



# Northeastern University

## College of Engineering

**COURSE SYLLABUS: PLEASE PRINT AND BRING THIS TO EACH CLASS.**

# **ENCP6000: CAREER MANAGEMENT FOR ENGINEERS**

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## Table of Contents

Lesson 1 – Introduction to Co-op, Career Goals & Resumes .....	3
Lesson 2 – Resumes & Positioning Statements .....	4
Lesson 3 – Career Fair Prep & Mock Positioning Statements .....	5
Lesson 4 – Job Searching Tools and Methods & LinkedIn .....	6
Lesson 5 – Interviewing & Cover Letters .....	7
Lesson 6 – Mindset and Networking Letters .....	8
Lesson 7 – Mindful Learning and Motivation Theory .....	9
Lesson 8 – Engineering Ethics & US Immigration Policy .....	10
Lesson 9 – Planning for and choosing a Successful Co-op & Learning Outcomes .....	11
Lesson 10 – Professional Behavior, Diversity in the Workplace, & Summary .....	12
Assignments.....	13
Career Goals.....	14
Resume.....	16
Positioning Statement.....	17
Interview Prep Assignment.....	19
LinkedIn Profile.....	20
Sample Student Cover Letter.....	21
Ethics Case Study Assignment.....	23
Learning Outcomes Assignment.....	24
Sample Student Learning Outcomes Assignment.....	26
Appendices.....	27
Appendix A.....	28
Appendix B.....	29
Appendix C.....	31
Appendix D.....	32
Appendix E.....	33
Appendix F.....	34
Appendix G.....	35

## Lesson 1 – Intro to Co-op, Career Goals & Resumes

### Learning Objectives:

1. Describe goals of cooperative education for graduate engineering students.
2. Identify and describe:
  - i. How a co-op experience will help achieve your career goals.
  - ii. What you expect to gain from a co-op experience.
3. Explain and summarize course procedures and requirements and co-op eligibility requirements and guidelines.
4. Explain your career goals.
5. Update your resume.

### Before Class:

1. Read the Announcements on Blackboard and complete all tasks listed under: **Preparation BEFORE Your First Class** (videos, Career Goals, Resumes).
2. Read and download Course Policies document (on Blackboard→Course Policies, Schedule, and Grading→ENCP6000 Course Policies).
3. Read Graduate School of Engineering Cooperative Education Program Eligibility Requirements and Guidelines and procedures for accepting a co-op. Links are below.
  - a. <http://www.coe.neu.edu/graduate-co-op/graduate-co-op-eligibility-and-requirements>
  - b. [https://husky.desk.com/customer/en/portal/articles/2263760-procedures-for-accepting-a-co-op?b\\_id=4649](https://husky.desk.com/customer/en/portal/articles/2263760-procedures-for-accepting-a-co-op?b_id=4649).

### Homework (refer to the Course Policies document and Blackboard for due dates/times):

1. To prepare for Quiz #1:
  - a. Read and be able to explain the university academic integrity policy <http://www.northeastern.edu/osccr/academic-integrity-policy/>
  - b. Review the Course Policies.
  - c. Review Co-op Eligibility Requirements
2. Complete the Blackboard Policies Quiz.
3. Complete the Career Goals assignment and submit via Blackboard (see assignment in Assignments section). Make sure you receive a digital receipt from Turnitin which confirms your assignment was successfully uploaded.
4. Submit your Resume Draft #1 to Blackboard. Make sure you receive a Turnitin receipt as proof of submission.

### Textbooks

Purchase the course text listed below which is available in the bookstore, from online stores (Amazon.com), google books, or other bookstores.

Langer, Ellen J. (1997). *The Power of Mindful Learning*. Cambridge, MA: Da Capo Press. (Referred to throughout this course as Mindful.)

## Lesson 2 – Resumes and Positioning Statements

### Learning Objectives:

1. Complete and review resumes.
2. Create a Positioning Statement.

### Before Class:

1. Complete the homework assignments (from the previous class).
2. Read the career service webpage on resumes:
  - a. <http://www.northeastern.edu/careers/jobs-internships/resumes/>
  - b. <http://www.northeastern.edu/careers/wp-content/uploads/2016/07/Resume-Guide-2015.pdf>

### Homework (refer to the Course Policies document and Blackboard for due dates/times):

1. Please refer to the Assignments section of this syllabus for instructions on the Positioning Statement. Submit on Blackboard and get a digital receipt from Turnitin.
2. Update your Resume based on feedback received. You do not have to submit it again, but improving it will help you be prepared for the Career Fair.

### Lesson 3 – Career Fair Prep, Resume Review, & Mock Positioning Statements

**Learning Objectives:**

1. Research and plan how to maximize your attendance at the Career Fair.
2. Continue to revise your resume.
3. Present Positioning Statements in class.

**Before Class:**

1. Complete your homework.
2. Watch: “Graduate student resumes: highlighting an academic project” video  
<https://www.youtube.com/watch?v=06sSWmWG3TM>

**Homework (refer to the Course Policies document and Blackboard for due dates/times):**

1. Complete the **Get Informed Module**.

**Career Fair Preparation - Friday, October 5, 2018:**

1. Update your professional resume.
2. Practice your Positioning Statement aloud.
3. Visit the Career Development website for career fair info:  
<http://www.northeastern.edu/careers/jobsinternships/career-fairs/>
  - a. Use the information there to start your research efforts and sharpen your skills for attending the Career Fair. You can also check the Career Development website to get a list of employers who will be there and check for jobs and companies you might be interested in. There are also workshops available to help you maximize your time there. Links to these resources can be found on Blackboard.
  - b. Visit the Career Center during walk-in hours for more help and planning.
  - c. **NOTE FOR FALL SEMESTER ONLY:** You are encouraged to attend the career fair even if you are not eligible until the spring to see what it is like and understand what you need to do to be successful. You should make sure any employers that you speak with are aware of your eligibility timeline.

## **Lesson 4 – Job Searching Tools and Methods & LinkedIn Profiles**

### **Learning Objectives:**

1. Conduct an effective job search using career fairs, online tools, networks, and career services.
2. Learn where, why, and how to apply for jobs.
3. Create a LinkedIn profile that conforms to professional standards.
4. Explain how you can use LinkedIn features (groups, connections, job postings) to further your career.
5. Explain using myNEU – NUcareers to search for and apply for jobs and to upload documents.

### **Before Class:**

1. Complete your homework.

### **Homework (refer to the Course Policies document and Blackboard for due dates/times):**

1. Complete Interview Prep assignment. Submit it on Blackboard (make sure you receive a digital receipt from Turnitin confirming that it was successfully submitted).
2. Come to next class dressed for an interview (graded assignment).
3. Submit LinkedIn Draft #1 and submit the URL in Blackboard in a Word document. Instructions are in the Assignments section of this syllabus.

## Lesson 5 – Interviewing & Cover Letters

### Objectives:

1. Identify the different types of interviews and articulate their purposes and differences.
2. Prepare for and carry out an interview in accordance with professional standards.
3. Write an effective cover letter.
4. Write a professional thank you letter.

