

**APS1030**

**Engineering Careers – Theories and Strategies to Manage your Career for the Future**

**Course description**

21<sup>st</sup> century career management skills and knowledge are critical success factors for engineers, to develop their own careers for the future, and as leaders and project managers, to help develop others' careers. Especially in engineering where career engagement influences innovation and productivity, talent management is arguably the most important learning to bridge the gap between an engineering education and an engineer's ability to apply their learning in the real world.

In this course, students will learn about contemporary theories and issues in career development and talent management so they can apply their knowledge and skills, to benefit their own career wellbeing, their teams, organizations, and society. Students will learn an evidence-based framework for career clarification and exploration. Using this framework, students gain talent management strategies, increase hope and confidence, expand their network and use practical tools. In an increasingly volatile, uncertain, complex, ambiguous (VUCA) world of work, students will consider career paths, hear and tell career stories, and understand talent management in the broader scope of careers in organizations and self-employment, and related issues of mobility, professionalization, dual careers, and more.

**Learning Outcomes**

By the end of the course students will be able to:

- Describe a narrative framework for career management and tools for career clarification and exploration
- Categorize one's own career stories into a holistic 'career statement'
- Use your 'career statement' to guide your own career exploration, utilizing an Exploration Plan
- Create meaningful links between knowledge gained in class, and practical career tools including resume, LinkedIn profile and job interview
- Evaluate approaches to career and performance management in organization
- Critique notions of career engagement, employee engagement and a manager's role
- As they relate to careers, list key elements of chaos theory, planned happenstance, limits of rationality, harmonious and obsessive passion
- Describe aspects of the professionalization of engineering
- Explain an innovation mindset in one's career and paraphrase the links between innovation, productivity and career
- Apply Luthan's psychological capital to career and workplace talent management
- Analyze three narrative methods for career clarification and life design

- Personal attribute outcome: Students will experience increases in hope, confidence, optimism, resilience, collectively, psychological capital (PsyCap)
- Impact outcomes: Over the next few years students will make satisfying choices aligned with the Career Statement and Exploration Plan they developed in this course; When they become managers, students will use skills and knowledge gained to help develop the careers of their subordinates and peers

### **Course delivery overview**

It is anticipated that the delivery of this course will be based on four themes delivered in 12 sessions , plus an intro session. Each theme will include one or more CAREer Management (CARMA) Tools.

This course is different from other engineering content courses in that the personal stakes are high with respect to the impact on one's own career and life. The implications of your work will reach in a real way beyond this course, your job search and early years on the job. Each class builds on the previous one. In part because of the high personal stakes, you may find yourself tempted to devote a lot of time to the materials. You will have to manage your time investments wisely. The individual and organizational views of the course will ask you to shift perspectives frequently. Personal issues may arise and class members will be asked to treat personal issues and data with respect and understanding.

**Note:** Articles listed below are a mix of required and optional reading, provided here to give prospective students a sense of the material. Final required reading list will be available in first class meeting.

### **Theme 1 – Navigating Careers in a VUCA world (Volatile, Uncertain, Complex, Ambiguous)**

- Complexity, chaos, and nonlinear dynamics; Applying chaos theory of careers to your career
  - Bloch, D. P. (2005). Complexity, chaos, and nonlinear dynamics: A new perspective on career development theory. *The Career Development Quarterly*, 53(3), 194-207.
  - Pryor, R., & Bright, J. (2011). *The chaos theory of careers: A new perspective on working in the twenty-first century*. Taylor & Francis. OR Pryor, R. G., & Bright, J. E. (2007). Applying chaos theory to careers: Attraction and attractors. *Journal of Vocational Behavior*, 71(3), 375-400.
- Learning to plan and pivot in your career like a startup
  - Hoffman, R., & Casnocha, B. (2012). *The start-up of you: Adapt to the future, invest in yourself, and transform your career*. Random House LLC.
- Innovation and Careers [collaboratively presented with Stephen Armstrong]
  - What it means to be innovative; integrating an innovation mindset in your career

- Maintaining an engineering career in evolving and innovative workplaces; learning to recognize the 'sweet spot' between burnout and obsolescence
- CARMA Tools #1: Skill & network building plus practical tools
  - Who You Are MATTERS! career and life clarification game experience

