailed journal of all site visits, academic activities, and organized social functions (i.e. the Welcome Reception, not regular meals or independent activities) during the entire time we are in Israel. The journal should include a comprehensive record of all field study activities (i.e. activity name, date, time, location, speakers, key topics, etc.), a critique or evaluation of each activity, a brief summary of any impact the activity may have had on your perception of entrepreneurship, and any general thoughts you might have on broader political, social, or cultural issues. The journal should conclude with a general assessment of the field study portion of the trip: its overall value, most significant highlights, and key educational aspects.

While the journal may be submitted in a standard report format, i.e. ten typed pages in length (12 point font, double spaced, with one-inch margins, and printed on one side of 8 ½" x 11" paper); students are strongly encouraged to experiment with more creative means of recording and presenting their experiences, such as a blog, website, or digital magazine – including photos, video clips, hyperlinks, animated graphics, interactive displays, etc.

This assignment must be submitted by January 22, 2012 – one week after returning to the US. To encourage students to be as creative as possible, and to prepare an honest and forthright assessment, this assignment will be assessed on a Pass/Fail basis.

### **UNDERGRADUATE STUDENTS (MGT 347)**

As the major course project, undergraduate students will prepare and present a term paper that examines one of the organizations that the class is scheduled to visit. This research paper should provide a comprehensive overview and analysis of the organization. It must include a brief history, an examination of the industry/government sector in which it operates, and an analysis of its core competencies and competitive advantage. This paper is to be completed individually and submitted prior to departure. Presentations will be made prior to the class visiting the subject organization. To spread coverage of the organizations to be visited, a signup sheet will be made available at the start of the semester. The term paper should be no less than 10 pages in length and include at least 3 referenced sources. Presentations should be approximately 5 – 10 minutes in length. Due by December 13, 2011.

# GRADUATE STUDENTS (MGT 630/INB 670) Business Plan, Case Study, or Research Paper (45%)

As the major course project, graduate students will prepare either: 1) a formal business plan (preferably using the software package "Business Plan Pro 11.0 Premier" by Palo Alto Software, Inc.); 2) a case study ready for publication; OR 3) a detailed research paper. The business plan or case study may be prepared individually of by teams of two or three students with prior permission of the instructor. The research paper must be completed individually. This project must be submitted within 10 days after returning from the field study portion of the course.

Option 1 of 3 - Business Plan - The business plan may be created for an entirely new venture that would be suitable in Israel, or prepared for an existing venture encountered during the trip. The finished plan (including tables, exhibits, appendices, etc.) should be approximately twenty-five pages in length and must include a one page Executive Summary. All plans should be carefully proofed prior to submission and completed in as professional a manner as possible. The final plan should reflect the knowledge gained by completing the assignments leading up to it and experiences in the field. Diligent industry research and methodical financial analysis should also be evident in the completed business plan. All business plans must be submitted electronically to the Assignments section on Blackboard, and in hard copy to the instructor, within two weeks of returning to the United States.

It is recommended that the business plan be prepared using the software package Business Plan Pro 11.0 Premier. Students may use other software packages, or simply prepare the plan using MS Word ®. As a guideline, the plan should include the following:

Executive Summary – an overview of the plan, not to exceed 1 page.

Business Description – details of the business and what it does.

Market Analysis – characteristics of the market and description of customers.

Product or Service Analysis – the specifics of your product or service, and the unmet need.

Competition – identify current and potential competitors, analyze likely competitive response.

Marketing Strategy – how sales will be achieved (incl. 4 Ps: Product, Price, Promotion, and Place).

Operations – how the produce the product or service will be produced, include required resources.

Management – who will 'make it all happen'; what are their responsibilities and qualifications.

Finances – what will it cost, who will fund it, how will revenue be generated, when will it be profitable.

Supporting Information – detailed information that clearly illustrates and bolsters your plan.

The business plan may be prepared individually of by teams of two or three students with prior permission of the instructor.

Option 2 of 3 - Case Study — As an alternative to preparing a formal business plan, students may prepare a complete case study on an entrepreneurial venture or compelling technology from Israel. The case study would be written in a similar fashion to cases contained in a graduate-level strategy textbook and must be in a 'publication ready' format. Any students considering this option should arrange to meet with the instructor to discuss the project in detail. Requirements of the Case Study would include: a particular teaching objective and how it fits into this course; a specific management issue and a call for resolution; as well as detailed company data (may be disguised) and relevant industry information. In addition, a separate Teaching Notes document should be prepared.

