The University of Pennsylvania The Wharton School Management Department

Venture Capital and Entrepreneurial Management

MGMT 804 – Q3 Spring 2015

AUCTION PROSPECTUS: THE COURSE REQUIREMENTS WILL REMAIN UNCHANGED BUT THE INSTRUCTOR MAY MAKE SOME MINOR CONTENT CHANGES

Stephen M. Sammut

Senior Fellow, Health Care Management Lecturer, Wharton Entrepreneurial Programs 422 Vance Hall Phone: (610) 202 - 6597

email: smsammut@wharton.upenn.edu

Course Overview and Design

This elective course focuses on venture capital and the typical venture-backed start-up company based on conventions and practices in the United States. Venture capital and the technology sector that it supports continue to evolve structurally. This evolution traces from the dot-com bubble of 1998-2000; the dramatic economic upheaval in 2008-2009; the explosive growth of companies with an Internet-based business model; the globalization of business in general; the expansive adoption of consumer-based technologies, products, and services; and other influential changes. Our class will cover traditional conventions in the industry that have historically shaped investor and company behaviors as well as the structural changes that we are witnessing now.

Among the many factors that are currently impacting the industry, we will discuss the following: Venture capital funds typically have a ten-year life. The dot-com bubble of 1998-2000 that lifted financial performance and produced positive returns for so many venture firms has become a distant event and fallen off the horizon for return calculations. As a result, venture capital as an asset class is not performing at the traditional norms of fifteen to twenty percent ROI. Many funds today are showing negative returns to their limited partners. As a result, traditional LPs are engaged in a "flight to quality"; reinforcing the dominance of the established top-tier VC firms at the expense of lesser-known firms. It is widely acknowledged that the VC industry is in a state of contraction with the inflow of new funds to VC firms diminishing and as the VC community consolidates. What effect will this have on innovation and growth in the technology sector? The average investment horizon for a venture-backed startup to achieve an "exit" through an IPO has continued to exceed historical norms—over nine years on average in 2010, in contrast with an average horizon of a little over four years in 1999. Venture firms are therefore required to support the capital requirements of their portfolio companies over a longer period as these companies wait for an opportune exit and hence adversely affecting realized returns. Has venture capital as an asset class been permanently impaired? The IPO market has traditionally been a mainspring addressing the liquidity and capital formation requirements of the technology sector. While the last decade has witnessed a marked decline in the number of venture-backed technology IPOs— from an annual average of around 500 IPOs during 1990-1999 to fewer than 100 IPOs during 2000-2010, with a low of only six venture-backed IPOs in 2008. Following the economic meltdown in late 2008, the IPO market in 2008-2009 was the worst experienced in

over 40 years. But, 2012 through 2014 has ushered in a renaissance of IPOs. What is driving that? Is it sustainable?

The angel community is exploding in terms of activity levels, number of individual angels/angel groups, and significance to the industry; in response to the dramatic increase in the number of consumer internet and social media startups; and other companies structured around an online business model. These companies require extremely modest amounts of capital—in some cases less than \$50,000—to demonstrate proof of concept, and their all-in equity capital requirements are significantly less than traditional "brick and mortar" companies. Individual angels, angel organizations, and now "superangels" have rushed into the breach with astounding success. However, is there a dark lining to this phenomenon? The traditional venture capital community is in a state of contraction. As these angel-funded companies grow and begin looking for their first round of institutional capital, will the traditional venture capital community be there to take these companies to the next level of growth? If they have limited investment dollars to spend, as was the case in 2008, we should expect that current portfolio companies will take priority over new investments.

If this marks the beginning of a trend, should we expect a massive "culling" of these online startups that cannot attract institutional capital? What might we expect from the M&A market in respect to companies unable to secure additional funding? How will it impact company valuation? The emergence of private secondary market exchanges, through companies that include SharePost and SecondMarket, has offered an alternative to the traditional "exits" found in an IPO sale or merger. Investors and employees in private companies with substantial valuations such as Facebook, Groupon and Zynga (before their IPOs) have achieved limited liquidity through these exchanges. Compounding the availability of liquidity through these private exchanges is the growing belief of many CEOs and their investors that "going public" has become too complicated, too costly, and too aggravating. If the luster of the technology company IPO has dimmed, for whatever reason, what structural impact will this have on the VC industry that traditionally favored an exit through an IPO to capture the "valuation premium" that the public market favors? Absent a vibrant IPO market for startups, are the exit opportunities available through M&A alone compelling enough to draw LP interest in VC as an asset class over the long term?