### Before Class:

1. Complete the homework.
2. Read the following: [http://media.myjobhelper.com/img/what-to-wear-to-your-job-interview.jpg?\\_ga=1.60356589.1771096765.1483573911](http://media.myjobhelper.com/img/what-to-wear-to-your-job-interview.jpg?_ga=1.60356589.1771096765.1483573911)
3. Read How To: Dress For Interview Success at <http://www.resolution-tech.com/interview-dress/>

### Homework (refer to the Course Policies document and Blackboard for due dates/times):

1. Read the following two short articles on Blackboard. Blackboard → Course Material →
  - a. “Mindsets: Developing Talent through a Growth Mindset.”
  - b. “10 Big Ideas for Mindset”
2. Complete Mindset Quiz.
3. Complete your Resume Draft #2 and submit in Blackboard. Instructions are in the Assignments section of this syllabus.
4. Find a job posting that interests you and write a cover letter for that job.
5. Submit the job posting **AND** cover letter on Blackboard. Make sure you receive confirmation from Blackboard that it was successfully submitted. In the Assignments section of the syllabus are directions for this assignment and a sample job posting and a sample cover letter for you to use as a guide.

## **Lesson 6 – Mindset and Networking**

### **Learning Objectives:**

1. Distinguish between a growth and fixed mindset; explain the difference.
2. Describe the relationship between a growth mindset and your approach to success, failure and effort.
3. Describe GRIT and the role effort plays in GRIT.
4. Describe the purposes and methods of networking.
5. Write a networking letter.

### **Before Class:**

1. Complete the homework.

### **Homework (refer to the Course Policies document and Blackboard for due dates/times):**

1. Read the Introduction and Chapters 3 & 6 in *Mindful Learning* as well as the article, “Mindfulness in the Age of Complexity”, found on Blackboard → Course Material → Mindset, Mindful Learning and Motivation.
2. Complete Mindful Quiz.



## Lesson 7 – Mindful Learning and Motivation Theory

### Learning Objectives:

1. Explain what mindful engagement is and its effect on your work and studies.
2. Discuss the benefits of active engagement.
3. Explain the difference between intrinsic and extrinsic motivation.
4. Discuss the elements of motivation such as autonomy, mastery, purpose and connectedness.

### Before Class:

1. Complete the homework.
2. Watch the video on motivation again that we showed in day one of class. What does this tell you about motivation? <http://www.youtube.com/watch?v=u6XAPnuFjJc>

### Homework (refer to the Course Policies document and Blackboard for due dates/times):

1. Ethics Quiz Preparation: Read the NSPE Code of Ethics (<https://www.nspe.org/resources/ethics/code-ethics>) also on Blackboard →Course Material →Engineering Ethics→Engineering Code of Ethics).
2. Take the Ethics Quiz on Blackboard.
3. Submit your Ethics Case Study homework based on the articles on Blackboard (Volkswagen or Wells Fargo). You can find these cases at Blackboard→Course Material→Engineering Ethics→Volkswagen or Wells Fargo. **You only need to do ONE case, either Volkswagen or Wells Fargo, (not both of them) as assigned below.**
  - a. If your last name begins with letters between **A – L**, do your assignment on the **Wells Fargo** case.
  - b. If your last name begins with letters between **M – Z**, do your assignment on the **Volkswagen** case.
4. Prepare for next week's class discussion by reading the ENCP6000 Ethical Case Studies found on Blackboard→Course Material→Engineering Ethics→ENCP6000 Ethics Cases

## **Lesson 8 – Engineering Ethics & US Immigration Policy**

### **Learning Objectives:**

1. Paraphrase the key tenants of the National Society of Professional Engineers (NSPE) Code of Ethics.
2. Be able to explain ethical expectations in the US workplace.
3. Analyze and evaluate a situation in terms of ethical considerations.
4. Articulate the importance of ethical behavior in engineering.
5. Review of Immigration Policies

### **Before Class:**

1. Complete your homework.
2. Read the Engineering Code of Ethics found on Blackboard under Course Material/Engineering Ethics. You need to read this to complete the Ethics quiz.
3. Also, read the ENCP6000 Ethical Case Studies found on Blackboard→Course Material→Engineering Ethics→ENCP6000 Ethics Cases. You need to read and think about these cases to be able to participate in class.

### **Homework (refer to the Course Policies document and Blackboard for due dates/times):**

1. LinkedIn Final Submission.
2. Resume Final Submission.

## **Lesson 9 – Planning for a Successful Co-op & Learning Outcomes**

### **Learning Objectives:**

1. Develop a plan to take advantage of your co-op experience.
2. Write learning outcomes for your co-op experience.
3. Assess your progress towards achieving your learning objectives.

### **Before Class:**

1. Complete the homework.
2. Read and study the procedures for accepting a Co-op job found on the Husky Desk [https://husky.desk.com/?b\\_id=4649](https://husky.desk.com/?b_id=4649).

### **Homework (refer to the Course Policies document and Blackboard for due dates/times):**

1. Following the instruction in the Assignments section of your syllabus, write your Learning Outcomes. Be sure to pay attention to the sample for formatting the heading and outcomes.

## **Lesson 10 – Diversity and Professional Behavior in the Workplace & Course Summary**

### **Learning Objectives:**

1. Discuss reasons diversity is valued in the workplace.
2. List and explain common issues associated with diversity in the US workplace.
3. List the types of diversity that can exist.
4. Explain Cultural Competency and the continuum.
5. Explain and be able to exhibit expected professional behavior in the US workplace.

### **Before Class:**

1. Complete the homework.
2. Watch the video <https://youtu.be/14bCsM16bYo>

### **Homework:**

1. If you have any outstanding assignments, you must see your instructor.
2. For everyone else, you have completed ENCP6000!

# Assignments

**Directions:** For all assignments and quizzes, please refer to the Course Policies document and Blackboard for due dates and times.

## CAREER GOALS ASSIGNMENT

If you don't know where you want to go, it is hard to get there!

To develop your career goals, first think about your ultimate long term goal. Then think about a well-defined logical path that will help you to achieve that goal. The path should include a description of your short term goals (co-op position and first job after graduation) and your intermediate goals (5-10 years after graduation).

Try to articulate how each position prepares you for the next and advances your career goals.

As you construct your career goals, think about what you learned from the Daniel Pink "motivation" video. Can you envision how your needs for Mastery, Autonomy, Purpose and Connectedness can be satisfied, to help you be motivated, productive, and happy?

Ultimately, your career goals are driven by a wish to achieve purpose – combining that which you love, that which you are good at, that which you can be paid for, and that which the world needs. Remember the diagram from class.

Don't worry if you think your career goals will change – they surely will! Career goals are something you will continually revise throughout your career. Asking about your career goals is a very common interview question for both co-op positions and employment after graduation. Your career goals also serve as a foundation for other lessons and assignments in this course.

