



UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE & ENGINEERING
Institute for Leadership Education in Engineering

APS1030 Syllabus & Course Overview [as at May 11, 2015, subject to change]

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

Instructor: Mark Franklin 416 465 9222 If using email, subject line must include APS1030 mark@careercycles.com

Course description

21st 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 sketch' and 'career statement'
- Use your 'career statement' to guide your own strategic career exploration, utilizing an Exploration Plan
- As they relate to careers, list key elements of chaos theory, planned happenstance, limits of rational decision making
- Create meaningful links between knowledge gained in class, and practical career tools including resume, LinkedIn profile, job interview skills, networking skills
- Evaluate approaches to career and performance management in organization
- Critique notions of career engagement, employee engagement and a manager's role

- Describe aspects of the engineering profession and work environment including role of PEO, OSPE, Engineers Canada, relevant Industry Associations, companies
- Explain an innovation mindset in one's career and paraphrase the links between innovation, productivity and career
- Apply 'psychological capital' and 'feedforward' to career and workplace talent management
- Personal attribute outcome: Students will experience increases in hope, efficacy (confidence), resilience, optimism, (HERO) collectively, psychological capital (PsyCap); curiosity and exploration; clarity
- 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 11-12 meetings. 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.

Four Themes

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
- Learning to plan and pivot in your career like a startup
- Innovation and Careers [collaboratively presented with Stephen Armstrong]
- 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
- Narrative methods for career clarification, My Career Story, the Storied Approach, and Life Design

- 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

Theme 3 – Intentional Exploration and Making Choices

- Planned Happenstance; what it is; how it influences careers, yours and others;
- Rational limits of career decision making
- Underemployment, Unemployment, Poorly Integrated New Entrants (PINES)
- Professionalization of Engineering; establishing and managing careers
- CARMA TOOLS #4: Skill & network building plus practical tools
 - Constructing your Possibility & Exploration Plan
- CARMA TOOLS #5: Skill & network building plus practical tools
 - Career Tools Alignment: Job Postings, Resume, LinkedIn profile.
- CARMA TOOLS #6: Skill & network building plus practical tools
 - Interview skills workshop

Theme 4 – Managing Engineering Talent

- Managing careers in large organizations
- Career engagement as a key component of employee engagement
- What you need to know about performance management: pros and cons of traditional performance reviews; introducing the evidence-based 'feedforward' method
- Unexpected unemployment; Job loss as a blessing in disguise
- Job-search strategies and reemployment quality
- Internationally educated professionals: their career experiences in Canada
- CARMA TOOLS #7: Skill & network building plus practical tools
 - Experience and learn to use the Feedforward model



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.

EVALUATION PLAN

Assignments and evaluation aligned with learning objectives, and what I'd like you to get out of this course. See breakdown below.

Critical Review of Readings 30% (maybe two in the fall, 15% each)

- Critical review of readings. 3 articles most engaging for you. Draw out themes. Paper should be theoretical and reflective. Compare / contrast. Locate yourself. 1200 – 1500 words. Be creative; questions below for guidance only.

Career Management Logbook 25%. (=book in which details of a trip or journey are recorded)

- Iterative. Submit x2, v1.0, v2.0
- 5% for v1. 20% for v2

Interview Project: Presentation & Report 30%.

- Groups of 3-4 (~10 groups).

- Research/Prep; Interview; Presentation; Report
- To ensure all team members are involved in the project, distribute team roles
- Team presentation 15% (~15 mins each)
 - Research & Preparation
 - Write/Adapt questions (if 3 team members, these 2 roles combined)
 - Lead interviewer (others can be secondary)
 - Presentation lead (others can be secondary)
- Each team member provides 500-700 word reflection, after presentation. 15%