The course will take all of these factors into consideration from the different and distinct perspectives of both the entrepreneur and the venture capital investor. We will also address management issues regarding the working relationship between the VC and the entrepreneur, corporate governance, and executive compensation. The entrepreneur's perspective addresses the challenges in organizing and financing the venture. Examination of this perspective reveals how entrepreneurs gain an understanding of the context and mechanics of valuing the business. Together, these matters help define the financing requirements of the business and suggest the approach for where and how to raise capital, and thereafter manage the relationship with investors.

Complementing, and sometimes in opposition to the entrepreneur's outlook, is the venture capitalist's perspective, which explores issues of concern to investors in evaluating, structuring, and pricing venture capital investments. Insights gained from these class discussions will be valuable for students considering a career in venture capital, while also providing essential information for entrepreneurs. As we explore the venture capitalist's perspective, We will address several aspects of the investment process including the term sheet content and structure, term sheet negotiation, valuation methods, and the impact of successive rounds of financing on capitalization and ownership. All of these factors set the stage for the relationship between management and investors as well as the governance of the company.

The course is pragmatic in its orientation. It will cover seven principal areas relevant to the privately held, high-growth-potential start-up. These include:

- A brief overview of the venture capital industry today, as well as a discussion of the typical venture fund structure;
- Common organizational issues encountered in the formation of a venture-backed start-up, including matters relating to initial capitalization, intellectual property, and more;
- · Valuation methodologies that form the basis of the negotiation between the entrepreneur and the venture capitalist in anticipation of a venture investment;
- The challenges of fundraising, due diligence, and financing strategies;
- Typical investment terms found in the term sheet and the dynamics of negotiation between the entrepreneur and the venture capitalist;
- Elements of compensation, both cash and equity, that are common to venture-backed companies in the technology sector;
- Corporate governance in the context of a venture-backed start-up company and the typical dynamics that play out between VC and the entrepreneur in the post-financing phase.

The course is designed principally to address the interests of students who expect to embark on an entrepreneurial career, expect to assume a managerial role with a venture-backed start-up company, or wish to pursue a career in venture capital. In light of the time constraints associated with a half-unit course, the curriculum is confined to key fundamentals in the area of venture capital and start-up companies. The course will touch upon a range of fields including finance, accounting, executive compensation, strategy and corporate law and will attempt to identify mainstream "best practices" in the area of high growth potential start-ups. Students completing the course will have a solid understanding of the questions and issues that typical start-up face with respect to capitalization.

Other Course Features and Resources

There will be a dedicated Canvas site for our course. Lecture notes, the Simulation Cases, and course materials that are not copyrighted by a third party, periodic announcements and a course blog will be posted on this Canvas site.

You will be able to access Study.net through Canvas. All third party copyrighted readings are found on Study.net. You should receive an email with log-in information from Study.net at the beginning of the semester. Please contact customerservice@study.net with any logon issues.

Requirements and Evaluation

The number of assigned readings in the course range from moderate to heavy, particularly at the beginning of the course. This syllabus, the assignments, and the readings have been organized so that students can manage the requirements efficiently. As in all courses, the lectures and discussions in the classroom will be much more meaningful if the required readings have been studied in advance. From time to time, mid-course changes in presentations or materials may be made to achieve academic objectives.

Students Requirements and Evaluation

The Bulkpack is divided into two components: Required Readings and Supplemental Materials. The Required Readings are generally comprised of secondary source materials provided for background. The Supplemental Materials consist of examples of legal or business documents included for the purpose of illustrating the themes discussed in class.

The course is primarily in a term "simulation" and discussion format, supplemented by lectures. For each class there will be a submission of a portion of the simulation. During the class, two student teams will present their analysis and conclusions for the relevant portion of the simulation – one from the VC point of view, the other from the entrepreneurial point of view. It is expected that all students come to class fully prepared: namely, having read the assigned readings for the session and fully ready to respond to the questions outlined in the simulation.

