Université d'Ottawa
Faculté de génie

École de science informatique
et de génie électrique

uOttawa
L'Université canadienne
Canada's university

University of Ottawa
Faculty of Engineering

School of Electrical Engineering
and Computer Science

ELG 5301 [H] Professional Skills and Responsibility
Fall 2024

Professor:

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1 – COURSE DESCRIPTION

ELG 5301 [H] Professional Skills and Responsibility (3 units)

Students work in teams (peer groups) to complete hands-on projects and online learning modules to build their professional network and develop their careers; understand their responsibilities as professionals; and develop professional skills with a focus on communication, team leadership, and project management. Fundamentals of technical team-based projects including problem definition, research, planning and how to write a technical project proposal. Required modules on academic writing, plagiarism and conducting a literature review.

Course Components: Lecture, Tutorial.

2- LEARNING OBJECTIVES.

Upon successful completion of this course, students:

a. Will be able to build and enhance their professional networks.
b. Will understand trends in the engineering job markets and will develop their career plans.
c. Will understand the meaning of professional responsibilities.
d. Will be able to communicate professionally.
e. Will be able to lead groups and teams.
f. Will be able to manage projects.

3 – PREREQUISITES

No course prerequisites.

4 – COURSE SCHEDULE, all times, dates, rooms are avaible at the course schedule

Lectures: Online, using **ZOOM.**

Time: Tuesday (Lectures): 8:30-11:20 Am, *first lecture will be on Sep 10th, 2024*.

Zoom link for this course is available at ELG 5301 [H] course Brightspace.

Students will meet three professors teaching ELG/GNG5301 course, as well as distinguished guest speakers on certain topics related to course Syllabus, grading, Engineering practice, Professional Development Pre-Employment Preparation, Research Skills for Engineers.

All ELG 5301 H 00 students will attend the same Tuesday Online session.

All course content, lectures, assignments and announcements will be timely posted on Brightspace. All Lecture sessions will be recorded and shared. This will allow students residing at different Time Zones to listen to recorded sessions.

Tutorials:

Students enrolled in ELG 5301 H00 are also enrolled either in

1: ELG 5301 H01 On campus Tutorial

Date: Wednesday, Time: 10:00AM –11:20AM.

Frequency: Weekly, starts on Sep 11th, 2024.

Location: 129 Louis Pasteur (LPR), 286.

2: ELG 5301 H02 Virtual Tutorial

Date: Thursday, Time:10:00 AM- 11:20AM.

Frequency: Weekly, starts on Sep 12th, 2024.

Location: Online, zoom links are available at your course Brightspace.

5 – COURSE CONTENT

The course includes a series of workshops related to professional development. Guest speakers on special topics will contribute to the course. Students will work in teams (peer groups) to complete hands-on and online learning modules. This includes professional development, projects design, and team-building activities sponsored by the Faculty of Engineering as well as the University Career Centre.

The course also includes a Research Skills for Engineers (RSFE) module that is unique to this course. It will be offered by a team of uOttawa Librarians using a separate Brightspace environment that they manage to provide access to resources, assignments, quizzes, etc. The RSFE module also include resources related to academic writing, plagiarism, and literature reviews.

6 – COURSE LOGISTICS

All course information, materials, and announcements will be posted on **Brightspace**. All lecture sessions will be recorded for the benefit of all registered students.

7 – COURSE MATERIALS

The course syllabus is posted on **Brightspace** under **Content > Course Information**. It provides detailed information on week-by-week course activities. All assignments are posted under the **Assignment** tab on the main page of **Brightspace**.

8 - PEER GROUPS

Interpersonal Leadership is imperative part of Professional Development. The concept of Peer Group Evaluation is practiced in this course for exercising Interpersonal Communication and Collaboration Skills. Consequently, students can realistically develop the Interpersonal Leadership for successful exposure to Professional Environment.

- All students are assigned to Peer groups on **Brightspace.** Please check the group members in **Brightspace > Groups.**
- Every Peer group is led by a **Peer Group Coordinator**; each group will elect a **Peer Group Coordinator** by collaborating with the members.
- One **Direct TA** will be assigned on each Peer Group to mentor the group members.
- Every week, every TA will work with his TUT group coordinators to discuss weekly assignments (Personal, or Peer groups).

- **Peer Assessment** (please see the Deliverables section at **page 8**) is the part of this course where members will evaluate assignments of each other to reflect their ability of Professional Integrity and Discernment. Peer Assessment (Peer Feedback) is a form of evaluation where peers grade each other following a set of guidelines & grading matrix.
  This assessment style will be used in this course for the Peer group evaluation where each member of the group will evaluate other peer group members assignment to reflect their ability of Professional Integrity and Discernment. The grading matrix for the Peer group assignments evaluation will be described in the class. **For any peer group, a Maximum grade of 100% can be awarded to maximum one exceptional student only and a grade of 80% can be awarded to maximum one student only**. For the peer group evaluation there must be a justification for each peer group member's grading.
- Peer group assignments will be graded following a Grading Matrix that will be described in the class.
- Weekly announcements will be posted frequently on Brightspace.
- Microsoft (MS) team will be used to facilitate peer groups communications.

9- ASSINGMENTS

Course assignments are organized in two categories as follows:

a) Personal assignments
b) Peer group assignments

Note: 10% detection will be applied for any delayed submission.

Please refer to the Deliverables section for additional information on course assignments & please note that a 10% penalty will be applied for any delayed submission of assignments.