Engagement & participation – 15%

- Engagement ambassador role – 5% Every class (9 classes, miss #1, #4)
 - 2-3 people per reading in role as ambassadors to help engage in the discussion based on the readings. There will be two readings per class; though group will be divided into two Reading Groups, each Reading Group reads one article
 - Ambassador expected to come prepared having read it thoroughly. Submit one-pager (~200 words) and add to Logbook; includes 4-6 talking points and 4-6 discussion questions. Talking points may be: Background of author(s); Key concepts; Relevant results; What was surprising; Link to other readings or class topics; Personal relevance...
- Pop quiz – 4%
- In-class writing exercises, self-evaluation – 3%
- Attendance – 3%
 - Expectation is to attend every class. If you're here every class you get it. If you are going to miss one class, expectation is an email day before explaining why. Miss 2+, don't get it. I'll take attendance first few classes to check and learn your names.

Drop and Add Dates

Section Code: F / Drop Date Deadline: May 28 / Add Date Deadline: May 14

- <http://gradstudies.engineering.utoronto.ca/professional-degrees/elite-certificate/>

Late Policy: All assignments must be handed in or presented on the day they are due. Written assignments will receive a late penalty of 5% per day including weekends and will not be accepted after 5 days. Exceptions will only be made in case of medically certified illness (requiring a signed medical form).

Overview of class meetings

Meetings & due dates	Topics	Readings & Resources [Class divided into Readers #1, Readers #2]
May11-#1-Course Overview & Theme1: 21 st Century Careers	<ul style="list-style-type: none"> Welcome – Intentions & Agenda for today [5] Instructor ‘short story’, how course came to be, learning objectives [5] Interactive quiz / (Online #6,9) [10] Student intros [30] What does it mean to manage your career for the future? (video & discussion & log) [15] CareerCycles Model – Overview [5] Course overview and 4 themes [20] Evaluation plan [10] What to do for next class [15] <ul style="list-style-type: none"> Baseline measures, PsyCap/HERO (log) Radar screen of possibilities (log) Readings – how to present (log ambassadors only) Resources – what to do Questions & open discussion [5] 	<ul style="list-style-type: none"> Readers #1: Bright, J. E., & Pryor, R. G. (2005). The chaos theory of careers: A user’s guide. The Career Development Quarterly, 53(4), 291-305. Readers #2: Bloch, D. P. (2005). Complexity, chaos, and nonlinear dynamics: A new perspective on career development theory. The Career Development Quarterly, 53(3), 194-207. <p>RESOURCES:</p> <ul style="list-style-type: none"> CareerCycles Model Bennett and Lemoine (2014). What VUCA really means to you. Harvard Business Review, January 2014. Startup of You visual summary or executive summary link Career Challenge Quiz http://careerchallenge.ca <p>OPTIONAL RESOURCES</p> <ul style="list-style-type: none"> CareerCycles Videos – Now, Next, Future https://www.youtube.com/watch?v=FkJE Stv Sm0#t=78 Career Buzz interview – Dave Redekopp http://careercycles.com/benefits-of-co-working

Meetings & due dates	Topics	Readings & Resources [Class divided into Readers #1, Readers #2]
May14-#2- Theme1: 21 st Century Careers	<ul style="list-style-type: none"> • Proprioceptive writing (intro, activity & log) [10] • Reading/Resource facilitated discussion [20] • Career Story: Mark F. Illustrate clues→inspired action; working identity; what are you learning? [20] • Career Plan? Not! (SFU Video & discussion) [15] • VUCA (exercise) [10] • Rules for permanent beta thinking (activity) [20] • CareerCycles Model – Expanded. Start ‘Career & Life Clarification’ process [10] • What to do for next class [5] • Questions & open discussion [5] 	<ul style="list-style-type: none"> • Readers #1: Franklin, Yanar, Feller (in press). Narrative Method of Practice Increases Curiosity & Exploration, Psychological Capital, and Personal Growth Leading to Career Clarity: A Retrospective Outcome Study. Canadian Journal of Career Development • Readers #2: Gilbert, D. T., & Wilson, T. D. (2000). Miswanting: Some problems in the forecasting of future affective states. <p>RESOURCE: Talent Egg Engineering Guide link</p> <p>RESOURCE: Your Personal Brand PWC – videos, workbook link</p> <p>RESOURCE: Career Buzz interview with Afifa Siddiqui http://careercycles.com/millennial-generation-expert (minute 32:25)</p>
May18 – NO CLASSES – VICTORIA DAY		