The finished case study should be approximately 15 pages in length (typed, 12 point font, double spaced, one-inch margins, and printed on one side of 8 1/2 x 11 inch paper). The Teaching Notes should be approximately 5 pages in length. All papers are due within two weeks of returning to the United States and must be submitted to the Assignments section on Blackboard. The instructor will provide more detailed information regarding the preparation of a Case Study to students interested in pursuing this option.

The case study may be prepared individually of by teams of two or three students with prior permission of the instructor.

Option 3 of 3 - Research Paper — As an alternative to preparing a business plan or case study, students may write a detailed research paper. The topic of the research paper must be directly related to technology innovation and entrepreneurship in Israel. Your hypothesis should be clearly stated, manageable and insightful (not a statement of obvious fact). The underlying purpose is to advance your knowledge and answer a specific question (i.e. at the start of the research project you really don't know what the answer is). Your paper must include an abstract of two hundred words or less, some sort of "literature review" to demonstrate a familiarity with the literature pertaining to your topic, and complete citations (use MLA or APA style). The final research paper should be approximately twenty pages in length, not including the bibliography. The research paper assignment must be completed individually and is due within two weeks of returning to the United States.

Any student interested in pursuing this option should discuss their hypothesis and research methodology with the instructor ahead of time.

This assignment is due by January 22, 2012 – one week after returning to the US.

#### **FINAL COURSE GRADE**

Course Grade	Descriptive Equivalent	Quantitative Equivalent	Quality Points
Α	Excellent	94-100	4.0
A-	Excellent	90-93	3.7
B+	Good	87-89	3.3
В	Good	84-86	3.0
B-	Good	80-83	2.7
C+	Passing	77-79	2.3
С	Passing	74-76	2.0
F	Failing	0-73%	0

#### **ACADEMIC INTEGRITY**

All members of the Pace community are expected to behave with honesty and integrity. The Graduate Catalog includes the following advisory for students on Academic Integrity:

Students must accept the responsibility to be honest and to respect ethical standards in meeting their academic assignments and requirements. Integrity in academic life requires that students demonstrate intellectual and academic achievement independent of all assistance except that authorized by the instructor.

The use of an outside source in any academic paper, report or submission for academic credit without the appropriate acknowledgement is plagiarism. It is also academically dishonest to submit anything in electronic form as one's own that is the work, either fully or in part, of someone else. It is unethical to present as one's own work, the ideas, words or representations of another without the proper indication of the source. Therefore, it is the student's responsibility to give credit to any quotation, idea or data borrowed from an outside source. Students who fail to meet the responsibility for academic integrity subject themselves to sanctions ranging from a reduction in grade or failure in the assignment or course in which the offense occurred to suspension, dismissal or expulsion from the University. (L-54)

To encourage academic integrity in students' written submissions, the Lubin School of Business subscribes to "Turnitin.com," which describes itself as follows:

We [Turnitin.com] prevent and detect plagiarism by comparing submitted papers to billions of pages of content located on the Internet and our proprietary databases. The results of our comparisons are compiled, one for each paper submitted, in custom "Originality Reports." These reports are sent to participating educators, who access the results by logging into their Turnitin account(s). (www.turnitin.com)

As a condition of taking this course, all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. No student papers will be submitted to Turnitin.com without a student's written consent and permission. If a student does not provide such written consent and permission, the instructor may:

- 1. Require a short reflection paper on research methodology;
- 2. Require a draft bibliography prior to submission of the final paper;
- 3. Require the cover page and first cited page of each reference source to be photocopied and submitted with the final paper.
- 4. Require other steps as deemed appropriate by the instructor.

Students can get help on how to use resources properly in their research and writing from many sources. This site (<a href="http://www.pace.edu/library/pages/instruct/plaig.html">http://www.pace.edu/library/pages/instruct/plaig.html</a>) provides links to useful information. The Library also offers an online tutorial on doing research for papers called "APOLLO." The tutorial is the first item under Student Resources at the link just presented.