### *Instructions for the Assignment:*

**You must submit your assignment through Blackboard (make sure you receive a digital receipt from Turnitin confirming that it was successfully submitted).**

Your paper will be assessed on how well you addressed the following components:

- Educational background and previous professional experience (if applicable)
- A well-defined path that describes how you plan to achieve your goals, including
  - Your co-op position/first job
  - Your intermediate goals (5-10 years)
  - Ultimate career goal
- Quality of writing
- Following directions
- Your paper must be 12 point font, double-spaced, 1" inch margins, 2 pages
- For the Heading: ENCP 6000, Section \_\_ Career Goals Last Name, First Name
- Number and label in **BOLD** the sections as Section 1 and Section 2 in your paper

### *Include:*

- **Section I: Educational Background & Previous Professional Experience**
  - Write the name and location of your undergraduate degree program and why you chose that degree program.
  - If you have any professional experience prior to beginning your graduate degree, please write the company name, briefly list the position(s) you held, the skills you acquired and describe how it is relevant to your future work.
  - Write the name of your current degree program at Northeastern University and why you chose this degree. If this represents a change in career direction, please explain briefly why

you made the change.

○ **Section 2: Co-op Position / First Job**

- Describe your ideal **co-op/first job** position. What is your title or role? What type of company would you like to work for (i.e., describe the products or services the company provides)? Is the company well-established (i.e., Fortune 500, start-up venture, or something in between)? How will your undergraduate and graduate education help you?
- Describe the skills, knowledge or abilities you hope to acquire while on **co-op / first job** that will prepare you for your future career. **BE SPECIFIC!!!** Consider the type of position you hope to get after graduating from Northeastern.  
(Hint: Look at a similar job description on LinkedIn or Indeed.com. What types of skills, knowledge or abilities do you need to acquire to make you a more distinguishable candidate for this position after you graduate from Northeastern?)

○ **Section 3: Intermediate Career Goal: Position 5-10 years into your Professional Career)**

- Describe your ideal **position 5-10 years into your professional career**. What is your title or role? What type of company would you like to work for (i.e., describe the products or services the company provides)? Is the company well-established (i.e., Fortune 500, start-up venture, or something in between)?
- Describe the skills, knowledge or abilities you hope to acquire in this position 5-10 years after graduate school. **BE SPECIFIC!!!** Consider the types of skills you will need to learn to reach your **ultimate career goal**. How will this position help you reach your ultimate career goal?

○ **Section 4: Ultimate Career Goal**

- Describe your ultimate professional goal (i.e. I would like to create my own software development business or I would like to become the CIO of a software application company). Include the position/title within your description.
- Describe the type of company you wish to work for. What type of products/services does the company offer? Is the company well-established (Fortune 500, start-up venture, or something in between)?
- Describe where you would like to work (i.e. United States, India, China, Brazil, etc.)
- Describe what you think will be your major responsibilities.
- Briefly describe *why* you are interested in this particular career goal.

## RESUME

Write a one page resume that conforms to the professional standards discussed in class. Your resume will be assessed on the following components:

- Contact Information: Name, address, phone, and email (must be in U.S. format). You may include a link to your LinkedIn profile, GitHub, etc.
- Summary and/or Technical Skills\*
  - Summary: Well-written narrative, no grammatical errors/typos, includes applicable skills/keywords – distinguishable!
  - Technical Skills: Relevant list of technical skills/expertise
- Education: Reverse chronological order, location, schools, correct degree (Master of Science in Information Systems), and relevant awards/honors (if applicable). **Nothing prior to college!**
- Experience: Well-written accomplishment statements (with action verbs), measurable achievements, no grammatical errors/typos, reverse chronological order, includes company location and project context (if applicable) – **accomplishments must be recent/relevant/distinguishable!**
- Format: Your resume will be evaluated on the readability of the document as well as the quality of the writing. **Your resume must not contain any grammatical errors/typos. In addition, the document must fit onto one page.**

Submit your assignment through Blackboard (make sure you receive a Turnitin confirmation from Blackboard that it was successfully submitted).

### Tips for Including Projects, Case Studies and/or Certificates

#### 1. Academic Projects and Case Studies

An **academic project** usually lasts an entire term or academic year. Typically these are either self-motivated, part of a graduation requirement, an independent study, or a capstone course. An engineering project could be defined as a collaborative enterprise, involving research or design that is carefully planned to achieve a particular aim. A case study is a documented study of a specific real-life situation or imagined scenario used as a training tool in a course or as part of your education. Students are required to analyze the prescribed cases and present their interpretations or solutions, supported by the line of reasoning and assumptions made. Make sure your academic projects and case studies are relevant, recent and distinguishable.

For an example of writing a project, look at the following:

<https://www.youtube.com/watch?v=06sSWmWG3TM>

A **case study** is a documented study of a specific real-life situation or imagined scenario, used as a training tool in a course or as part of your education. Students are required to analyze the prescribed cases and present their interpretations or solutions, supported by the line of reasoning and assumptions made. This is generally done as part of the requirements for a course, is usually wholly contained in the course,



and is presented to the class or a professor either in a report or oral presentation with back up material.

*Employers don't want to see case studies or any minor homework projects that are so small you can't really talk about them. It only makes you look more generic.* You will want to include 1-2 projects **ONLY** if they are whole semester/term projects. Omit anything half a term or less in scope. Ideally, you will have 1-3 bullets in this section that emphasize and show measurable achievement of what you did, not what the project was about. The idea here is to give the person you'll be speaking to enough information to ask a decent question. If there's not enough of the project to warrant talking about it, then skip it. These are the exact same things you should consider when you write up your work experience.

## 2. Certifications, Certificates and Credentials

There is a difference between courses taken and certifications; getting a certificate does not mean you are certified. Professional certification, trade certification, or professional designation, often called simply certification or qualification, is a designation earned by a person to assure qualification to perform a job or task. There is often a standardized examination required.

Certificates are given for completing a course, workshop, doing a good job, or completing a training session. Corporate, or "internal" certifications, are made by a corporation or low-stakes organization for internal purposes. For example, a corporation might require a one-day training course for all sales personnel, after which they receive a certificate. While this certificate has limited portability – to other corporations, for example – it is the most simple to develop. Many universities grant professional certificates as an award for the completion of an educational program. These are all a local type of recognition and are not universally recognized.

In the academic and professional world the use of credentials is common. Examples include diplomas, degrees and certifications, in order to attest to the completion of specific training or education programs that signify the successful completion of tests and exams, and to provide independent validation of an individual's possession of the knowledge, skills, and ability necessary to practice a particular occupation competently. For example: John Doe, PhD, PE. Documentation of academic and professional credentials usually consists of a formal document and the issuing institution or body usually maintains a record of the credential as well. Academic credentials are normally valid for the lifetime of the person to whom they are issued. Professional certifications are normally valid for a limited number of years, based on the pace of change in the certified profession, and require periodic recertification through reexamination, continuing professional development, or meeting other specified criteria to maintain currency.

### **Office of Career Development:**

Career Development offers lot of great FREE workshops, seminars, as well as one-on-one assistance with resumes, interviews, and job searches. Many are geared specifically for graduate students and/or international students. This is a service open to all NEU students and alumni. Take advantage of it! Visit their site to keep up on the latest happenings and events: <http://www.northeastern.edu/careers/about/>.