Meetings & due dates	Topics	Readings & Resources [Class divided into Readers #1, Readers #2]
May21-#3- Theme2: Career & Life Clarification	<ul style="list-style-type: none"> • Proprioceptive writing (activity & log) [10] • Reading/Resource facilitated discussion [15] • Career Story: Mike K. (confirmed) What are you learning? [20] • Online Storyteller – interactive • Desires exercise & Miswanting • Strengths: Your stories; Strengths development • Personal qualities (activity): Four temperaments. Most like you? • Other people / Heroes & Dragons / Career advice • Interview Project – intro [15] • Questions & open discussion [5] 	<ul style="list-style-type: none"> • Readers #1: Savickas, M. L. (2012). Life design: A paradigm for career intervention in the 21st century. Journal of Counseling & Development, 90(1), 13-19. • Readers #2: Franklin, M., Feller, R., & Yanar, B. (2014). Narrative Assessment Tools for Career and Life Clarification and Intentional Exploration: Lily's Case Study. Career Planning and Adult Development Journal • Recommended: Jarvis, P.S. (2003). Career Management Paradigm Shift. Prosperity for Citizens, Windfalls for Governments. http://files.eric.ed.gov/fulltext/ED481657.pdf <p>RESOURCE: My Story on Vocopher link Pages 6 and 10</p> <p>RESOURCE: Jobpostings Engineering Guide link</p> <p>RESOURCE: Industry-specific career sites, e.g. Careers in Oil and Gas http://www.careersinoilandgas.com</p>

Meetings & due dates	Topics	Readings & Resources [Class divided into Readers #1, Readers #2]
May25 (3 hours) - #4- Theme2: Career & Life Clarification	<ul style="list-style-type: none"> CARMA #1: <i>Who You Are Matters!</i> Instructions for submitting Career Management Logbook Reading/Resource facilitated discussion [time permitting] Questions & open discussion [5] 	<ul style="list-style-type: none"> Readers #1: Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. <i>Personnel Psychology</i>, 60(3), 541-572. Readers #2: Lengelle, R., Meijers, F., Poell, R., & Post, M. (2013). The effects of creative, expressive, and reflective writing on career learning: An explorative study. <i>Journal of Vocational Behavior</i>, 83(3), 419-427. <p>RESOURCE: CareerCycles Online Storyteller, add 4+ stories to Timeline</p> <p>RESOURCE: Engineering Careers link</p>
May 28 (3 hours) - #5- Theme2: Career & Life Clarification SUBMIT: Career Management Logbook 1.0	<ul style="list-style-type: none"> Proprioceptive writing (activity & log) [10] Reading/Resource facilitated discussion [15] <i>Who You Are Matters!</i> deepening exercise; Natural interests; Assets... 6 lessons of Johnny Bunko (exercise, log) link Career Story: Stephen A. (confirmed) What are you learning? [20] Guest: Innovation and Career Management Questions & open discussion [5] 	<ul style="list-style-type: none"> Readers #1: Ibarra/working identity TBD Readers #2: Meijers, F., & Lengelle, R. (2012). Narratives at work: The development of career identity. <i>British Journal of Guidance & Counselling</i>, 40(2), 157-176. <p>RESOURCE: Review Emerging Careers on ALIS/OCCINFO link</p> <p>RESOURCE: Vault Career Info site http://www.vault.com/</p>

