

**Management Consulting For Engineers** — 10 Day-Spring 2018 (9AM–Noon) weeks; 28<sup>th</sup> May–1st June 2018 and 11<sup>th</sup> June to 15<sup>th</sup> June 2018. **ROOM SF3201**

## **Course Outline**

Management Consulting will continue to be a significant career option for many graduate students, regardless of whether a student’s academic foundation is in business, engineering, or the basic sciences. Careers in Management Consulting often provide individuals an opportunity for challenging work, continued self-development, access to important social and professional networks, and, over time, significant financial rewards. This course is designed to enable graduate engineers explore, and prepare for a career in management consulting. The course is taught by a qualified fellow certified management consultant (FCMC) and licensed professional engineer (P.Eng). The Management Consulting Industry has grown in size and complexity particularly since the early 1990’s. Although there are many very small firms, the industry is dominated by a relatively few very large global organizations that practice in a variety of business settings and business disciplines. In addition many businesses have developed internal consulting organizations to provide consulting related services within the organization and often in conjunction with consulting services offered by third party firms. In this course we explore what it means to be a Management Consultant, and will introduce students to consulting frameworks and methods; simulate consulting project activities and situations using business cases; and network students with practicing consulting professionals from a variety of global and local firms. Within the context of this course, consulting is view broadly and is inclusive of a number of practice areas including Strategy Consulting, IT Consulting, Marketing Consulting, Human Capital Consulting, Operational/Process Consulting, Organizational Consulting, and the very specialized field of engineering management consulting. Course participants will be organized into consulting teams and will have the opportunity to identify and complete two simulated consulting engagements and participate in a Case Competition sponsored and judged by a tier one Consulting firm.

## **Course Objectives**

1. Develop an understanding of the nature and rigor of management consulting and to develop skills in management consulting fundamentals.
2. Learn how to identify, analyze, and negotiate consulting opportunities – important in building a practice or progressing upward within an existing one.
3. Demonstrate problem solving, design, and other analytical skills and learn overall consulting process skills.
4. Practice and sharpen executive writing and presentation skills. A student who has successfully completed the coursework should be able to clearly articulate how consultants add value; how consulting practices are built and sustained; approaches to identifying and securing consulting opportunities; how client relationships can be managed and what to do in problem situations; and have demonstrated skills and the effective use of typical analytical frameworks used by consulting organizations today.
5. The primary objective of this course is to provide you with an opportunity to become familiar

with the typical phases in a consulting project. These phases include: selling a project, entering the client firm, gathering data, diagnosing issues, implementing solutions and leaving. In addition to discussing these phases in class, we will discuss how similarly, and how differently, consultants work with their clients. We will also study the functional specialty areas in which most consultants practice. We conclude the course with discussions of ethical issues, career concerns and expert witnessing of consultants.

## **CORE READING LIST**

- Block, Peter. *Flawless Consulting, 2<sup>nd</sup> edition*. University Associates, La Jolla.
- Greiner, Larry E. and Poulfelt, Flemming. *The Contemporary Consultant – Insights from Experts*. Thomson South-Western Publishing, 2004.
- Greiner, Larry E., Olson, Thomas H. and Poulfelt, Flemming. *The Contemporary Consultant – Casebook*. Thomson South-Western Publishing, 2004.
- Brussalis, Chris W. (Ed.). *Management Consulting Class Reading Material*. Pittsburgh: Carnegie Mellon University, 2017.

There are no mandatory prerequisites but previous course work or experience in leadership, innovation management, process management, project management, continuous improvement (six sigma, lean), strategic management, organizational change management, lean product development or operations management would be helpful.