## POSITIONING STATEMENT

1. Write a positioning statement that describes **YOU** in terms of your experience, expertise, and unique skills and strengths. The length of time to “speak” a positioning statement is 60-90 seconds, so you need to practice speaking your statement aloud to ensure it is not too short or not too long. Submit it on Blackboard. Make sure you receive a digital receipt from Turnitin confirming that it was successfully submitted.
2. Bring your Positioning Statement to class next week. **You will be using it in class.**
3. As described in class, a positioning statement is a personal statement about you. While it is short, it can, or should, include what is special about you so that you can capture the interest of the person you are addressing. Imagine 10 students in a line at a career fair and they all say the same thing. That is not very interesting to the hiring manager, nor is it **DISTINGUISHABLE**. If you can mention a strength of yours, and maybe some special accomplishment, and connect that to either how it contributes to your career direction or why you think that what you learned will help you succeed at your next job (and perhaps the specific company if you are in a job fair situation), all of that will help you to stand out and improve your chances of making an impact. You may or may not choose to use a template like the one below. At a career fair, you should have researched any target company and as a last sentence either mention something you are interested in at the company or ask what types of opportunities may become available that fit your skills and interests.

### Positioning Statement Template:

My name is \_\_\_\_\_ and I am a \_\_\_\_\_. For the past \_\_\_\_\_ years, I have been \_\_\_\_\_. I have strong skills in \_\_\_\_\_. While I was at \_\_\_\_\_, I \_\_\_\_\_ (describe one or 2 strengths and accomplishments.) Finally, would you please provide some \_\_\_\_\_ (feedback, information, insight, etc.) regarding any positions, jobs, co-ops within your organization.

### INTERVIEW PREP ASSIGNMENT

For this assignment, write out and answer the following questions on a Word document and submit it on Blackboard. Don't forget to get a Turnitin receipt for confirmation.

*[HOT TIP:] In a real interview situation, answering these questions is what gives you the opportunity to differentiate yourself from others and become the candidate selected for the job offer. How do you win the interview? With **Preparation and Practice!!!***

1. Answer the question "Tell me about yourself?"
2. Write four (non-trivial) questions you might expect to get asked based on your resume (you do not need to answer them but think about how you would).
3. Answer two of the following questions:
  - a. What are your weaknesses?
  - b. Why should we hire you?
  - c. Why did you pursue a graduate degree and why did you select Northeastern and the major that you did?
4. Describe a time either in a job or in school when things did not go well. Write down what happened, what action you took to resolve it, and what the result was.

## LINKEDIN PROFILE

Create or update your LinkedIn profile using the guidelines discussed in class. You must include a professional picture, headline, clear career progression, connections, groups and endorsements. You must join at least three technical groups and follow at least three companies, not schools. Everything must be in English with US formatting.

Your LinkedIn Profile will be assessed on the following components:

- Professional picture: High-quality resolution, interview attire, headshot, neutral background (no distractions!)
- Headline: Personalized to student – distinguishable! (not: “MS \_student seeking co-op”). **NOTE: You will lose points for “seeking co-op”!**
- Summary: Well-written narrative, no grammatical errors/typos, includes applicable skills/keywords – distinguishable!
- Experience: Well-written accomplishment statements (with action verbs), reverse chronological order, includes company location and project context (if applicable)
- Education: Reverse chronological order, schools and correct degree (Master of Science in \_\_\_\_\_)
- Groups: Join at least three technical career related groups (Java Developers, Supply Chain Geeks, etc. You should also join Northeastern University Graduate School of Engineering Co-op)
- Companies: Follow at least three companies (not including Northeastern University or any other school)
- Endorsements: You need at least three endorsements. They can be in one skill or 3 skills

When grading the assignment, if we cannot see your picture, you will fail the assignment. Make sure you have your profile set so all can see. Never include personal information such as your home address, birth year, marital status or schooling prior to undergrad. Additionally, if you have characters other than English, you will fail the assignment. Your profile will be viewed and graded after the due date.

You may include a link to your profile on your resume.

## JOB DESCRIPTION AND COVER LETTER

*Below is a sample job description with a sample cover letter. **Both** must be submitted for this assignment. You must copy and paste the entire job description into your Word doc, not the link only.*

### **TripAdvisor Vacation Rentals Software Engineering Co-op**

TripAdvisor, the market leader in travel research, is seeking a talented Software Engineer Co-op for the Vacation Rentals team in its Boston office at North Station.

The Vacation Rentals team, a separate business unit within TripAdvisor, is building the next big product - making it easy for our customers to research and book vacation rental.

As a Software Engineering co-op, your work will encompass the key areas of execution for the Vacation Rentals business including building APIs, micro-services, web UIs, native apps, all on a PCI compliant platform. We move quickly, projects are short (in average 3 days), and you will ship features every day used by millions of people.

TripAdvisor is well known for having an extremely strong engineering organization; you will be working with the best and getting stuff done, in the fastest growing area of an incredibly profitable, growing, fun company.

### **Qualifications**

- Working towards a BS or MS in Computer Science or equivalent
- Be available for co-op January 2017- June 2017
- You have a solid foundation in data structures, OO Design with rock-solid programming skills
- You have some hands-on knowledge of Linux, Java, JavaScript and related open source technologies such as Apache, Tomcat, and MySQL
- You have strong interpersonal skills, analytical skills, combined with intellectual curiosity. A desire and ability to "get things done" are essential requirements
- You want to work in a rapidly changing, collaborative, and iterative product development environment

Your heading should match your resume heading

**SACHIN SHAH**  
**123 Broadway, Malden, MA 02148**  
[shah.s@husky.neu.edu](mailto:shah.s@husky.neu.edu) | 617-878-1234

The inside address should include the name, title and business of the company. If you know the name of the recruiter or HR individual, include it here.

Hiring Manager  
 Human Relations Department TripAdvisor LLC  
 400 First Ave  
 Needham, MA 02494

Use last name only in the greeting, also called a salutation, or title if name isn't known.

Dear Hiring Manager:

I am writing to express my interest and apply for your job listing for a Software Engineer Co-op, which I found on Northeastern's Co-op network. I am a diligent, self-motivated and analytical computer systems engineering graduate student at Northeastern University. I enjoy being challenged and working on projects that require me to work outside my comfort zone and knowledge set, while continuing to learn new languages and develop techniques that are important to gain more practical experience and add to the success of an organization.

As a computer systems engineer, My technical expertise includes cross-platform proficiency (Windows, Linux), strong foundation in programming languages (including C, C++, C#, Java, and SQL); and advanced knowledge of developer applications, tools, methodologies and best practices (including OOD, web-development using open source technologies like Apache Tomcat, Spring MVC) and engineering big-data systems. I have a strong interest in information technology and business applications. The professional experience as a mainframe developer at Accenture for one year, helped me explore the domain of the use of technology to attain business goals. As a proactive and enthusiastic developer, my tasks included analyzing functional business requirements and managing all facets of product development lifecycle which includes developing of COBOL/DB2 applications using JCLs/PROCs. My active listening skills helped in handling problems and taking improvement advice. I have been repeatedly recognized for developing innovative solutions and have received appreciation for proving credible work which resulted in leading heights of achieving targets.