#### ETHICAL BEHAVIOR

- 1. Individual assignments are to be done individually. This means that the research and write-up of the Case Analysis Report, Business Literature Reports, and New Business Opportunity Analysis Plan is to be done by you and you alone.
- 2. Plagiarism of published or unpublished work is unethical. Material taken from other sources should be quoted and cited where appropriate.
- 3. Respect your fellow students by not interrupting the class, this includes:
  - arriving late,
  - taking unscheduled breaks,
  - using a mobile phone or pager,
  - eating or drinking,
  - side conversations (especially when a fellow student is speaking), and
  - leaving early.

All students must adhere to the Lubin School's Code of Academic Integrity throughout the course and the University's RULES FOR EXAMINATION during the Final exam. Violation of these rules, which are in conformity with the STUDENT HONOR CODE, is punishable by expulsion from the University.

#### STUDENTS WITH DISABILITIES

Pace University and the Lubin School of Business believe it is important that students receive appropriate accommodation for any disability. To receive accommodation for any disability, you must contact your campus Counseling Center (Pace Plaza, 212-346-1526; Westchester, 914-773-3710). The Coordinator of Disability Services will:

- Evaluate your medical/learning/psychological documentation
- If further documentation is necessary, refer you for appropriate tests
- Make recommendations for your plan of accommodation
- Prepare letters for you to give to your professors to arrange for the recommended accommodations.

Your professor is not authorized to provide any accommodation prior to your arranging for it through the Counseling Center.

#### **COURSE SCHEDULE**

Session	Date	Topic
1	Sept 13 2011	Introduction and Overview
2	Oct 11 2011	The Nature and Importance of Entrepreneurship Guest Speaker: Yaron Galai, Co-Founder & CEO, Outbrain
3	Nov 15 2011	Technology and Innovation Guest Speaker: Fredric Price, Chairman & CEO, Chiasma
4	Dec 13 2011	International Business and Globalization Guest Speakers: Ran Harnevo, Co-Founder & CEO, 5min Media and Nili Shalev, Economic Minister to North America, Gvt. of Israel
Travel	Jan 5-15 2012	See Planned Travel Itinerary Academic Associate in Israel: Ayla Matalon

#### **GUEST SPEAKER BIOGRAPHIES**

#### Yaron Galai, Co-Founder & CEO, Outbrain

Yaron Galai is the Co-Founder and CEO. Prior to founding Outbrain, Mr. Galai was Co-Founder, SVP of Quigo, Inc. (www.quigo.com), a provider of performance-based marketing solutions for advertisers and premium publishers. He previously served as the CEO of the company for three years. Quigo was acquired by AOL in December 2007. Previously, Mr. Galai was Co-Founder & VP Business Development at Ad4ever, a developer of rich-media advertising technologies for the web which was later acquired by Atlas (a division of aQuantive - www.aquantive.com). Earlier, he was the Founder of NetWorks Web Design - an SEO and web design firm. At NetWorks he oversaw the production and search engine optimization of over 30 websites. Mr. Galai studied industrial design at the Holon Technological Institute, and is a Major (reserve) officer in the Israel Navy.

#### Ran Harnevo, Co-Founder & CEO, 5min Media & SVP Video at AOL

With over a decade of industry experience, Ran co-founded 5min Media in 2007, leading it to be the largest online video syndication platform, which was acquired by AOL in September 2010. In addition to his role as CEO of 5min Media, Ran is the Senior Vice President of AOL Video, where he leads the company's efforts to increase video across its sites and oversees the distribution of content from AOL video partners.

Prior to starting 5min Media, Ran's experience included working as a writer and deputy editor at Tel-Aviv Magazine. Ran has studied Philosophy and Computer Science at Tel Aviv University after serving in the Israeli air force for 7 years.

#### Ayla Matalon, Executive Director, MIT Enterprise Forum of Israel

Ayla Matalon is the Executive Director of the MIT Enterprise Forum of Israel and lectures on high-tech entrepreneurship and business development at the Technion – Israel Institute of Technology, Tel Aviv University, and the Herzliya Interdisciplinary Center. To date she has taught in 6 academic institutions, including 3 MBA programs, and has given approximately 50 courses in entrepreneurship, innovation and business development. Ms. Matalon serves as a consultant to a number of Israeli start-ups and early-stage companies and holds a number of board positions. She graduated cum laude from the Technion – Israel Institute of Technology (B.A. and M.Sc.) and received an MBA (emphasis on Entrepreneurship) from INSEAD.