Meetings & due dates	Topics	Readings & Resources [Class divided into Readers #1, Readers #2]
June1-#6-Theme3-Intentional Exploration	<ul style="list-style-type: none"> • Proprioceptive writing (activity & log) [10] • Reading/Resource facilitated discussion [15] • Emerging Careers / 'Big Waves' (Start Up of You, p8) • CARMA #3: Exploration Plan-1 • Field Research (intro; log; expect >=3 possibilities; expect >= field research (See Laurie D's ppt)) • Career Story: Ashley Good. What are you learning? [20] • VIDEO: Road to Employment Part 1 • CARMA #4: Employment Readiness-Resumes • Questions & open discussion [5] 	<ul style="list-style-type: none"> • Readers #1: Mitchell, K. E., Levin, S., & Krumboltz, J. D. (1999). Planned happenstance: Constructing unexpected career opportunities. Journal of counseling & Development, 77(2), 115-124. • Readers #2: 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. <p>RESOURCE: Check Job Market Trends at http://www.jobbank.gc.ca/</p> <p>RESOURCE: Industry Associations e.g. http://www.oowa.org/business-directory/ http://www.oneia.ca/</p> <p>RESOURCE: Creating an Online Presence on LinkedIn - Part I link</p>

Meetings & due dates	Topics	Readings & Resources [Class divided into Readers #1, Readers #2]
June4-#7- Theme3- Intentional Exploration	<ul style="list-style-type: none"> • Proprioceptive writing (activity & log) [10] • Reading/Resource facilitated discussion [15] • Career Story: Jenny. What are you learning? [20] • Career Engagement model link • Labour Market Information (Clues)/jobbank site • CARMA #3: Exploration Plan-2. Positive thought: Intentions (See SFU doc from Laurie) • CARMA #5: Employment Readiness-LinkedIn • Questions & open discussion [5] 	<ul style="list-style-type: none"> • Readers #1: Bell, D., Benes, K. (2012). Transitioning Graduates to Work: Improving the Labour Market Success of Poorly Integrated New Entrants (PINES) in Canada. CCDF FCDC. • Readers #2: 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. <p>RESOURCE: Pink, Daniel. Ten Pas, Rob. The Adventures of Johnny Bunko: The Last Career Guide You'll Ever Need. Riverhead Trade: 2008. BOOK. OR The 6 Lessons Summary</p> <p>RESOURCE: Guide to the required experience for licensing as a professional engineer in Ontario, from PEO - link on PEO site</p> <p>RESOURCE: Engaging With Your LinkedIn Network - Part II link</p>

Meetings & due dates	Topics	Readings & Resources [Class divided into Readers #1, Readers #2]
June8-#8- Theme3- Intentional Exploration	<ul style="list-style-type: none"> • Proprioceptive writing (activity & log) [10] • Reading/Resource facilitated discussion [15] • Career Story: _____. What are you learning? [20] • Professionalization: PEO / EIT / P.Eng. OSPE. OACETT. What they are & do • Applying for License – Additional certifications • CARMA #3: Exploration Plan-3. Getting unstuck with WOOP • CARMA #6: Employment Readiness-Interview skills • Questions & open discussion [5] 	<ul style="list-style-type: none"> • Readers #1: Kluger, A. N., & Nir, D. (2010). The feedforward interview. Human Resource Management Review, 20(3), 235-246. • Readers #2: 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. <p>RESOURCE: Job Search Engine http://www.eluta.ca/ and others</p> <p>RESOURCE: U of T Career Centre http://www.careers.utoronto.ca online workshops. And Career Learning Network</p>
June11-#9-Theme4- Manag'g Eng'g Talent SUBMIT: Interview Project Report, Groups 1-3	<ul style="list-style-type: none"> • Proprioceptive writing (activity & log) [10] • Reading/Resource facilitated discussion [15] • Career Story: _____. What are you learning? [20] • Workforce development • CARMA #7: Feedback and Feedforward technique • Interview Project, Groups 1-3 [50 mins] • Employment Readiness-6 Strategies. Influencer Audit. Proactive Relationships 	<ul style="list-style-type: none"> • Readers #1: Zizys, T. (2014) Better Work: The path to good jobs is through employers (Report, Video, Career Buzz, Slides) link • Readers #2: 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. <p>RESOURCE: U of T Engineering Career Centre http://engineeringcareers.utoronto.ca/</p>

