

FOR APPROVAL	PUBLIC	OPEN SESSION
то:	UTM Academic Affairs Committee	
SPONSOR: CONTACT INFO:	Professor Rhonda McEwen, Vice-Principal Academic & Dean	
PRESENTER: CONTACT INFO:	Professor Heather Miller, Vice-Dean, Teaching & Learning vdteachlearn.utm@utoronto.ca	
DATE:	May 2, 2022 for May 9, 2022	

### AGENDA ITEM:

### **ITEM IDENTIFICATION:**

Minor Modification: Undergraduate Curriculum Changes: Humanities, Sciences and Social Sciences, UTM

### JURISDICTIONAL INFORMATION:

4

Under section 5.6 of its terms of reference, the Academic Affairs Committee is responsible for major and minor modifications to existing degree programs.

### **GOVERNANCE PATH:**

• UTM Academic Affairs Committee [for approval] (May 9, 2022)

### **PREVIOUS ACTION TAKEN:**

Minor undergraduate curriculum changes in the Humanities, Sciences and Social Sciences for the 2022-23 academic year were approved by the Academic Affairs Committee in September of 2021 and in January 2022.

### **HIGHLIGHTS**:

The Curriculum Reports are comprised of Minor Modifications to existing undergraduate programs. These curricular changes are intended to have significant positive effects on a cumulative basis, but are considered to be minor changes in the context of the UTQAP. It is important to note that the changes brought forward at these meetings will come into effect during the 2023-2024 Academic Year.

The enclosed reports represent the proposed changes from the March 2022 meetings of the Decanal Divisional Undergraduate Curriculum Committees for Humanities, Social Sciences, and

Sciences. These curriculum committees consist of the Chairs, Associate Chairs, or Chair's designates of each UTM Department and Institute. Each of the attached curriculum reports are organized by academic unit and then sub-divided based on the type of change(s) being proposed.

Resource implications for all proposed changes were reviewed by the Resource Implications Committee within the Office of the Dean. These curriculum reports reflect all approved resource requests. Where required, library resources have been discussed and approved by the Hazel McCallion Academic Learning Centre (HMALC).

### Humanities Divisional Undergraduate Curriculum Committee

The Humanities Divisional Undergraduate Curriculum Committee report summarizes changes made to 6 programs and 61 courses. Of these course changes, academic units in the Humanities are looking forward to introducing 14 new courses in 2023-2024 along with 21 course modifications and 26 course retirements. From the new course offerings, highlights include new courses in Chinese Linguistics (LIN375H5 *Chinese Linguistics* and LIN475H5 *Special Topics in Chinese Linguistics*, which speaks to the new Chinese Linguist hire in the Department of Language Studies. In the Department of Visual Studies (DVS), two new courses in Cinema Studies (CIN210H5 *Contemporary Southeast Asian Cinemas* and CIN408H5 *Potential Cinema: Theories, Visions, and Practices of Decoloniality from East to Southeast Asia*) will help to build the course options available in their major program, which was introduced in Fall 2021. Additionally, a full-year internship (DVS410Y5 *Internship in Visual Studies*) is being launched in DVS. This course is expected to replace their half-term internship course and facilitate a richer experiential learning experience and allow for better understanding of workplace rights and responsibilities and employment laws.

Across the Humanities and Social Sciences, the Institute for the Study of University Pedagogy (ISUP) has proposed four (4) new courses. The first, ISP200H5 *Advanced Writing for University and Beyond*, will be a continuation of the existing ISP100H5 Writing for University and Beyond for students looking to further advance their writing and reading skills. The other three courses are special topics courses at the 200-, 300-, and 400-level (ISP250H5, ISP350H5, and ISP450H5) to provide some flexibility for ISUP faculty to develop and test new courses.