10- FINAL EXAMINATION

The final Exam will be a take home exam to prepare your Final Project. Final Project is a written technical project, following engineering standards templates IEEE where every student needs to describe the project in his/her own words reflecting technical writing skills. Final Project Presentation is verbal presentation, prepared as group.

11- COURS GRADING

Students will be evaluated according to what is indicated in the Deliverables section and according to the following components:

a. Attendance & personal course task completion 65%.
b. Peer groups evaluation 35%.
c. Written IEEE Report (10) + IEEE Peer Group Feedback (6) + Final Presentation (10) = 26% will not be posted on Brightspace.
d. Students will be able to access their final grads on uozone.

12- PASSING GRADE

The passing grade is 70%. Students must attend the final presentation, and present on their contribution to the final project. On campus students must present on site, online students must present online.

13 – ATTENDANCE AND CLASSROOM ETIQUETTE

Either in-person or remote attendance to lectures and tutorials is mandatory. *As per Faculty of be allowed to write the final examination.*

Mobile /intelligent phones and other communication devices must be turned to silent during in-person or remote lectures and tutorials.

Cameras must be turned on during remote lectures and tutorials.

14 – COURSE-SPECIFIC POLICIES

Late work

Late assignment submissions are allowed only for one week after the posted due date. Moreover, a 10% detection will be applied for any delayed submission. Requests for grade amendments will only be considered if they are submitted within two weeks of the grades being posted on **Brightspace**.

15 – GENERAL POLICIES

All components of the course (i.e., laboratory reports, assignments, etc.) must be fulfilled; otherwise, students may receive an EIN as a final mark (equivalent to an F). This is also valid for a student who is taking the course for the second time.

Information on academic fraud can be found at this link:

https://www.uottawa.ca/vice-president-academic/academic-regulations-explained/academic-fraud.

Students are to become familiar with the Faculty of Engineering rules and regulations; you may refer to them if you happen to miss an exam. These are within the University of Ottawa's regulations sections 9.4, 9.5, 9.6, 14.2 and 14.3, which define conduct during an examination, academic fraud, the sanctions and the decision and appeal processes: https://www.uottawa.ca/administration-and-governance/policies-and-regulations.

Students are to familiarize themselves with the University of Ottawa's policy on plagiarism (http://web5.uottawa.ca/mcs-smc/academicintegrity/home.php). This policy will be strictly enforced in this course.

Important dates and deadlines for the academic year can be found at the following link: http://www.registrar.uottawa.ca/Default.aspx?tabid=2671.

Several resources from the Faculty of Engineering can be found at the following link: https://www.uottawa.ca/en/students.

16 – PRELIMINARY SCHEDULE OF ACADEMIC ACTIVITIES

Week	Tuesdays, LEC Online	Wednesdays, TUT, On campus	Thursdays, TUT, Virtual
1: Sep 10, 11, 12	Course Introduction, Syllabus	Introduction, Peer groups & Peer Coordinators Grading, SWOT analysis	Introduction, Peer groups & Peer Coordinators Grading, SWOT analysis
2: Sep 17, 18, 19	Job Search ,Engineering Practic and Key Concepts in Engineering Management	Job Search Techniques, G&G module	Job Search Techniques, G&G module
3: Sep 24 , 25, 26	CEED Training	RSFE introduction, PDC presentation	RSFE introduction, PDC presentation
4: Oct 1, 2, 3	Career Planning	Career Planning	Career Planning
5: Oct 8, 9, 10	IEEE Report Standards Workshop & Technical Pitch	Projects List / groups	Projects List / groups
Reading week: October 13-19	No classes	No classes	No classes
6: Oct 22, 23, 24	Research skills for Engineers (uOttawa Library), Resume writing	Resume critiques, Makerspace tour	Resume critiques, Makerspace tour
7: Oct 29, 30, 31	LinkedIn Learning	LinkedIn Learning Workshop (Technical) Online	LinkedIn Learning Workshop (Technical) Online
8: Nov 5, 6, 7	Interview Skills	Mock Interview Workshop	Mock Interview Workshop
9:Nov 12, 13, 14	Technical Pitch	Technical Pitch	Technical Pitch

10: Nov 19, 20, 21	Industry Panel	Technical Pitch	Technical Pitch
11: Nov 26, 27, 28	ELG/GNG/DTI 5902 Industry Project	LinkedIn Learning Workshop (Professional) Online	LinkedIn Learning Workshop (Professional) Online
12: Dec 3, 4, 5	Final Presentation 1	Final Presentation 2	Final presentation 3

17- Deliverables:

Due Week	Personal Deliverable	Grade%	Peer Assessment	Grade%
W1:	Personal SWOT Analysis	3	Peer Feedback	5
W2:	G&G module	3	Peer Feedback	0
W3:	Job Search Report	3	Peer Feedback	8
W4:	Career Plan Report	3	Peer Feedback	8
W5:	Proof of Completion of assignment for CEED Training & Attendance	5	Peer Feedback	0
W6, 7:	Research Skills for Engineers	7		
W8:	Resume Writing	6	Peer Feedback	8
W9:	LinkedIn Learning -Technical	4	Peer Feedback	0
W10A:	Mock Interviews	4		
W10B:	Technical pitch	3		
W11:	LinkedIn Learning - Professionalism	4	Peer Feedback	0
W12:	IEEE report	10	Peer Feedback	6
W13, 14:	Final presentation	10		
Total		65		35