TripAdvisor is well known for having an extremely strong engineering organization who believes working with the best and valuing perfection. This is what excites me about working at TripAdvisor. I have excellent time management skills that help me to define priorities and implement activities tailored to meet deadlines. I am eager to face the challenges to develop creative and innovative systems solution for TripAdvisor.

I look forward discussing about this opportunity further with you. You can contact me at 617-878-1234 or [shah.s@husky.neu.edu](mailto:shah.s@husky.neu.edu). Thank you for your time and consideration.

Sincerely,

Include a closing.

Sachin Shah

Include a space for your signature before your typed name.

The body should contain your purpose, why you are qualified and your contact information

**ETHICS CASE STUDY ASSIGNMENT**

There are two articles on Blackboard which you will use for this assignment. One is an article about the Wells Fargo scandal and the other is about the Volkswagen scandal. You can find them at Blackboard→Course Material→Engineering Ethics→Volkswagen or Wells Fargo

- If your last name begins with letters between **A – L**, do your assignment on the **Wells Fargo** case.
- If your last name begins with letters between **M – Z**, do your assignment on the **Volkswagen** case.
- You only need to do **ONE** case either Wells Fargo **OR** Volkswagen (not both).

This assignment is to read the case and answer the questions below. All ethics case material is on Blackboard under Course Material→Engineering Ethics.

Include the following sections for your case study and format your assignment accordingly:

A. *Header including:* ENCP6000, Sec. No. and Your Name

B. *Case Title*

Sample:      **ENCP6000**

**Sec. No. 2**  
**Volkswagen**

**Shah, Sachin**

C. Answer the following questions for your case:

1. In your own words, what do you feel is the one most significant or most interesting issue about this case? Explain why from an ethics perspective (3 sentences).
2. Pick two of the roles that were impacted (executive, worker, stockholder, customer, etc.).
  - a. Describe the impact the incident had on them and their lives.
  - b. Evaluate if the result was “fair” in your estimation.
  - c. Explain why you think it was “fair” or “unfair” (minimum 2 sentences for each role; 4 total).
3. What was the root cause of the scandal? What different behavior(s) could prevent it in the future? (minimum 3 sentences)

**\*\*\*Extra Credit:** 20 points on your final course grade

Imagine yourself as an employee in the company. You become aware of the unethical activities, and further find out that your co-worker friend is involved in it.

1. Write down three options for actions you might take
2. What are the advantages and disadvantages of each option. (2 sentences for each action – a total of 6 sentences)
3. What option would you choose?
4. Is it an easy or difficult choice?
5. Why did you choose it? (3 sentences)

## LEARNING OUTCOMES

**Learning Outcomes** are goals that describe how a student will be different because of a professional **learning** experience. They express the knowledge and skills you hope to gain from a co-op job **learning** experience.

You will write three learning outcomes for your co-op experience. This will require you to think and do some self-assessment. If you already have a co-op position lined up, your outcomes may be very specific and tailored to that job. If you don't have a co-op lined up, tailor them to the type of co-op job you are searching for.

When selecting your three outcomes, you should think about your career goals, what you already know, what you think you know, and what you want to know as guides for what is significant for you. Make sure the outcomes are specific, substantial, and valuable to your career progress. This exercise will help you maximize your co-op experience. You are much more likely to achieve these outcomes, learn from your experience, and receive constructive feedback from your supervisor, if you plan for it.

**\*\*\* Note: there is an extra credit section at the end which you can complete to get up to 20 extra points on this assignment \*\*\***

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**Assignment Instructions** (Also, please refer to the sample on the following pages):

Learning Outcomes should be *measurable*, *observable*, and *concrete*. Follow the S.M.A.R.T. model on the next page.

1. Ensure the header on your assignment follows the sample and includes the course and section number, assignment name, and your last name followed by your first name.
2. Number your outcomes and make the outcome **bold**, so it is clearly visible. (see the sample below)
3. Each outcome should begin with “**As a result of co-op, I will be able to ....**”
4. Select a specific action verb that captures how you will demonstrate your learning. A good learning outcome includes an action verb. The verbs should be *measurable*, *tangible* and *concrete*.
  - a. Create, design, explain, justify, critique, diagram, draw, and produce are examples of measurable action verbs to use.
  - b. Know, learn, understand, familiarize, realize, appreciate, become familiar with, etc., are not measurable, tangible or concrete and should be avoided.
  - c. See the Bloom's Taxonomy Verb List (on Blackboard→Course Material→Resume) for a list of example measurable verbs, all at different levels of achievement.
5. Use complete simple sentences.
6. After each outcome, provide a brief explanation (two to three sentences max) as to why you selected this particular outcome. You can either use bullets for each sentence or use paragraph form.

Be sure to submit your assignment through Blackboard and receive a digital receipt from Turnitin confirming that it was successfully submitted.

**\*\*\*EXTRA CREDIT (up to 20 pts):** Write an additional two Learning Outcomes up to five total. \*\*\*

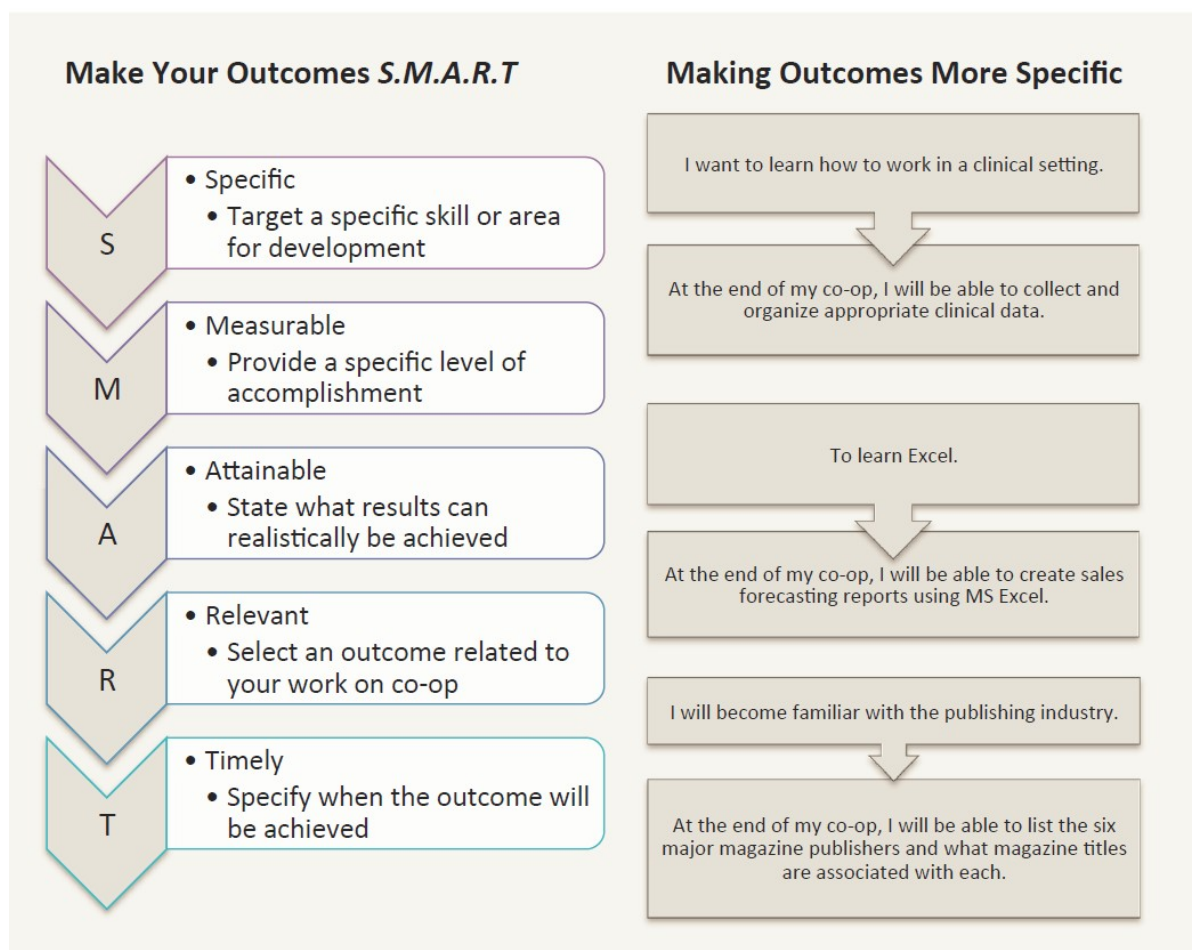
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**HINTS:**