Depending on enrollment Students are asked to form a total of **TEN** simulation teams of **six to seven** members at the beginning of the course. Depending on enrollment, some teams may be permitted to have eight students Choose your teammates carefully – changes will not be allowed once your study group team has been formed. Study groups are expected to meet and develop each part of the simulation.

Note: the deadline for the formation of study groups is by:

Wednesday, January 21, 2015

All students are expected to participate in class discussions; students should expect to be cold called.

Student Grades

The Wharton grading practices will be used. The final course grade will be computed as follows:

Five simulation memo submissions (teams) (50%)

Teams will be expected to evaluate the contributions of members using a form that will be provided by the instructor

Class contribution (10%)

Given the size of the class, the webcafe will include a course blog. Entries onto the blog will count towards class participation

Quiz, open notes/open book (40%)

Note: The instructor will take great care to grade as fairly as possible and will strictly adhere to Wharton MBA program grading policies. Grades will NOT be discussed at the end of the course.

Lecture Notes

The PowerPoint slides used in class will be posted on Canvas prior to class. Students should print the slides and bring to class. With some exceptions, particularly in the first two sessions, three to six slides per page will be readable.

Required Texts

Course Bulk-pack: MGMT 804 Venture Capital and Entrepreneurial Management, Spring 2015 edition, compiled by Raffi Amit will be available on **study.net**

Class Cancellation and Make-up Days:

In the unlikely event that a class must be canceled, students will be contacted by e-mail. Generally, if a make-up class can be scheduled, it will be held on the preceding or following Friday in the AM. Make-up classes will be video recorded and posted.

Communicating with the Instructor

The best way to contact me is by e-mail. An appointment matrix will be posted on the webcafe. The instructor prides himself in availability to students and welcomes opportunities to get to know students.

If for any reason you are unable to attend class, please notify the instructor in advance.

Learning Environment

Students are expected to strictly adhere to Concert Rules, including:
☐ Class starts and ends exactly on time. Students are expected to be prompt.
☐ Students remain in attendance for the duration of the class, except in an emergency.
☐ Students display their Wharton issued name tents.
All phones and electronic communication devices are turned off. In the interest of saving paper, laptops and tablets are permitted for note taking purposes. Slides will be provided in PPT versions for that purpose. Students are expected to refrain from e-mailing, Tweeting, or surfing the net, etc.

Note: The instructor, at his sole discretion, will apply grade penalties for any and all violations of these **Concert Rules**.

About the instructor

Mr. Sammut is Senior Fellow, Wharton Health Care Management and Lecturer, Wharton Entrepreneurship. He is former Venture Partner, Burrill & Company, a San Francisco based life science venture capital fund and merchant bank. At Burrill & Company, Mr. Sammut focused on international activity, with a special focus on global health venturing. He is currently an advisor to the Africa Health PE Fund operated by the Abraaj Group.

At the Wharton School, and periodically in the University of Pennsylvania School of Applied Science and Engineering, School of Law and School of Medicine), he teaches venture capital management, corporate development, mergers and acquisitions, biotechnology entrepreneurship, intellectual property strategy, and private equity in emerging markets, Israeli innovation, health care systems, and a special seminar on private sector participation in international health. He is faculty advisor to student-alumni organization called the Wharton Health International Volunteer Program (WHIVP) that provides *pro bono* consulting services to public health services and clinics in the developing world. WHIVP was awarded the Health and Human Rights Leadership Award by Doctors of the World for its decade long work in developing world health systems.

Mr. Sammut is also Founder and Chair of the International Institute for Biotechnology Entrepreneurship, a non-profit organization offering intensive training programs throughout the world for managers of biotechnology companies. He actively conducts research under a grant from the Bill & Melinda Gates Foundation, in collaboration with the McGlaughin-Rotman Center for Global Health at the University of Toronto on the capability of emerging market countries in the biotechnology and pharmaceutical industries. He is also on the faculty of the World Intellectual Property Organization/UN executive education program.

