ENG SCI 9701 – Business Acumen

Course Outline, Summer 2019

Objectives

Designed for research students, this course is designed to develop literacy in the basic concepts of business. Discover a broad range of business subjects while learning the fundamentals. ‘Speak the language’ of top management. Find out about current events in the business news, and why they are relevant to you as a research engineer. Learn when to follow, and when to lead. Be effective in the workplace.

The topics for this course were selected as they address the most immediate ways in which research engineers ‘work with the business’. We begin with interpreting financial statements, and ‘following the money’. We then explore business strategy and long-term sustainability, followed by market planning and appealing to customers. Following this, we examine how decisions are actually made within organizations, why business processes are the way they are, and how to improve them.

This in turn leads to exploring how to implement strategy and apply processes that support innovation, and how to get commitment to change. We then discuss leadership: who leads best? How do they do it? How can the research engineer lead? What are the ‘hot topics’ in the workplace today, and the major trends that will affect business in the future? Bring your ideas. Let’s emulate the senior management workplace.

Topics by Module:

1. Financial statements: interpreting statements of financial position; profit and loss; changes in equity; cash flows; annual reports, including management discussion & analysis, operational indicators
2. Financial statements: continued
3. Business strategy: setting and applying organizational strategy; connecting strategy with daily operating activities; business sustainability, including economic profit, social value, environmental accountability
4. Market planning: market analysis; regulatory and competitive environments; differentiation; customer segmentation and promotion strategies
5. Organizational structures: types of organization; how decisions are made within organizations
6. Operations management: business processes and process improvement; adding value
7. Innovation: understanding of organizational processes that support innovation; opportunity management; obtaining commitment to change
8. Leadership: being effective; focusing on contribution; leading oneself, teams and organizations; negotiation; cognitive biases and reducing risk
9. Understanding business events: topical issues in the business press
10. Hot Topics: labour law; gender, race, religion, and disability; diversity, equity, and fairness; ‘dressing for success’; intercultural competencies
Prerequisites

This course is open to any PhD student at any stage of the program.

Instructor:

Section 001: David Sumpton dsumpton@uwo.ca
- Office hours: by appointment in person. Telephone or video conference meetings may be scheduled.

Contact Hours & Schedule:

Contact hours: 3 hours per class X 10 modules
- Tuesdays and Thursdays, 8:30 – 11:30 am, July 23 – August 22, room SEB 1200

Textbook:

No required text.

Course Materials:

- Essential readings are provided in OWL, including cases.
- Readings from literature and the business press may also be assigned.

Evaluation:

The final course mark is determined as a Pass/Fail. Full and prepared contribution to each session results in a Pass. After the second week, the instructor will provide insights on your progress as appropriate, intended to help you sustain your preparation, contribution and interest in the course.

Non-attendance without significant extenuating circumstances will result in a Fail, as will poor preparation, disruptive behaviour or other counterproductive activity.

As a general guide to preparation and contribution, think about:

- The skills which a Doctoral level student, on graduation from their program, would demonstrate: http://www.tcu.gov.on.ca/pepg/programs/oqf/certificate13.html
- Who leads best? How do they do it?
- What are the major forces and trends that affect business and organizations?
- How might the research engineer effectively contribute?
Scholastic Offences:

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:
http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf

Plagiarism:

University policy states that plagiarism, defined as the “act or an instance of copying or stealing another’s words or ideas and attributing them as one’s own.” (excerpted from Black’s Law Dictionary, West Group, 1999, 7th ed., p. 1170) is a scholastic offence. In submitting any written work as part of the coursework requirements for this course students must ensure that this work is written in their own words. Whenever students take an idea or a passage of text from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

A student who is found guilty of plagiarism in respect of any written work submitted as part of the coursework requirements for this course will be given a grade of zero for the submitted work. Repeated acts of plagiarism, either in this course or any other course subsequent to a first offence, will result in the student being given a failing grade for the course in which the subsequent offence occurs, and may also incur further penalties such as requiring the student to withdraw from the program in which they are enrolled in.

Attendance:

Any student who, in the opinion of the instructor, is absent too frequently from class, laboratory, or tutorial periods will be reported to the Dean (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean, the student will be debarred from taking the regular final examination in the course.

Accessibility:

Please contact the course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.
Conduct:

Students are expected to arrive at lectures on time, and to conduct themselves during class in a professional and respectful manner that is not disruptive to others. Late comers may be asked to wait outside the classroom until being invited in by the Instructor. Please turn off your cell phone before coming to a class, tutorial, quiz or exam.

On the premises of the University or at a University-sponsored program, students must abide by the Student Code of Conduct:
http://www.uwo.ca/univsec/board/code.pdf

Sickness and Other Problems:

Students should immediately consult with the Instructor or Department Chair if they have any problems that could affect their performance in the course. Where appropriate, the problems should be documented (see attached). The student should seek advice from the Instructor or Department Chair regarding how best to deal with the problem. Failure to notify the Instructor or Department Chair immediately (or as soon as possible thereafter) will have a negative effect on any appeal.

For more information concerning medical accommodations, please see:
http://www.uwo.ca/univsec/handbook/appeals/accommodation_medical.pdf

Notice:

Students are responsible for regularly checking their email, and the course OWL site for notices related to the course.