Think about answering the question during an interview for a full time job you may get: **What did you learn on co-op?** You want to make the answer specific and non-trivial. These are things that will set you apart because you had the co-op experience. If you say “I learned how to apply the theoretical things I learned in class in a practical way.” You have said nothing and they will think you have learned nothing. If you say “I learned a growth mindset”, they will wonder why you had to go on co-op to learn that. While professional behavior and ethics are important those are expected of all employees, saying you learned them on co-op is not a selling point; it is a reason not to hire you if you don’t have them! Think about your answers to that question and you should be able to go back and write the objectives on what you will learn, based on what you anticipate saying when asked: what did you learn on co-op?

Remember they need to be measurable. You should be able to ask, as a result of co-op can I (your objective), and then point to and explain how you know that you can. Once you have achieved them they might become bullet points on your resume or LinkedIn profile because they will be measurable, tangible achievements. There are several levels of achievement of objectives. At one end is having knowledge, application requires a deeper level of achievement, and being able to synthesize things requires an even higher level. Not all learning outcomes require the same level of achievement.



**\*\*\*\*Sample Learning Outcomes Assignment\*\*\*\***

ENCP 6000, Section 02

Assignment: Learning Outcomes

Shah, Sachin

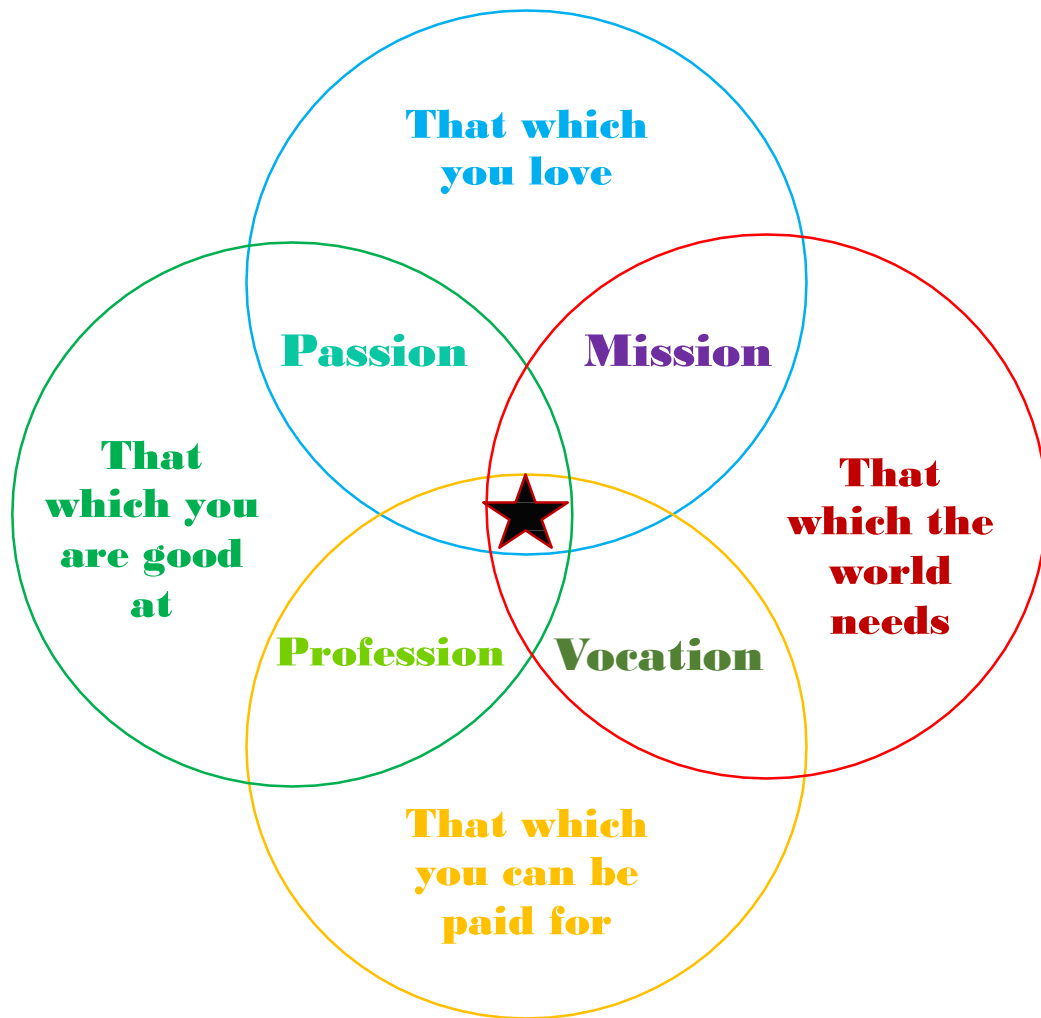
1. **At the end of my co-op, I will be able to automate some aspects of Excel, including creating Macro-driven applications and developing custom Add-ins in Excel, using VBA (Visual Basic for Applications).**
  - First, I've taught myself some knowledge about VBA and macro, but I lack practice in a real working scene. Thus, a co-op will be a great opportunity for me to practice and master VBA.
  - Furthermore, Excel is the most popular office tool and VBA is an easy yet powerful way to automate repetitive operations in Excel. Thus, VBA is a very advantageous skill to have as I expect myself to have an Analyst or Developer role in a financially related area. It is a way for me to sell myself as a "Excel Guru" and distinguish myself from other competitors in the job market.
2. **At the end of my co-op, I will be able to sketch the organizational chart for the company with whom I co-op and explain not only the relationship among different departments, but also identify their day-to-day responsibilities with a good understanding of the company's structure.**
  - I think understanding the company's structure is important, because it provides employees (me in this case) with the guidance of standard workflow and official reporting relationships among departments.
  - Secondly, since there are so many different organizational structures, co-op is a great opportunity for me to consider which type of company I want to work for in the future. Do I like a large company with hierarchical structure? Or Do I prefer a flat organizational structure? It can help me improve the possibility of finding a full-time position that is more suitable for me after graduation.
3. **At the end of my co-op, I will be able to master all software or tools my co-op role requires, ideally get corresponding certifications if available, and compare them with the mainstream tools in the industry.**
  - There are two reasons why I set this as a learning objective. First, comparing them with the mainstream tools in the industry is a way for me to adjust my working expectation per my co-op experience. It is an opportunity for me to evaluate what skills I should invest my time in and develop them further into my expertise. I can use these skills in the industry that interest me and monetize them in the long term.
  - Two, co-op is a precious opportunity for me to have some hands-on practice in a real-world working environment. It is necessary for me to master the tools and it can be an advantage for my future job hunting as well.