### Sciences Divisional Undergraduate Curriculum Committee

Changes proposed in the Sciences Divisional Undergraduate Curriculum Committee and reflected in the corresponding report include 11 program changes along with 44 course changes, of which 14 are new courses, 28 are modifications to existing courses, and 2 are course retirements/ deletions. Highlights from the Sciences include the introduction of three (3) joint linguistic courses from the Departments of Language Studies and Psychology. These three courses (JLP384H5 *Speech Communication*, JLP388H5 *Bilingualism & Multiple Language Acquisition*, and JLP481H5 *Topics in Developmental Psycholinguistics*) highlight the intersecting work of linguists in the Department of Language Studies and cognitive scientists in the Department of Psychology and its natural synergies. These courses will be taught by faculty in both departments and be open to students in both Linguistics and Psychology. The Department of Psychology is additionally introducing a new Neuroimaging Laboratory course (PSY368H5)

as well as a topics course in well-being (PSY424H5). The Department of Mathematical & Computational Sciences (MCS) is splitting two 100-level full-year math courses (MAT137Y5 Calculus and MAT157Y5 Analysis I) into half-credit courses to give the unit and students greater flexibility and options in scheduling and programming. MCS is also introducing new special topics courses in Computer Science (CSC397H5) and Robotics (CSC496H5) to respond to increased interest in these fields and enrolments in these courses and programs.

### Social Sciences Divisional Undergraduate Curriculum Committee

In the Social Sciences, 1 program change was proposed along with 21 course changes (3 new courses; 12 course modifications; and 6 course retirements). Noteworthy changes include the introduction of three (3) new courses (POL404H5 *Political Theory for the Present*, POL406H5 *Insurgents, Criminals and Warlords*, and POL414H5 *The Future of Work*) and the retirement of six (6) courses in the Department of Political Science, reflecting phase 1 of a curricular overhaul within the Department. Additional highlights are the four (4) new courses from ISUP discussed in the Humanities Divisional Undergraduate Curriculum Committee section above.

### **RECOMMENDATION:**

Be It Resolved,

THAT the proposed Humanities, Sciences and Social Sciences undergraduate curriculum changes for the 2023-24 academic year, as detailed in the respective curriculum reports, be approved.

## **DOCUMENTATION PROVIDED:**

- Humanities Curriculum Report
- Sciences Curriculum Report
- Social Sciences Curriculum Report



# University of Toronto Mississauga

Humanities Curriculum Proposals Report Meeting Date: March 8 2022

## Contents

Contents	2
English and Drama (UTM), Department of	3
3 Minor Program Modifications:	3
Historical Studies (UTM), Department of	5
1 Course Revival:	5
8 Course Modifications:	6
26 Retired Courses:	11
Language Studies (UTM), Department of	14
5 New Courses:	14
12 Course Modifications:	18
3 Program Revisions:	23
Study of University Pedagogy (UTM), Institute for the	27
4 New Courses:	27
Visual Studies (UTM), Department of	31
5 New Courses:	31

## English and Drama (UTM), Department of

3 Minor Program Modifications:

### Canadian Studies - Minor (Arts)

### **Completion Requirements:**

- 1. 4.0 credits are required, fulfilling the following requirements:
- 2. 2.0 credits in at least two different subject areas from the following list: ENG215H5 or ENG252Y5 or ENG255H5 or ENG274H5 or ENG352H5 or ENG353Y5 or ENG354Y5 or ENG357H5 or ENG361H5 or ENG362H5 or ENG392H5 or ENG393H5 or GGR202H5 or HIS261H5 or (HIS262H5 or HIS263Y5) or HIS358H5 or [POL214Y5 or (POL215H5 or POL216H5)].
- 3. 2.0 additional credits (at least 1.0 of which must be at the 300/400 level) from courses listed above that have not already been applied towards the requirements for the Minor Program in Canadian Studies or approved by the program advisor.

### Rationale:

Added ENG357H5 because the course is similar in content to the other courses listed.

Resource Implications:

### Dramaturgy and Drama Studies - Major (Arts)

### Description:

Dramaturgy and Drama Studies (DDS) integrates creative and scholarly approaches to theatre through a common emphasis on dramaturgy. In addition to specific courses in developmental and production dramaturgy, the DDS program includes courses that examine theatre history, dramatic literature, critical theory, playwriting, devising, and intermedial performance, among others. DDS provides students with first-rate academic experience and credentials, while offering them ample opportunities for creative application of acquired knowledge and skills through practical components and practice-based research projects. All courses are taken at U of T Mississauga (UTM). Any courses taken outside of UTM should be pre-approved for credit by the Director of Drama Studies and the Undergraduate Advisor on a course-by-course basis.