## **Important Expectations of Online Students**

Online learning is not home study. It requires as much or more effort than in class learning – the advantage being – you get to engage in the learning experience at a time you choose. The academic rigor and learning outcomes are identical to an in class experience. **The online course will be administered via blackboard therefore use of blackboard is mandatory.** There are some baseline rules that online learning requires. Students:

- Must commit and engage in online discussion from the end of the first week. Marks for online discussion are included in the mid term and final critical review papers.
- Must read and understand the student performance evaluation rubric and demonstrate this by discussing how it works in blackboard by the end of the 2<sup>nd</sup> week.
- Provide **(optional)** a 2-minute background introduction video by the end of the 2<sup>nd</sup> week – just to demonstrate the use of video and drop box. **Written introduction mandatory.**
- Will be expected to produce one 4-6-minute video - to self assess the mid term critical review.
- Understand a lack of engagement in the discussion board evenly paced throughout the course will inhibit your ability to write the critical review papers. Each lecture and discussion board will be posted for 2 full weeks and then locked (can read but not write). This means online blackboard discussions on the lectures must be completed in an even flow through the course – you can't build them up. This would inhibit the learning experience

## **Course Structure and Content**

Managing Consulting for Engineers is divided into four themes and 12 modules:

The first theme is: **Management Consulting in Context**

The second theme is: **Professional Practice in Management Consulting**

The third theme is: **Skills for Success in Management Consulting**

### **Learning outcomes**

1. Define management consulting and understand why and how consultants are utilized
2. Apply a consulting process framework to simulated client engagement
3. Understand the value of stakeholder engagement and how to apply it
4. Develop a proposal and work plan for a consulting project
5. Learn, practice, and refine skills for client engagement and project management
6. Learn and apply discovery techniques and qualitative/quantitative research skills
7. Make effective presentations to client organizations

**Class Participation.** This course will be offered over 10 days June 2018 (over 4 weeks). The course will be taught through a combination of video lectures (15-50 minutes), critical review readings, and **in-Class activity and discussion.** In-class activity includes presentations and discussions that will be delivered as teams each day. Teams will present answer to questions set against each module video (listed in discussion board).

**Critical Review (CR) Papers.** **The requirements for CR's change from year to year.** CR papers can be handed in and also posted on the discussion board. **All CR's will be written papers (800 – 1200 words).** Critical reviews will consist of reviewing an academic paper and / or **special interest topic** that is most likely career related. There are lots of choices for the critical reviews from the core management consulting books. The remainder of the critical review readings can be from scholarly academic papers listed on the course website (blackboard). There are lots of choices – students can also find and review the latest academic papers on innovation.

**Final Paper - Project Report.** Students will form teams and produce a team report. Whether in a virtual team environment or as an individual the level of effort is the same. For the final paper you are free to select a topic in innovation that interests you. The goal of the final project report is not to do original field research, but to demonstrate to me your ability to apply innovation concepts *in a situation of your choosing*. The final report should be double-spaced, 12 point font, (approximately 1200 – 1500 words per student). Timing is very important to Managing Innovation! **A hard copy and a soft copy of the paper** (using Microsoft Word, NOT an Adobe Acrobat PDF!) must be delivered by email no later than **29<sup>th</sup> June 2018 at 4pm** to my email

address, [stephenc.armstrong@utoronto.ca](mailto:stephenc.armstrong@utoronto.ca) - the hard copy to be given to the mechanical & industrial engineering graduate office

**Please note: for guidance purposes summaries of the team project reports from the 2010 to 2017 classes are available at: <http://www.amgimanagement.com/founder/teaching.html>**

**Course Grading:** The components of the final course grade will be weighted as follows:

Final Team Report (5% Charter and Summary ppt 10%)	40%
In Class Participation (team presentations and discussions)	40%
Critical Review of Academic Paper (CR1)	10%
Written Book or Special Interest Review (CR2)	10%

40% will be determined by the final project team paper (includes 10% for summary ppt presentation and 5% charter). 50% of the grade will be determined by Class activity Participation –blackboard discussion board **is not required** but this is where readings and module discussion questions are located. 10% is a book or special interest review (between 1,000-1,500 words).