**\*\*\*Optional Extra Credit\*\*\***

1. **This is where your optional extra credit Outcomes 4 and 5 will go should you choose to create them.**

# Appendices

## Appendix A



 **Purpose**

## Appendix B

## Mindset Quiz

SCORE

- \_\_\_\_\_ **1. Intelligence is something people are born with that can't be changed.**  
Strongly Disagree      Disagree      Agree      Strongly Agree
- \_\_\_\_\_ **2. No matter how intelligent you are, you can always be more intelligent.**  
Strongly Agree      Agree      Disagree      Strongly Disagree
- \_\_\_\_\_ **3. You can always substantially change how intelligent you are.**  
Strongly Agree      Agree      Disagree      Strongly Disagree
- \_\_\_\_\_ **4. You are a certain kind of person, and there is not much that can be done to really change that.**  
Strongly Disagree      Disagree      Agree      Strongly Agree
- \_\_\_\_\_ **5. You can always change basic things about the kind of person you are.**  
Strongly Agree      Agree      Disagree      Strongly Disagree
- \_\_\_\_\_ **6. Musical talent can be learned by anyone**  
Strongly Agree      Agree      Disagree      Strongly Disagree
- \_\_\_\_\_ **7. Only a few people will be truly good at sports—you have to be “born with it.”**  
Strongly Disagree      Disagree      Agree      Strongly Agree
- \_\_\_\_\_ **8. Math is much easier to learn if you are male or maybe come from a culture who values math.**  
Strongly Disagree      Disagree      Agree      Strongly Agree
- \_\_\_\_\_ **9. The harder you work at something, the better you will be at it.**  
Strongly Agree      Agree      Disagree      Strongly Disagree
- \_\_\_\_\_ **10. No matter what kind of person you are, you can always change substantially.**  
Strongly Agree      Agree      Disagree      Strongly Disagree

SCORE

- \_\_\_\_\_ **11. Trying new things is stressful for me and I avoid it.**  
 Strongly Disagree Disagree Agree Strongly Agree
- \_\_\_\_\_ **12. Some people are good and kind, and some are not—it's not often that people change.**  
 Strongly Disagree Disagree Agree Strongly Agree
- \_\_\_\_\_ **13. I appreciate when people give me feedback about my performance.**  
 Strongly Agree Agree Disagree Strongly Disagree
- \_\_\_\_\_ **14. I often get angry when I get negative feedback about my performance.**  
 Strongly Disagree Disagree Agree Strongly Agree
- \_\_\_\_\_ **15. All human beings are capable of learning.**  
 Strongly Agree Agree Disagree Strongly Disagree
- \_\_\_\_\_ **16. You can learn new things, but you can't really change how intelligent you are.**  
 Strongly Disagree Disagree Agree Strongly Agree
- \_\_\_\_\_ **17. You can do things differently, but the important parts of who you are can't really be changed.**  
 Strongly Disagree Disagree Agree Strongly Agree
- \_\_\_\_\_ **18. Human beings are basically good, but sometimes make terrible decisions.**  
 Strongly Agree Agree Disagree Strongly Disagree
- \_\_\_\_\_ **19. An important reason why I do my work is that I like to learn new things.**  
 Strongly Agree Agree Disagree Strongly Disagree
- \_\_\_\_\_ **20. Truly smart people do not need to try hard.**  
 Strongly Disagree Disagree Agree Strongly Agree

**TOTAL Side 1** \_\_\_\_\_ **+** **TOTAL Side 2** \_\_\_\_\_ **= TOTAL** \_\_\_\_\_

Adapted from:

McKenzie, K. (2013). Developing a growth mindset: The secret to improving your grades. [PowerPoint slides]. *Academic Success Summit Program*. East Stroudsburg University, East Stroudsburg, PA. Retrieved from [http://www4.esu.edu/academics/enrichment\\_learning/documents/pdf/developing\\_growth\\_mindset.pdf](http://www4.esu.edu/academics/enrichment_learning/documents/pdf/developing_growth_mindset.pdf)