### **Completion Requirements:**

7.0 credits are required, as follows:

- First and Second Years: (DRE121H5 or DRE/ENG121H5) and (DRE122H5 or ENG122H5) and DRE200H5 and DRE222H5
- Higher Years: 1.0 DRE at the 300 level and 4.0 credits from the drama-related courses, at least 1.0 at the 300+ level.

### Rationale:

We added CIN206H5 and VCC427H5 because the course is similar to our drama related courses listed.

Resource Implications:

### Dramaturgy and Drama Studies - Minor (Arts)

### **Description:**

Dramaturgy and Drama Studies (DDS) integrates creative and scholarly approaches to theatre through a common emphasis on dramaturgy. In addition to specific courses in developmental and production dramaturgy, the DDS program includes courses that examine theatre history, dramatic literature, critical theory, playwriting, devising, and intermedial performance, among others. DDS provides students with first-rate academic experience and credentials, while offering them ample opportunities for creative application of acquired knowledge and skills through practical components and practice-based research projects. All courses are taken at U of T Mississauga (UTM). Any courses taken outside of UTM should be pre-approved for credit by the Director of Drama Studies and the Undergraduate Advisor on a course-by-course basis.

### **Completion Requirements:**

4.0 credits are required, as follows:

- First and Second Years: (DRE121H5 or DRE/ENG121H5) and (DRE122H5 or ENG122H5) and DRE200H5 and DRE222H5
- Higher years: 300/400 DRE credit and 1.0 further DRE from the drama-related courses.

### Rationale:

We added CIN206H5 and VCC427H5 because the course is similar to our drama related courses listed.

### **Resource Implications:**

## Historical Studies (UTM), Department of

### 1 Course Revival:

### CLA320H5: The Etruscans

### Description:

A close study of the history, culture, society, religion, art and archaeology of the Etruscans(1000–100 <del>800–</del> <del>100</del> BCE) and of their contacts with Greek and Roman society and culture. <del>[24L]</del>

### Prerequisites:

CLA230H5 or / CLA231H5 or / CLA233H5 or / CLA237H5

### Exclusions:

Previous: New: CLA391H5 (Fall 2022)

## Distribution Requirements:

Previous: New: Humanities

### Rationale:

The course was deleted from the course offerings but a new instructor will offer the course on a regular basis.

### Resource:

### 8 Course Modifications:

### HIS241H5: Introduction to 19th-Century European History

#### Title:

**Previous**: Introduction to 19th-Century European History **New**: Revolution and Social Conflict in Europe: 1789-1890

#### Description:

**Previous**: An introduction to the principal themes of western European history from the French Revolution to the 1890's. [24L, 12T]

**New**: Nineteenth-Century Europe is arguably the most revolutionary century in human history. Around 1800, Europe was a relative backwater characterized by agricultural economies and monarchial government. By 1900 a new decidedly modern world emerged, shaped by the priorities of industry, capitalism, and democracy. What caused these dramatic changes?

#### Rationale:

The older course title and description do not adequately describe the content of the current course offering.

#### **Resources:**

### HIS242H5: Introduction to Contemporary European History

Title: Nations , Ideologies, and Conflict in Introduction to Contemporary European History

### Description:

**Previous**: The evolution of European politics, culture, and society from 1890: the origins and consequences of the two world wars, the Bolshevik Revolution and Stalinism, Fascism and Nazism, the post-1945 reconstruction and division of Europe. This course is essentially a continuation of HIS241H5. [24L, 12T]

**New**: Nations, Ideologies, and Conflict offers a sweeping overview of European history from the eve of WWI to the present with attention to the key ideas--Liberalism, Communism, Fascism, Nazism, Populism, and Globalization--that drive social, political and cultural change.

### Rationale:

This original course title and description do not fit the current content and aims of the course.

**Resources:** 

### HIS326Y5: History of Women in Canada, 1600-2000

New Course Code: HIS326H5

Title: History of Women in Canada, 1600 2000

### **Contact Hours:**

Previous: *Lecture:* 24 / *Tutorial:* 24 New: *Lecture:* 24

### Description:

**Previous**: This course samples the experience of women in various regions of Canada from precontact times through the First World War. Was Iroquoian society a matriarchy? Were women in New France more "liberated" than their 19th century granddaughters? Other topics include domestic servants, fur trade women, suffrage campaigns, Nellie McClung, World War II and Women's Liberation. **Note** : This is a 1.0 credit course that is offered over one session (half year) only.

