

# ARTS AND SCIENCE: INTERDISCIPLINARY (ASCX)

### **ASCX 150 Learning and Working in a Digital World Units:** 3.00

The future is uncertain. Information is expanding at an exponential rate. Jobs that were formerly done by humans are being taken over by artificial intelligence and automation. This course will ask what it means to be a human learner and worker in a rapidly changing digital world. Students will develop a transferable and flexible toolbox of skills. NOTE Also offered at Bader College, UK (Learning Hours may

Learning Hours: 120 (12 Seminar, 12 Group Learning, 48 Online Activity, 48 Private Study)

Requirements: Prerequisite Registration in an Arts and Science Degree Program. Equivalency ASCX 101/3.0\*. Offering Faculty: Faculty of Arts and Science **Course Learning Outcomes:** 

- 1. Understand how knowledge is created and what ethical obligations we have to the preservation and dissemination of knowledge.
- 2. Work in effective teams, exemplifying collaboration and cooperation.
- 3. Be aware of intercultural difference and apply principles of equity and inclusion.
- 4. Implement a productive and healthy writing practice.
- 5. Establish frameworks getting things done in ways that support curiosity, motivation, and focus.
- 6. Evaluate the fair and accurate presentation of qualitative and quantitative information and argumentation.

### ASCX 200 Dean's Changemaker Challenge: Collaborative **Problem Solving Units: 3.00**

This course is part of the Dean's Changemaker Challenge. It is dedicated to preparing students to identify -a real- world problem and to implement their solution to a problem. Successful completion of this course will provide access to ASCX 300 where students will have the opportunity to execute on the real-world implementation of their solution. Learning Hours: 120 (36 Seminar, 24 Group Learning, 24 Online Activity, 36 Private Study)

**Requirements:** Prerequisite Level 2 or above and registration in an Arts and Science Degree Plan. Exclusion ENIN 200/3.0. Offering Faculty: Faculty of Arts and Science

### **Course Learning Outcomes:**

- 1. Apply new approaches to solving business and social problems.
- 2. Demonstrate active listening skills in order to articulate effective communication, consider perspectives on diverse issues and improve the relevance and efficacy of proposed solutions.
- 3. Design, develop and pitch a Minimum Viable Product that can be presented to key stakeholders.
- 4. Differentiate between various approaches to corporate and social innovation, including public sector and social service innovation.
- 5. Gather, organize, and summarize information necessary to reframe a design problem as an entrepreneurial opportunity.



## ASCX 300 Dean's Changemaker Challenge: Implementation Strategies Units: 3.00

This course is part of the Dean's Changemaker Challenge. Students from this course will have successfully completed ASCX 200 to advance into ASCX 300. The course is dedicated to the implementation of their solution to a problem (identified in ASCX 200). The majority of work done in this course will be group work in an interdisciplinary team.

**Learning Hours:** 120 (36 Seminar, 36 Group Learning, 24 Online Activity, 24 Private Study)

**Requirements:** Prerequisite ASCX 200/3.0 and registration in an Arts and Science Degree Plan. Exclusion CHEE 302/3.5.

Offering Faculty: Faculty of Arts and Science

**Course Learning Outcomes:** 

- 1. Apply new approaches to solving business and social problems.
- Demonstrate active listening skills in order to articulate effective communication, consider perspectives on diverse issues and improve the relevance and efficacy of proposed solutions.
- 3. Design, develop, and pitch a Minimum Viable Product that can be presented to key stakeholders.
- 4. Differentiate between various approaches to corporate and social innovation, including public sector and social service innovation.
- Gather, organize, and summarize information necessary to reframe a design problem as an entrepreneurial opportunity.

### ASCX 400 Interdisciplinary Client-based Project Units: 3.00

Multi-disciplinary teams of engineering, commerce, law, science, social science, and humanities students undertake consulting projects with industrial, government and not-for-profit clients. Projects will encompass topics based on societal and industry interests (such as social innovation, process improvement, business strategy, environment etc.). **Learning Hours:** 120 (36 Tutorial, 24 Group Learning, 24

**Learning Hours:** 120 (36 Tutorial, 24 Group Learning, 24 Online Activity, 36 Private Study)

**Requirements:** Prerequisite Level 4 or above and permission of the Instructor. Exclusion APSC 401/4.5. **Offering Faculty:** Faculty of Arts and Science

#### **Course Learning Outcomes:**

- 1. Apply principles of design and problem solving to address problems posed by clients.
- 2. Build and implement a plan that effectively uses time and resources to solve a problem.
- 3. Demonstrate a reflective understanding of new information and knowledge gained in the context working with an external organization.
- 4. Demonstrate professional written and oral communication skills.
- 5. Work effectively in a multidisciplinary team to solve a problem.



#### ASCX 401 Sustainable Impact Units: 3.00

The course will follow an inquiry-based approach in a crossdisciplinary setting where students will focus on a preidentified social, economic or environmental issue. Together, students will collaboratively explore sustainability challenges while at the same time, further developing their knowledge, skills, and attributes needed for the future.

**Learning Hours:** 118 (24 Lecture, 36 Tutorial, 30 Group Learning, 8 Off-Campus Activity, 20 Private Study) Requirements: Prerequisite Level 4 or above. Offering Faculty: Faculty of Arts and Science

**Course Learning Outcomes:** 

- 1. Articulate relationships between their existing disciplinary skills and approaches from other disciplines.
- 2. Display professional skills (such as problem solving, written and oral, collaboration, consultation) using ethical and socially responsible practice.
- 3. Evaluate relevant research methods, tools, and techniques and appropriately apply them in their area(s) of research and scholarship.
- 4. Demonstrate a reflective understanding of new information and knowledge gained in the context of working with an external organization.
- 5. Collaboratively conceptualize, research, analyze, create and present recommendations and proposed solutions to complex projects.