**Office Hours.** Because I am Adjunct faculty it will be difficult to meet all of you individually in a timely manner because of the class size but we will have lots of interaction in class

### **Important Dates:**

- 28<sup>th</sup> May 2018 -First Seminar: Orientation on Course Content
- 1<sup>st</sup> June 2018 - Final date to drop APS1012 without academic penalty
- 1<sup>st</sup> June– Team Charter Due- Submit physical copy in class
- 15<sup>th</sup> June 2018 –Last Module and submission of Special Paper Review
- 15<sup>th</sup> June 2018 –Project team verbal presentations (Power point)
- 29<sup>th</sup> June 2018 – Submission of final report (physical hardcopy and e-copy in word)
- 17<sup>th</sup> July 2018 – All coursework grades submitted

## **Part I – Management Consulting in Context**

### **Mod 1 - Introduction to the Profession**

- Introduction and purpose of course
- Review syllabus
- Definition, roles, purpose of profession
- Uses of consultants – public sector, private sector, and internal consulting
- Introduce client projects

### **Development of the Profession**

- History and development of the profession
- Consulting roles and culture

- Professionalism and ethics
- Introduce *Bonner* case

### **Reading**

- *Flawless Consulting*, Chapters 1-3, 7.
- Price, Charlton R. Collaboration: The name of our game. *Consulting to Management*, 16(4), December 2005, p. 38.
- *Competency Framework and Certification Scheme for Certified Management Consultants*, New York: Institute of Management Consultants, 2015
- *Institute of Management Consultants Code of Ethics*. New York: Institute of Management Consultants, Feb. 3, 2005.
- Washburn, Stewart A. Challenge and renewal: A historic view of the profession. *Journal of Management Consulting*, 9(2), November 1996, pp. 47-53.
- *What's Behind the "CMC"?* New York: Institute of Management Consultants, 1997. *Management Consulting* 94-808

## **Mod 2 – The Consulting Process – Entry and Contracting**

- Types of projects and project cycles
- First client meetings
- Assignment strategy and plan
- Proposal development
- Consulting contract
- Service Quality
- Assign client projects
- Discuss *Bonner* case
- Introduce *Research Review*
- Introduce *Client Proposal*

### **Reading**

- *Flawless Consulting*, Chapters 4-6
- *Bonner* case, [www.flawlessconsulting.com](http://www.flawlessconsulting.com)
- Green, Charles H. Create trust, gain a client. *Consulting to Management*, 17(2), June 2006, pp. 27-29, 36.
- Hilditch-Roberts, Huw. A best practice guide for hiring consultants. *Strategic Direction*, 28(3), 2012, pp. 3-5.
- Lantos, Peter R. Consulting hurdles 101: Avoiding disaster. *Consulting to Management*, 14(1), March 2003, pp. 46-49.
- Scanlan, Janice. The agile consultant. *Consulting to Management*, 17(2), June 2006, pp. 22-24.
- Sobel, Andrew. Break into your client's inner circle. *Consulting to Management*, 14(1), March 2003, pp. 18-22.
- Weiss, Alan. Why good clients turn bad. *Consulting to Management*, 16(1), March 2005, pp.25-27.

## **Mod 3 –The Consulting Process – Discovery and Engagement**

- Diagnosis
- Data gathering techniques
- On-site interaction

**Research Review** (submit via Blackboard and hard copy in class)

**Guest: ?????**

**Reading:**

- *Flawless Consulting*, Chapters 10-12.
- Hagerty, Michael R. A powerful tool for diagnosis and strategy. *Journal of Management Consulting*, 9(4), November 1997, pp. 16-25.
- Weiss, Alan. Consultant, heal thyself. *Consulting to Management*, 17(2), June 2006, pp.10-12. *Management Consulting 94-808*