Mr. Sammut has been involved in the creation or funding of nearly 40 biotechnology, Internet, and information technology companies globally. He is on numerous Boards of Directors and Advisory Boards including Doctors of the World USA, Mitsubishi Corporation Life Sciences Business Group, the Royal Bank of Canada Technology Venture

Fund, the Cornell University Research Foundation, Combinent BioMedical Systems, Dynamis Pharmaceuticals, Gentis, Biowizard.com, the Center for Medicine in the Public Interest, Red Diamond Capital (a mid-market buyout fund), the Asia-Alpha Venture Fund, and several other organizations. He is also on the editorial board of the European Venture Capital Association Publications, The Private Equity Review, and the Journal of Commercial Biotechnology.

He is also active with the International Finance Corporation/World Bank Group where he co-authored a report on venture capital in China, serves as the principal consultant in the IFC's Technology Transfer Facility, and advises the health care section of the World Bank in program implementation in the developing world.

Mr. Sammut previously held the positions of Vice President of Development of Teleflex Incorporated where he created and managed acquisitions and alliances, and at S.R. One, Ltd., GlaxoSmithKline's venture capital fund. He was also Managing Director of Access Partners, a venture fund focused on formation of companies around university technologies and capitalized by corporate strategic investors.

Earlier in his career, he was Managing Director of the Center for Technology Transfer at the University of Pennsylvania, where he spun out over one dozen companies over a two-year period. He held a similar position at Jefferson Medical College. He is also co-founder and former CEO of the Philadelphia Organ Transplant Program, the largest transplant organ bank in the United States. He holds degrees in biology and humanities from Villanova University, attended Hahnemann Medical College for two years and holds an MBA from the Wharton School of the University of Pennsylvania.

SESSION SCHEDULE FOR QUARTER 3 2015

Sess	Date	Topic	Case/Activity	Deliverable	Preparation and Required Readings	Supplemental Readings
1	Wednesday January 14	Course introduction : The structure of the VC industry			"A Note on the Venture Capital Industry," Harvard Business School (HBS # 9-295- 065, July 12, 2001) "How Venture Capital Works," by B. Zider, Harvard Business Review (Nov-Dec 1998)	
2	Wednesday January 21	Company formation: structures, ownership and issues		Teams must be formed.	"The Legal Forms of Organization," Harvard Business School (HBS # 9-898- 245, February 19, 2004) "The Legal Protection of Intellectual Property," Harvard Business School (HBS # 9-898-230, April 17, 1998) "The Process of Forming the Company." Chapter 3 of High tech start-up: the complete handbook for creating successful new high tech companies, by J. Nesheim (2000) "Venture Capitalists," Chapter 9 in High tech start-up: the complete handbook for creating successful new high tech companies, by J. Nesheim (2000)	"Avoiding Trouble: Provisions in Previous Employment Documents that Every Start-up Company Founder Needs to Review," by Yokum Taku, WSGR Entrepreneurs Report (Winter 2008) "Guide to Trademark Issues for a New Company," WSGR Entrepreneurs Report (2005) "Selecting and Protecting a Company Name," by Aaron Hendelman, WSGR Entrepreneurs Report (Summer 2008) "Starting Up: Sizing the Stock Option Pool," by Doug Collom,
3	Monday January 26	Two assigned teams to present company formation section of simulation; part 1 of diligence lecture	Simulation Part 1: Company Formation	Post case write- up by Sunday, January 25, 11:59 PM	"New Venture Financing," Harvard Business School (HBS # 9-802-131, August 1, 2006) "Non-Traditional Financing Sources," by G. Sneddon and J. Turner in Pratt's Guide to Private Equity Sources, by Thomson Venture Economics (2004) "Strategic Investors in the Early-Stage Company," by Allison Spinner, WSGR Entrepreneurs Report (Winter 2007) "Super Angels Fly In to Aid Start-Ups," Tam & Ante, WSJ (Aug. 16, 2010)	WSGR Entrepreneurs Report (Summer 2008) "Startup Companies and Financing Basics," by Yoichiro Taku, WSGR Entrepreneurs Report (Fall 2007) "Top 10 Intellectual Property Tips for Early- Stage Companies," by Peter Eng, WSGR Entrepreneurs Report (Summer 2008) "Vesting of Founders' Stock: Beyond the Basics," by Doug Collom, WSGR Entrepreneurs Report (Spring 2008)