**New**: A course on the experiences of women in what is now Canada, from the deep past through the twentieth century. It addresses questions related to the many roles women occupied in Indigenous and settler societies and how these have changed over time. The course explores political, social, and cultural movements alongside personal relationships and lives.

### Exclusions:

Previous: New: HIS326Y5

#### Rationale:

The description and title are out of date. The course should be changed to an "H" course and have its tutorials removed to fit with the other 300-level offerings in the history program.

### **Resources:**

Resource form submitted

### HIS327Y5: From Antiquity to the Middle Ages: Europe 300-800

New Course Code: HIS327H5

### Title:

**Previous**: From Antiquity to the Middle Ages: Europe 300-800 **New**: The Early Medieval World

### **Contact Hours:**

Previous: *Lecture:* 48 New: *Lecture:* 24

### Description:

**Previous**: Lecture course on the transition from ancient to medieval civilization. Emphasizes the character of the source material and its role in shaping the interpretations of modern historiography.

**New**: Disorder, destruction, the dissolution of old and the creation of new societies, and a cultural revival that continues to influence intellectual and literary traditions: these are the big themes examined in this history of the early medieval world.

#### Prerequisites:

**Previous**: HIS220Y5 or HIS221H5 or CLA101H5 or CLA231H5 or CLA310H5 or CLA367H5 or CLA368H5 or CLA369H5 or Permission of Instructor **New**: CLA231H5 or CLA370H5 or HIS221H5.

#### Exclusions:

Previous: HIS424Y1 New:

### Rationale:

The course should be changed from Y to H to bring it in line with other HIS300-level offerings.

#### Resources:

Resource form submitted

### RLG204H5: Introduction to Islam and Muslim Civilizations

Title: Introduction to Islam and Muslim Civilizations

#### Description:

What does it mean to be Muslim? This What is the civilizational legacy of a faith practiced by one quarter of humanity? Addressing such questions, this course explores the cultural rich and historical development diverse traditions of Islam and Muslim life and religious expression. Topics and themes addressed in the course include the Prophet Muhammad Civilizations, the Qur'an and hadith ranging from history, law, arts and architecture scripture through artistic expressions, material devotion mysticism, Sufism, Shi'ism, ritual, philosophy and modern movements beyond. [24L, 12T]

#### Rationale:

The original title does not align with other 200-level history of religions courses (Introduction to Christianity, Introduction to Buddhism, etc.) and the course content. The new description aligns with the course title change.

**Resources:** 

### RLG415H5: Advanced Topics in the Study of Religion

### Description:

A critical exploration of selected topics in the study of religion. As part of this course, students may have the option of participating are required to participate in an international learning experience that will have an additional cost and application process.

### Rationale:

The designation change from INTL-R to INTL-O intends to improve the flexibility of the course to run with or without a travel component. This flexibility is important given current, and potential future, travel restrictions.

### Consultation:

IEC has been consulted

**Resources:** 

### RLG451Y5: Islamic Literatures

New Course Code: RLG451H5

### Contact Hours:

Previous: *Seminar:* 48 New: *Seminar:* 24

### Description:

This course is an in depth exploration of the literary traditions of the Islamic world. The course examines the influence of religion in the writings of Muslim authors, as well as the role of symbols, philosophy, mystical practice, ideologies, rituals and history in the creation of literary works such as poetry, novels, biographies, court chronicles, epics, pieces. Works will be studied in their original language. The focus language and more the primary theme of the course will change every year.

### Exclusions:

Previous: New: RLG451Y5

### Rationale:

To fit with other undergraduate courses in the program, this course will no longer assume that students can work with primary source languages and is being revised from a Y to an H credit.

### **Resources:**

Resource form submitted

### RLG464H5: Saints, Royalty, and the State in South Asian Religions

### Description:

This course focuses on the relationship between religious ideologies, saints, and state power in ancient, medieval, and precolonial Hindu, Buddhist, Sikh, and Muslim states in South Asia. We will read primary sources in translation and examine art, architecture, and material culture to examine how kings and saints/ascetics negotiated politics and power. [245]

### Prerequisites:

(RLG205H5 or RLG210H5 or RLG303H5) and 1.5 RLG credits credits.