## **Theme 2 – Career & Life Clarification, for Oneself**

- Hope + Confidence + Optimism + Resilience = Psychological capital; Your PsyCap and why growing it helps you manage careers, yours and others
  - Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541-572. OR
  - Luthans, F., Norman, S. M., Avolio, B. J., & Avey, J. B. (2008). The mediating role of psychological capital in the supportive organizational climate—employee performance relationship. *Journal of organizational Behavior*, 29(2), 219-238.
- Harmonious and obsessive passion
  - Vallerand, R. J., Paquet, Y., Philippe, F. L., & Charest, J. (2010). On the role of passion for work in burnout: A process model. *Journal of personality*, 78(1), 289-312. OR
  - Carpentier, J., Mageau, G. A., & Vallerand, R. J. (2012). Ruminations and flow: Why do people with a more harmonious passion experience higher well-being?. *Journal of Happiness Studies*, 13(3), 501-518. OR
  - Mageau, G. A., Vallerand, R. J., Charest, J., Salvy, S. J., Lacaille, N., Bouffard, T., & Koestner, R. (2009). On the development of harmonious and obsessive passion: The role of autonomy support, activity specialization, and identification with the activity. *Journal of Personality*, 77(3), 601-646.
- Narrative methods for career clarification, My Career Story, the Storied Approach, and Life Design
  - Franklin, M. (2014). CareerCycles: A Holistic and Narrative Method of Practice. In B.C.Shepard, P.S.Mani (Eds.), *Career Development Practice in Canada: Perspectives, Principles, and Professionalism* (pp. 441-463). Toronto: CERIC.
  - Savickas, M. L. (2012). Life design: A paradigm for career intervention in the 21st century. *Journal of Counseling & Development*, 90(1), 13-19.
  - Brott, P. E. (2005). A constructivist look at life roles. *The Career Development Quarterly*, 54(2), 138-149. OR
  - Brott, P. E. (2001). The storied approach: A postmodern perspective for career counseling. *The Career Development Quarterly*, 49(4), 304-313.
  - Lengelle, R., Meijers, F., Poell, R., & Post, M. (2013). The effects of creative, expressive, and reflective writing on career learning: An explorative study. *Journal of Vocational Behavior*, 83(3), 419-427.

- CARMA TOOLS #2: Skill & network building plus practical tools
  - Bring your Career Statement to life; peer groups established for students to read and hear each others' Career Statements
- CARMA TOOLS #3: Skill & network building plus practical tools
  - My Career Story [http://www.vocopher.com/CSI/CCI\\_workbook.pdf](http://www.vocopher.com/CSI/CCI_workbook.pdf)  
Savickas, M. & Hartung, P. (2012). My Career Story: An autobiographical workbook for life-career success.

### **Theme 3 – Intentional Exploration and Making Choices**

- Planned Happenstance; what it is; how it influences careers, yours and others
  - Mitchell, K. E., Levin, S., & Krumboltz, J. D. (1999). Planned happenstance: Constructing unexpected career opportunities. *Journal of counseling & Development*, 77(2), 115-124.
- Rational limits of career decision making
  - Krieshok, T. S., Black, M. D., & McKay, R. A. (2009). Career decision making: The limits of rationality and the abundance of non-conscious processes. *Journal of Vocational Behavior*, 75(3), 275-290.
- Underemployment, Unemployment, Poorly Integrated New Entrants (PINES)
  - Bell, D., Benes, K. (2012). Transitioning Graduates to Work: Improving the Labour Market Success of Poorly Integrated New Entrants (PINES) in Canada. CCDF FCDC.
- Professionalization of Engineering; establishing and managing careers
  - PEO's role, and how to articulate your engineering experience
  - The roles of OSPE, OACETT, Engineers Canada, CEO
  - The roles of your manager, HR, external career professionals (e.g. Association of Career Professionals International), friends & family
- CARMA TOOLS #4: Skill & network building plus practical tools
  - Constructing your Possibility & Exploration Plan (PEP). Each student's PEP will have at least three next step possibilities. Each possibility will be coupled with relevant 'clues' including 'Job Market Trends and News' from <http://www.jobbank.gc.ca/> Aligned with each possibility, students will identify inspired actions, and possible requirements
- CARMA TOOLS #5: Skill & network building plus practical tools
  - Career Tools Alignment: Job Postings, Resume, LinkedIn profile. Students will find at least three relevant postings, analyze them for fit, then adapt their resume and LinkedIn profile for these possibilities. Students will use <http://www.jobbank.gc.ca/> <https://www.linkedin.com/> <http://www.eluta.ca/>

- CARMA TOOLS #6: Skill & network building plus practical tools
  - Interview skills workshop. Students will learn and experience job interview scenarios for engineering jobs. Skills will be built around behavioural interview questions using the STAR technique, situational and open ended interview questions.