_	1	I	1		T	
					"VC Nomenclature and the Investor Spiral," by Manu Kumar, CNN Money (May 16, 2011) "VC 'Super Angels': Filling a Funding Gap or Killing 'The Next Google'?" Knowledge@Wharton (September 1, 2010)	2010 Equity Incentive Plan 2010 Stock Option Agreement
4	Wednesday January 28	Part 2 of diligence lecture			Read Simulation 2 Due Diligence Materials "Meeting with the Venture Capitalist," by W. Kingsley in Pratt's Guide to Private Equity Sources, by Thomson Venture Economics (2004)	
5	Monday February 2	Two assigned teams to present due diligence section of simulation Part 1 of Lecture on Capitalization Tables and Valuation	Simulation Part 2: Due Diligence	Post case write- up by Sunday, February 1, 11:59 PM		
6	Wednesday February 4	Part 2 of Lecture on Capitalization Tables and Valuation			"A Note on Valuation in Private Company Settings." (HBS # 9-297-050, April 2002) "Ownership, Dilution, Negotiation, and Valuation," Chapter 7 in High tech start-up: the complete handbook for creating successful new high tech companies, by J. Nesheim (2000) "Valuation: What It's Worth," VentureEdge, 2001	
7	Monday February 9	Two assigned teams to present cap table and valuation section of simulation Part 1 of Lecture on Term Sheets	Simulation Part 3: Cap Table and Valuation	Post case write- up by Sunday, February 8, 11:59 PM		

8	Wednesday February 11	Part 2 of Lecture on Term Sheets			"Anti-Dilution Protection: What You Need to Know," by Mark Baudler, WSGR Entrepreneurs Report (Spring 2008) "Liquidation Preferences: What They Really Do," by Craig Sherman, WSGR Entrepreneurs Report (Winter 2007) "Control: The Critical Issue in Negotiating Financing Terms," by Caine Moss, WSGR Entrepreneurs Report (Fall 2008) NVCA Model Documents: "Term Sheet for Series A Preferred Stock Financing"	"Founders Now Take the Money and Maintain Control," by Evelyn M. Rusli, The New York Times (April 7, 2011) "Navigating Down-Round and Dilutive Financings," by Yokum Taku, WSGR Entrepreneurs Report (Fall 2008) "The Nuts and Bolts of Recaps and Pay-To-Play Financings," by Timothy Harris, Venture Capital Journal (May 2010) Memorandum of Terms for Preferred Stock (negotiated) Memorandum of Terms for Preferred Stock (nonnegotiated company favorable) Memorandum of Terms for Preferred Stock (nonnegotiated investor favorable) Terms for Private Placement of Series Seed Preferred Stock The Funded Founder Institute: "Plain Preferred Term Sheet" WSGR Term Sheet Generator: "Memorandum of Terms"
9	Monday February 16	Two assigned teams to present term sheet section of simulation Part 1 of lecture on Governance, Value Add and Exits;	Simulation Part 4: Term Sheet Negotiation	Post concluded negotiation by Sunday, February 15, 11:59 PM	"Venture Capital Negotiations: VC versus Entrepreneur." Harvard Business School (HBS# 9-800-170, March 2, 2000)	TOTAL OF TOTAL OF
10	Wednesday February	Part 2 of Lecture on Governance, Value			"New Rules on Option Pricing for Private Companies," by Craig Sherman & Scott	

	18	Add and Exits;			McCall, WSGR Entrepreneurs Report (Fall 2007) "The Do's and Don'ts of Compensation for Early-Stage Company Employees," by Kristen Garcia Dumont and Jennifer Martinez, WSGR Entrepreneurs Report (Fall 2008)		
11	Monday February 23	Two assigned teams to present corporate governance simulation Brief lecture on corporate venture capital funds	Simulation Part 5: Governance and Term Sheet Analysis	Post case write- up by Sunday, February 15, 11:59 PM			
12	Wednesday February 25	Class symposium with guests to be announced					
13	Monday March 2	Course Summation and Quiz Review					
14	Monday March 4	Quiz: 4:30 PM to 6:30 PM Location TBA					