### Recommended Preparation:

RLG206H5 or RLG207H5 or RLG303H5

### Rationale:

The RLG303H5 course is now a core part of the South Asian religions curriculum and is taught every year. Since Islam is a central component of the RLG464H5 course content, the RLG303H5 should be a listed prerequisite, rather than a recommended preparation course.

### Resources:

### 26 Retired Courses:

### CLA232H5: Ancient Astronomy and Astrology

#### Rationale:

This course has not been taught since 2013, and it no longer fits with the Classical Civilization program.

### CLA405H5: Theories of Myth

#### Rationale:

The course had been proposed in 2006 by a now retired faculty member. It no longer fits with the Classical Civilization program.

### HIS222H5: Eastern Europe Since 1815

#### Rationale:

This course has not been taught since 2012, and it no longer fits with the history program.

### HIS263Y5: The History of Canada

### Rationale:

This course has not been taught since 2019 and has been replaced with a HIS200-level H course.

### HIS300H5: Islam and Muslims in the Balkans

#### Rationale:

This course has not been taught since 2012, and it no longer fits with the history program.

### HIS309H5: Anglo-Saxon England

#### Rationale:

This course has not been taught since 2012, and it no longer fits with the history program.

### HIS311H5: Introduction to Canadian International Relations

#### Rationale:

This course has not been taught since 2014, and it no longer fits with the history program.

### HIS312H5: Canadian Communities 1600-2000

### Rationale:

This course was proposed in 2012 but has never been taught, and it doesn't fit with the history program.

### HIS313H5: Canadian Working-Class History to 1919

### Rationale:

This course has not been taught since 2011, and it no longer fits with the history program.

### HIS314H5: 20th Century Canadian Working-Class History

### Rationale:

This course has not been taught since 2014, and it no longer fits with the history program.

### HIS351H5: Twentieth-Century Russia

### Rationale:

This course has not been taught since 2016, and it no longer fits with the history program.

### HIS364H5: International Labour Migration

#### Rationale:

This course has not been taught since 2015, and it no longer fits with the history program.

### HIS368H5: Canada in the First World War

#### Rationale:

This course has not been taught since 2014, and it no longer fits with the history program.

### HIS370H5: The American Revolution

#### Rationale:

This course has not been taught since 2014, and it no longer fits with the history program.

### HIS373H5: From the Gilded Age to the Jazz Age: The Emergence of Modern America, 1877-1929

#### Rationale:

This course has not been taught since 2013, and it no longer fits with the history program.

### HIS387H5: Popular Culture in East Asia

#### Rationale:

This course has not been taught since 2015, and it no longer fits with the history program.

### HIS394H5: Race and Empire in Colonial South Asia

### Rationale:

This course has not been taught since 2011, and it no longer fits with the history program.

### HIS403H5: Empire and Colonization in the French Atlantic

### Rationale:

This course has not been taught since 2011, and it no longer fits with the history program.

### HIS416H5: Canada and the Second World War

#### Rationale:

This course has not been taught since 2013, and it no longer fits with the history program.

### HIS425H5: Global Intellectual History: Asia and Africa in the 20th Century

#### Rationale:

This course was proposed in 2016 but has never been taught, and it doesn't fit with the history program.

### HIS440H5: Photography and American Culture

### Rationale:

This course has not been taught since 2003, and it no longer fits with the history program.

### HIS452H5: The Great Depression in Canada

#### Rationale:

This course has not been taught since 2010, and it no longer fits with the history program.

### HIS461H5: History of Upper Canada

#### Rationale:

This course has not been taught since 2008, and it no longer fits with the history program.

### HIS486H5: Political Thought in the Reformation

#### Rationale:

This course has not been taught since 1998, and it doesn't fit with the history program.

### HIS487H5: Canadian Social History

### Rationale:

This course has not been taught since 2014, and it no longer fits with the history program.

### HIS492H5: Entrepreneurial Diasporas

### Rationale:

This course was proposed in 2014 but has never been taught, and it doesn't fit with the history program.