## **Mod 4 – The Consulting Process – Analysis and Decision to Act**

- Developing and gathering alternatives
- Presenting action proposals to the client
- Work plans and project costing

**Client Proposal** (submit via Blackboard and hard copy in class)

### ***Flawless Consulting*, Chapters 13-15.**

- Andrews, Margaret. 6 tools every business consultant should know. Harvard Division of Continuing Education, *The Language of Business* blog, January 2012.
- Courtney, Hugh, Lovallo, Dan, and Clarke, Carmina. Deciding how to decide. *Harvard Business Review*, September 2013
- Frick, Walter. An introduction to data driven decisions for managers who don't like math. *Harvard Business Review* blog, May 2014.
- Klingel, Jeremy. Improving process across dynamic business portfolios. *Consulting*, 11(3), May/June 2009, pp. 46-47.
- Spradlin, Dwayne. Are you solving the right problem? *Harvard Business Review*, September 2012.
- Turner, Arthur N. Consulting is more than giving advice. *Harvard Business Review*, 60(5), Sept/Oct 1982, pp. 120-129.

## **Part 2 – Management Consulting Professional Practice**

### **Mod 5 – The Management Consulting Industry**

- View of management consulting world, synopsis of industry, types of firms
- Key industry challenges
- Key success factors
- Introduce *Case Study 1*

**Reading**

- Czerniawska, Fiona. The new business consulting landscape. *Consulting to Management*, 16(4), December 2005, pp. 3-6.
- Kornik, Joseph. *2017 Executive Outlook*. *Consulting*, January 2017.
- Krell, Eric. Special feature: How recruiters work. *Consulting Magazine*, 7(4), July/August 2005, pp. 28-33.
- Palmer, Taylor. IBISWorld Industry Report 54161: Management Consulting in the US. *IBISWorld*, December 2016.
- Sandberg, Robert and Werr, Andreas. The three challenges of corporate consulting. *MIT-Sloan Management Review*, 44(3), Spring 2003, pp. 59-66.
- Weiss, Alan. The unjust (consulting) universe. *Consulting to Management*, 16(4), December 2005, pp. 30-32. *Management Consulting 94-808*

## **Mod 6 - Consulting Process – Engagement & Implementation**

- Management of projects
- Presentations and communicating with clients
- Implementing your recommendations
- Ongoing client contact and service
- Team effectiveness

### **Case Study 1 (submit via Blackboard and hard copy in class)**

**Guest: ??????**

#### **Reading**

- ***Flawless Consulting, Chapters 16-17.***
- Merron, Keith. Masterful consulting. *Consulting to Management*, 16(2), June 2005, pp. 5-11, 54-58.
- Polzer, Jeffrey T. Making diverse teams click. *Harvard Business Review*. July-August 2008.

## **Mod 7- Consulting Process – Extension, Recycle, or Termination**

- Time for withdrawal
- Final reporting
- Evaluation
- Discuss *Case Study 1*

**Guest: ????????**

- Kubr, Milan. *Management Consulting: A Guide to the Profession*. Geneva: International Labour Office, Chapter 11, 1996.

## **Mar Reading Week – No Class**

## **Mod 8 - Project Status Update**

- Interim project presentations

- Introduce *Case Study 2*

## Part 3 – Skills For Success in Management Consulting

### Mod 9 - Change Management and Resistance

- Leadership
- Stakeholder engagement
- Utilizing resources
- Developing support
- Institutionalizing change

**Case Study 2 Due by 6:00 PM (submit via Blackboard and hard copy in class)**

**Guest Speaker: ?????**

#### Reading

- *Flawless Consulting*, Chapters 8-9.
- Brenowitz, Randi S. and Manning, Marilyn. How consultants help leaders get buy-in. *IMC Times*, 33(3), Fall 2002.
- DeVito, Liz. Kennedy Corner: Change Management; Easier Said Than Done. *Consulting*, December 10, 2012.
- Larcker, David F. and Tayan, Brian. Trust: The unwritten contract in corporate governance. Stanford Closer Look Series, July 2013.
- Larcker, David F. and Tayan, Brian. Leadership challenges at Hewlett-Packard: Through the looking glass. Stanford Closer Look Series, October 2011.