### Fredric Price, Chairman & CEO, Chiasma

Fredric D. Price is Chairman and CEO of Chiasma and a member of the Board of Directors of Enobia Pharma. Previously, he was Chairman of Omrix Biopharmaceuticals, a member of the Board of Directors of Pharmasset, Executive Chairman of Peptimmune, Chairman & CEO of BioMarin Pharmaceutical and CEO and a member of the Board of Directors of Applied Microbiology. As Chairman and/or CEO, he has raised more than \$500 million in a variety of securities transactions, led a total of 18 M&A and licensing transactions, built FDA approved facilities and had drugs approved in the US as well as in international markets. Mr. Price is a coinventor of 13 issued US patents. He received a BA from Dartmouth College and an MBA from the Wharton School of the University of Pennsylvania.

#### Nili Shalev, Economic Minister to North America, Government of Israel

Nili Shalev has more than 20 years of experience representing the Ministry of Industry and Trade in a wide range of executive positions. Prior to her current appointment, Ms. Shalev served as the Director of the International Projects and Financing Department at the Foreign Trade Administration in the Ministry of Industry Trade and Labor. Ms. Shalev holds an MBA (1996), an MA in Communications (1996) and a BA in International Relations (Cum Laude, 1989-1992), from The Hebrew University in Jerusalem.

## **TRAVEL ITINERARY**

Day	Function/Location – Specific Topic
1 - Thurs Jan 5, 2012	<ul> <li>Depart New York (EWR) Continental flight # C0 90 20:25</li> </ul>
2 - Fri Jan 6, 2012	<ul> <li>Arrive Tel Aviv (TLV) 13:55</li> <li>Transfer to Dizengoff Suites Hotel 15:00 - 16:00</li> <li>Local Orientation by Pace alumni entrepreneur Eric Klein 6:30 - 17:30</li> </ul>
3 - Sat Jan 7, 2012	■ Jerusalem Cultural Tour <u>09:00 - 17:00</u>
4 - Sun Jan 8, 2012	<ul> <li>Tel Aviv Stock Exchange 10:00 -11:15</li> <li>Better Place 13:00 - 14:30</li> <li>Welcome Reception (late lunch) at Liliyot Restaurant 15:00 – 17:00</li> </ul>
5 - Mon Jan 9, 2012	NORTHERN ISRAEL  Visit to Itamar Medical, Caesarea 10:15 - 11:30  Visit to the Baha'i Shrines, Haifa 12:30 - 1:30  Visit to ISCAR, Tefen 13:00 - 17:00
6 - Tues Jan 10, 2012	JERUSALEM  Chiasma - Panel on the life science market in Israel 10:00 - 12:00  Steven Eitan, CEO, Exalenz  Dana Gelbaum, VP Commercial Planning, Chiasma  Dalia Megiddo MD, Managing Partner, Expedio Ventures  Shmulik Tuvia PhD, Head of Research, Chiasma  Galit Zuckerman, CEO, Medasense  Omrix Biopharmaceuticals 13:30 - 15:30
7 - Wed Jan 11, 2012	SOUTHERN ISRAEL  Ashkelon Desalination Plant 10:00 - 11:30  Ormat Industries Ltd. 12:00 - 13:30  Objet, Rehovot 15:00 - 16:30
8 - Thurs Jan 12, 2012	TEL AVIV  Carmel Ventures, Herzliya 10:00 - 11:30  Noam Band, Founder of Dotomi and CEO of Timest  Amir Milo, CEO of Equivio  Tel Aviv University 15:00 - 17:00  Lecture by Dr. Ed Mlavsky about BIRD (Israel-U.S. Binational Industrial Research and Development Foundation)  Class session with local MBA students
9 - Fri Jan 13, 2012	<ul> <li>Farewell reception with Pace alumni, including Ilan Aisic, Eran</li> <li>Frenkel, Eric Klein, Yoram Levinson, &amp; Avi Mizrahi at Bariba</li> <li>Restaurant 11:00 – 13:00</li> </ul>
10 - Sat Jan 14, 2012	<ul> <li>Open Day for Students</li> <li>Bus to airport from Dizengoff Suites Hotel 19:00</li> <li>Depart Tel Aviv (TLV) Continental flight # C0 91 23:10</li> </ul>
11 - Sun Jan 15, 2012	<ul> <li>Arrive New York (EWR) 04:19</li> </ul>