## Language Studies (UTM), Department of

### 5 New Courses:

### FRE385H5: Decoding French Language Games

### **Contact Hours:**

Lecture: 24 / Tutorial: 12

### Description:

This course explores the phonological properties of French language games such as Verlan and Loucherbem. Adopting a comparative approach with standard French, particular emphasis will be placed on students' ability to identify and model phonological patterns of segmental and syllable structure modification using both descriptive and theoretical phonological tools.

### Prerequisites:

(FRE272H5 or FRE272Y5) and [FRE280Y5 or (FRE282H5 and FRE283H5) or a minimum grade of 77% in FSL406H5]

### Corequisites:

Exclusions:

Recommended Preparation:

### Rationale:

In keeping with the decision to reorient all current theoretical linguistics courses within our French program towards courses with a more applied focus to better meet students' interests and future professional needs, this course will be one of two to replace our current FRE376H5 French Phonology & Phonetics.

### **Resources:**

Resource Implications Form submitted for review.

### LIN352H5: English Language Linguistics in the Public Sphere

### Contact Hours:

Lecture: 24 / Tutorial: 12

### Description:

This course prepares students to engage with English language linguistics in public settings. Students will critically analyze what role the English language has in society, and learn how linguists can help answer the public's questions about the English language. Topics may include: what common misconceptions the general public has about language; the disconnect between what linguistics is and what the public wants to know about language, and how to bridge between this gap; dismantling English-supremacist attitudes and linguistic prejudices around the world; designing research to assess public attitudes about language.

**Prerequisites:** LIN204H5 and LIN205H5

Corequisites:

**Exclusions:** 

**Recommended Preparation:** 

### Rationale:

This course is for the ELL program. This course directly addresses the question of "why does linguistics matter?" It aims to meet the needs of (the majority of) ELL students who will not pursue graduate studies in linguistics, but will pursue a career elsewhere (like education or commerce). This course trains students to think about linguistics in the everyday context. There is a disconnect between what is taught in linguistics courses (e.g., formal syntactic theories) and what people in general want to know about language (e.g., "what do newly coined pandemic terms like 'covidiot' say about society?!"); this course will bridge this gap. After taking this course, students will be better prepared to use linguistics to fight misinformation about language in the real world.

### **Resources:**

Resource Implication Form submitted to the PCU (Office of the Dean).

### LIN375H5: Chinese Linguistics

Contact Hours: Lecture: 24 / Tutorial: 12

### Description:

This course offers a linguistic introduction to the features and characteristics of the Chinese languages. Attention will be given to the phonological, morphological and syntactic patterns of the language family, set against the backdrop of its linguistic and sociolinguistic history. The course not only examines the characteristics of Mandarin but also various other varieties of Chinese. No prior knowledge of a Chinese language is necessary.

**Prerequisites:** LIN229H5 and LIN232H5

Corequisites:

Exclusions:

**Recommended Preparation:** 

Rationale:

This is for the new hire linguist with specialization in Chinese Linguistics. It is a general course that any specialist can teach. The course description is in line with other courses whose topic is the structure of a language-family. We anticipate a lot of interest in the course; it will count toward our Linguistics Studies programs.

### **Resources:**

Course will be taught by new hire in Chinese Linguistics (July 1, 2022). Resource Implication Form submitted for review.

### LIN452H5: Communicating English Language Linguistics

### Contact Hours:

*Lecture:* 24

### Description:

This course teaches students advanced skills for engaging with English language linguistics in public settings. Topics may include: how to talk to a general audience about linguistics; navigating common public myths about language; presentation skills to make complex topics accessible; incorporating linguistics in language courses; public outreach and interview skills in linguistics; designing research to answer public questions about English. In this capstone course, students will output innovative projects for educating the public about English language linguistics. This course includes an experiential learning component where students will get hands-on experience talking to various audiences about linguistics.

Prerequisites:

LIN352H5

Corequisites:

Exclusions:

### **Recommended Preparation:**

### Rationale:

LIN452 is a course that teaches students how to talk about English language linguistics to the general public. LIN352H5 sets the backdrop for this course: What do people think about the English language? LIN452H5 expounds upon this to further ask: How do you talk to people about English language linguistics? Talking to non-linguists about linguistics is a very specific skill that is different from academic presentation skills, and something that is typically not taught in core linguistics courses. This course will benefit students, no matter what career they pursue. It prepares them for the very realistic situation of having to combat misinformation about language in everyday settings. This is a capstone course specifically catered to the ELL program, and gives linguistics students a unique experiential learning opportunity.