### Mod 10 - Creating Value for Yourself and the Firm

- Firm growth strategies, sales skills
- Managing a firm
- Professional development and staying current
- Developing areas of unique expertise
- Discuss *Case Study 2*

#### Reading

- *Flawless Consulting*, Chapters 18-19.
- Bliss, John and Wildrick, Meg. How to build a personal brand. *Consulting to Management*, 16(3), September 2005, pp. 6-10.
- Maister, David H. How's your asset? Maister Website, 1996, pp. 1-6.
- Markham, Calvert. Developing consulting skills. *Consulting to Management*, 16(4), December 2005, pp. 33-37.
- Schaffer, Robert H. Consulting for results. *Journal of Management Consulting*, 8(4), Fall 1995, pp. 44-52.

- Scheer, Jess. Diminishing Returns for Senior IT Consultants. *Consulting*, 13(2), March/April 2011, pp. 28-29.
- Taminiau, Yvette, Smit, Wouter, and de Lange, Annick. Innovation in management consulting firms through informal knowledge sharing. *Journal of Knowledge Management*, 13(1), 2009, pp. 42-55.
- Washburn, Stewart A. Establishing referral sources: A case study. *Journal of Management Consulting*, 10(1), May 1998, pp. 11-17. *Management Consulting* 94-808

## **Mod 11- Legal and Ethical Issues**

- Legal risks and management
- Client privilege issues
- Professional ethics

### **Guest Speaker – Law in Management Consulting**

- *In re Grand Jury Matter*, No. 91-832, 142 FRD 82, 1992.
- *Panitz v. Behrend*, 632 A.2d 562, Pa. Super, 1993.
- *LLMD of Michigan v. Jackson-Cross, et. al.* J-196, Pa. 1998.
- Allen, K. P. (2007) *The Attorney-Client Privilege in Pennsylvania*. 3-8.
- *Briscoe v. LaHue*, 460 U.S. 325, 75 L.Ed.2d 96, 103 S.Ct. 1108, 1983.
- Eyres, Patricia S. The top seven legal risks for consultants. *Consulting to Management*, 17(1), March 2006, pp. 9-10, 20.
- MacDonald, Elizabeth and Paltrow, Scot J. Ernst & Young advised the client but not about some big conflicts. *The Wall Street Journal*, August 10, 1999.
- Rodenhauer, Tom. Kennedy Corner: Placing a Price on Ethics. *Consulting*, June 28, 2011.
- Silverman, Arnold B. The attorney-client privilege. *JOM*, 49(6), 1997, p. 62.

## **Mod 12- Client's Perspective**

- Selection of consultants
- Effective management of consultants
- Evaluation of performance
- Use of consultants
- Maintaining independence and objectivity

### **Guest Speaker:**

- ??????

### **Reading**

- *Flawless Consulting Fieldbook*, Chapters 22, 36-37.
- Czerniawska, Fiona. Consultant: good, consulting firm: bad. *Consulting to Management*, 17(2), June 2006, pp. 3-5.
- Gable, Julie. Eight tips for working with a consultant. *The Information Management Journal*, July/August 2007, pp. 42-48.

- Shapiro, Eileen C.; Eccles, Robert G.; and Soske, Trina L. Consulting: Has the solution become part of the problem? *Sloan Management Review*, Summer 1993, pp. 89-95.
- Kesner, Idalene F. and Fowler, Sally. When consultants and clients clash. *Harvard Business Review*, Nov. 1997, pp. 22-38. *Management Consulting 94-808*

### **Mod 13- Final Consulting Project Presentations – Last Day of Class**

- Final presentations on consulting projects
- Guests: ??