Meetings & due dates	Topics	Readings & Resources [Class divided into Readers #1, Readers #2]
<p>June15-#10-Theme4- Manag'g Eng'g Talent</p> <p>SUBMIT: Interview Project Report, Groups 4-6</p> <p>SUBMIT: Career Management Logbook 2.0</p>	<ul style="list-style-type: none"> • Proprioceptive writing (activity & log) [10] • Reading/Resource facilitated discussion [15] • CARMA #8: Careers in Organizations-Guest / How Recruiters Work • Career Serendipity / Breakout Opportunities • Interview Project, Groups 4-6 [50 mins] 	<ul style="list-style-type: none"> • Readers #1: Hirsh, W., & Jackson, C. (2004). Managing careers in large organisations. Work Foundation.Employee Engagement, Performance Management, Career Management • Readers #2: Borgen, W. A., Butterfield, L. D., & LaLande, V. (2012). Career Conversations in Small-to Medium-Sized Businesses: A Competitive Advantage. <i>Canadian Journal of Counselling and Psychotherapy</i> 47(2). <p>RESOURCE: TBD</p>
<p>June18-#11-WrapUp</p> <p>SUBMIT: Critical Review of Readings</p> <p>SUBMIT: Interview Project Report, Groups 7-9</p>	<ul style="list-style-type: none"> • Proprioceptive writing (activity & log) [10] • Reading/Resource facilitated discussion [15] • Interview Project, Groups 7-9 [50 mins] • Questions & open discussion [5] 	<p>RESOURCE: TBD</p>

Relevant Career Websites

Jobsearch Engines and sites

Eluta.ca

Indeed: <http://www.indeed.ca/>

Simplyhired.ca

Wowjobs.ca

Ontario Public Services job site <https://www.gojobs.gov.on.ca/>

Workopolis <http://www.workopolis.com/EN/Common/HomePage.aspx>

Career Info

Alberta Occupational Info ALIS <http://occinfo.alis.alberta.ca/occinfopreview>

Government of Canada Job Bank <http://www.jobbank.gc.ca/home-eng.do?lang=eng>

Ask the Headhunter: www.asktheheadhunter.com

Job Hunter's Bible: <http://www.jobhuntersbible.com>

Salary: www.salary.com

Riley Guide: www.rileyguide.com

Career Cruising <http://public.careercruising.com/en/>

Workforce: <http://www.workforce.com>

Canadian Ass'n of Career Educators and Employers (CACEE) <http://www.cacee.com/recruitment.html>

Strengths Finder list of 34 strengths <http://www.strengthstest.com/strengthsfinder-themes/34-book-resources-cat/49-strengths-finder-themes.html>

Quintessential Careers: <http://www.quintcareers.com>

US Dept of Labor O*NET online: <http://online.onetcenter.org>

Vault: <http://www.vault.com>

Career Buzz radio podcasts <http://careercycles.com/category/radioshow2>

Career Guides & Resources

Talent Egg Engineering Guide <http://talentegg.ca/career-guides/engineering/>

PWC Personal Brand workbook: <http://www.pwc.com/us/en/careers/campus/programs-events/personal-brand/index.jhtml>

Propioceptive Writing <http://www.pwritng.org/>

Engineering Specific

PEO <http://peo.on.ca/>

OSPE <http://www.ospe.on.ca/>

Engineers Canada <https://www.engineerscanada.ca/>

Industry Associations

<http://www.oowa.org/business-directory/>

<http://www.oneia.ca/>

Career Centres

U of T Career Centre <http://www.careers.utoronto.ca>

U of T Engineering Career Centre <http://engineeringcareers.utoronto.ca/>