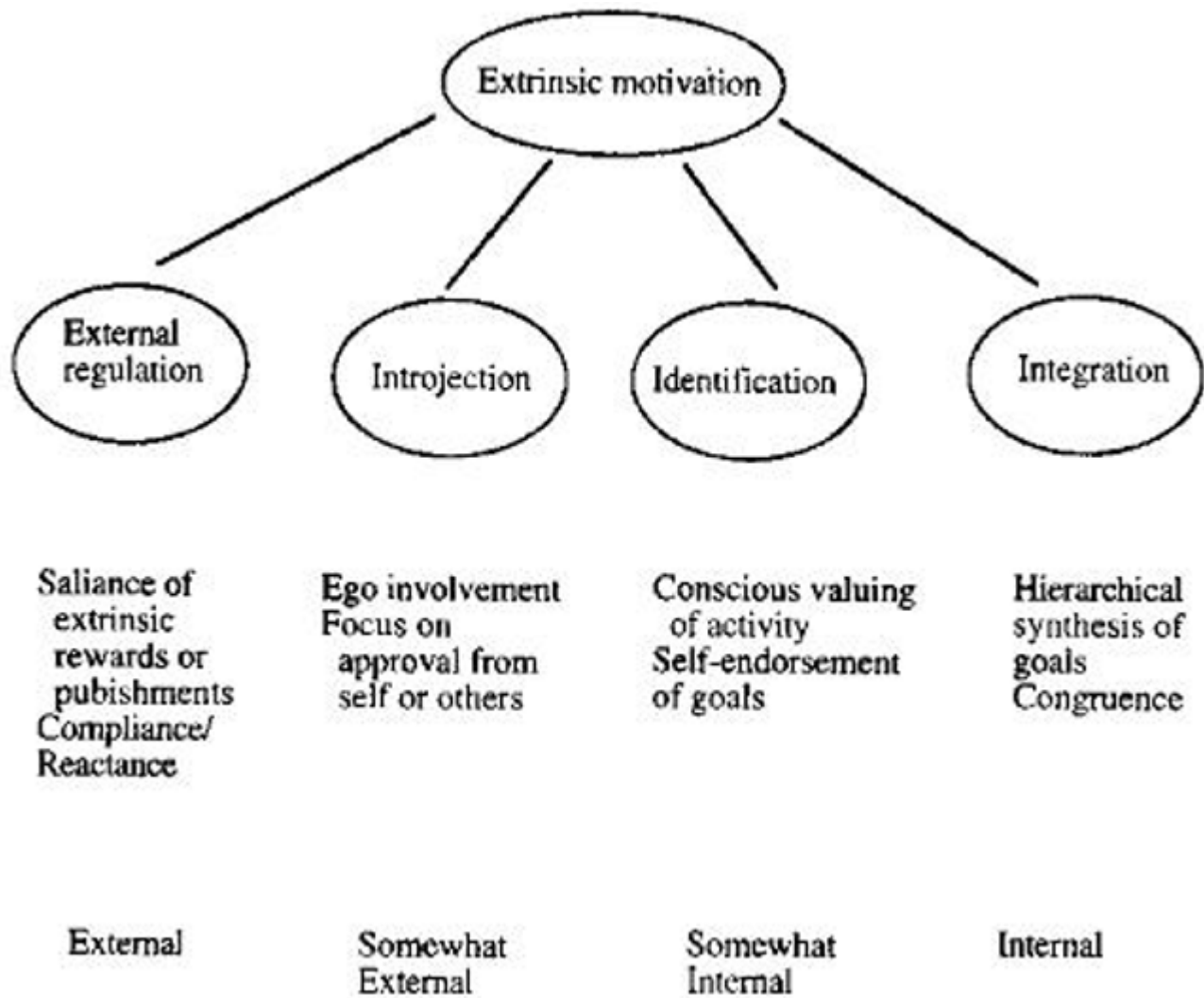
## Appendix C

## GRIT Quiz

## HOW GRITTY ARE YOU?

	Not at all like me	Not much like me	Some- what like me	Mostly like me	Very much like me
1. New ideas and projects sometimes distract me from previous ones.	5	4	3	2	1
2. Setbacks don't discourage me. I don't give up easily.	1	2	3	4	5
3. I often set a goal but later choose to pursue a different one.	5	4	3	2	1
4. I am a hard worker.	1	2	3	4	5
5. I have difficulty maintaining my focus on projects that take more than a few months to complete.	5	4	3	2	1
6. I finish whatever I begin.	1	2	3	4	5
7. My interests change from year to year.	5	4	3	2	1
8. I am diligent. I never give up.	1	2	3	4	5
9. I have been obsessed with a certain idea or project for a short time but later lost interest.	5	4	3	2	1
10. I have overcome setbacks to conquer an important challenge.	1	2	3	4	5

## Appendix D



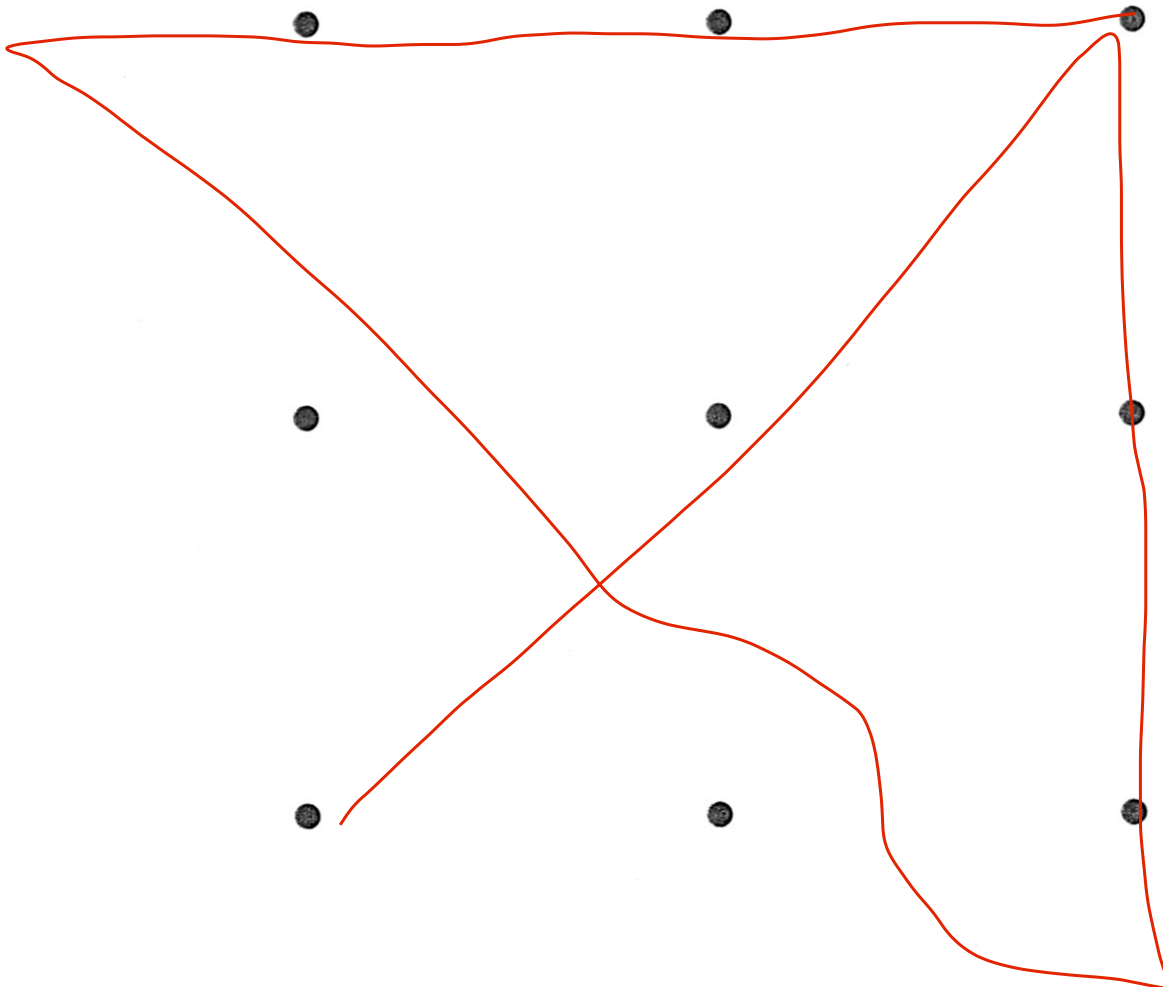
From: Ryan and Deci, "Intrinsic and Extrinsic Motivations: Classical Definitions and New Directions", Contemporary Educational Psychology, 25, p. 61 (2000)



## Appendix E

**Nine Dot Exercise**

Connect all nine dots with four straight lines, without lifting the pencil off the page, and without retracing over any of the lines.



## Appendix F

## Interview Planning Worksheet

SKILL	Where Acquired	Illustration/Anecdote	How it Might Apply

## Appendix G

## Diversity Ice Breaker

Category	Examples