#### **Theme 4 – Managing Engineering Talent**

- Managing careers in large organizations
  - Hirsh, W., & Jackson, C. (2004). Managing careers in large organisations. Work Foundation. Employee Engagement, Performance Management, Career Management
- Career engagement as a key component of employee engagement
  - Harter, J. K., Schmidt, F. L., Killham, E. A., & Agrawal, S. (2009). Q12 meta-analysis: The relationship between engagement at work and organizational outcomes. Washington, DC, USA: The Gallup Organization.
  - Neault, R. A., & Pickerell, D. A. (2011). Career engagement: Bridging career counseling and employee engagement. Journal of Employment Counseling, 48(4), 185-188.
- What you need to know about performance management: pros and cons of traditional performance reviews; introducing the evidence-based 'feedforward' method
  - Performance reviews overview
  - Culbert, S. (2008). Get Rid of the Performance Review! Wall Street Journal. Retrieved from <http://online.wsj.com/news/articles/SB122426318874844933> on April 18, 2014 OR
  - Culbert, S. A. (2010). Get Rid of the Performance Review!: How Companies Can Stop Intimidating, Start Managing--and Focus on What Really Matters. Hachette Digital, Inc..
  - Kluger, A. N., & Nir, D. (2010). The feedforward interview. Human Resource Management Review, 20(3), 235-246.
  - Bouskila-Yam, O., & Kluger, A. N. (2011). Strength-based performance appraisal and goal setting. Human Resource Management Review, 21(2), 137-147.
  - Latham, G. P., Budworth, M. H., Yanar, B., & Whyte, G. (2008). The influence of a manager's own performance appraisal on the evaluation of others. International Journal of Selection and Assessment, 16(3), 220-228.
- Unexpected unemployment; Job loss as a blessing in disguise
  - Overview of what happens to employees when companies reorganize
  - The career transition reality; career transition industry

- Recruiters, Executive Search, Headhunters: who they are and how they work
- Zikic, J., & Klehe, U. C. (2006). Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality. *Journal of Vocational Behavior*, 69(3), 391-409.
- Job-search strategies and reemployment quality
  - Koen, J., Klehe, U. C., Van Vianen, A. E., Zikic, J., & Nauta, A. (2010). Job-search strategies and reemployment quality: The impact of career adaptability. *Journal of Vocational Behavior*, 77(1), 126-139.
- Narratives at work: the development of career identity
  - Meijers, F., & Lengelle, R. (2012). Narratives at work: The development of career identity. *British Journal of Guidance & Counselling*, 40(2), 157-176.
- Internationally educated professionals: their career experiences in Canada
  - View film: Dr. Cabbie (2014) D: Jean-François Pouliot
  - Zikic, J., Bonache, J., & Cerdin, J. L. (2010). Crossing national boundaries: A typology of qualified immigrants' career orientations. *Journal of Organizational Behavior*, 31(5), 667-686.
- CARMA TOOLS #6: Skill & network building plus practical tools
  - Experience and learn to use the Feedforward model
- CARMA TOOLS #7: Skill & network building plus practical tools
  - Managing careers in organizations: Students plan, moderate and debrief Panel of Experts

## Evaluation

Critical reviews of articles	25% (Three reviews, 700-1000 words each)
Personal career management assignment	25%
Class engagement & participation	25%
Project with In-class presentation	25%

## Instructor Bio



Mark Franklin, M.Ed., P.Eng., CMF, is practice leader of CareerCycles, a career management social enterprise based in Toronto, and president of One Life Tools. Mark and a team of Associates have enriched the career wellbeing of 3500+ clients of all ages and stages across Canada by helping individuals make satisfying career and educational choices. Mark holds a Bachelor of Applied Science in Industrial Engineering, a Master of Education in Counselling Psychology, and the Career Management Fellow designation through Institute of Career Certification International. In his engineering career, Mark consulted with hundreds of client companies first with a decision support provider then as a management consultant with KPMG. Later,

Mark worked as a career counsellor at U of Toronto and York U where helped thousands of students connect the dots between education and career. Mark's career management insights have appeared in The Globe and Mail, National Post and other media, he's authored a book chapter and peer-reviewed journal articles, and he regularly speaks to groups at national and international conferences. Mark produces and hosts the Career Buzz radio show (Wed. 11am-noon on 89.5 FM or ciut.fm) where he's interviewed hundreds of guests about insights and turning points in their career stories.

### **Instructor Philosophy**

- Enthusiasm for learning is contagious...model it to find it
- We choose how we think, feel and act
- Information is not knowledge...knowledge is constructed, not given
- High expectations help generate excellent outcomes
- Communication is essential, and goes both ways
- Attendance, participation, and preparation are crucial aspects of the class. Readings and assignments are in addition to, and supportive of, classroom lectures, discussions and activities.