### Resources:

Resource Implication Form submitted for review.

### LIN475H5: Topics in Chinese Linguistics

### **Contact Hours:**

Lecture: 24

### Description:

An advanced seminar that explores topics and issues concerning the Chinese languages. Depending on the instructor, focus of the course may be oriented toward structural properties, language and society, bilingualism, the languages of China, or historical issues.

### Prerequisites:

LIN375H5 or instructor's permission

### Corequisites:

Exclusions:

### **Recommended Preparation:**

### Rationale:

This is a natural follow-up course to LIN375H5, allowing flexibility in the topics that can be covered depending on the expertise of the instructor. The course description is in line with other upper-level topics courses. We anticipate a lot of interest in LIN375H5, and so this course could also be well-subscribed. It will count toward our Linguistics Studies programs.

### Consultation:

### Resources:

Resource Implications Form submitted for review.

### 12 Course Modifications:

### HIN411H5: Hindi Culture and Media

### Description:

The course is designed for students who have completed intermediate Hindi and have a good knowledge of Urdu. The course enhances all four language skills through a focus on culture delivered via various forms of the media. The teaching material for the course will largely include segments from Hindi films, soap operas, Music TV, cine magazines or related items from newspapers in Hindi. Students who take this course for Language Citation (in Hindi) notation must complete written course work in Hindi.

### **Prerequisites:**

**Previous**: **New**: HIN313H5 or permission of instructor.

### Recommended Preparation:

Previous: HIN312Y5 New:

### Rationale:

Removed "Recommended Preparation". Students do require Hindi language preparation for this course. HIN312Y5 was not used as it was retired and HIN313H5, as the second half of the former course, should be the new prerequisite. Updated course description and removed the mention of Urdu

Resources:

### JAL253H5: Language and Society

### Description:

This course offers an introduction to the The study of the relationship between language and society with the goal of understanding language use social structure through social structures. Working within this socially-informed perspective language; major themes are multilingual societies, topics covered will include language, perception including pidgin and creoles, and identity development; verbal and non-verbal communication; speaking across cultures; language use and social networks; interaction through speech. (Given by the Departments of Anthropology and language and power Linguistics). While this course fulfills a requirement for the Minor minor program in English Language Linguistics, it does not count towards the Major major or Minor minor programs in Linguistic Studies. [24L, 12T]

#### Prerequisites:

LIN204H5 or LIN101H5 or LIN102H5 or LIN204H5 LIN100Y5 or ANT206H5

### Rationale:

LIN100Y5 has been retired long enough to remove it from the Prerequisites. Description updated to reflect the empirical scope of the course – something in place for some time now.

### Resources:

No resource implications as a result of course description change.

### JFL389H5: Second Language Assessment

### Prerequisites: [FRE272H5 and(FRE282H5 or FRE283H5)] or [LIN101H5 and (LIN102H5 or LIN205H5 LIN101H5 and LIN102H5)]

### Rationale:

JFL389H5 belongs to the pool of 300- and 400-level courses which count toward fulfillment of the ELL minor program. In this round of changes, we have proposed to remove LIN102H5 from the ELL minor program requirements, and, as a consequence, the upper-level courses in this pool that have LIN102H5 as a prerequisite must be amended so that they are still open to ELL minor students. Making the syntax/semantics prerequisite more flexible, so that either LIN102H5 or LIN205H5 satisfy it, solves the problem.

### **Resources:**

No resource implications as a result of prerequisite change.

### LIN229H5: Sound Patterns in Language

**Title:** Phonological Sound Patterns in Language

Prerequisites: LIN101H5 (or LIN100Y5) and LIN228H5

### Rationale:

This change puts the name of LIN229 more in line with names of other LIN courses at this level (e.g. "syntactic patterns in language"), plus acknowledge the existence of the phonology of sign languages, which do not have sound. We are also removing LIN100Y5 from the prerequisite list, because this course has not been offered in many years.

### **Resources:**

No resource implications - title change and prerequisite clean-up.

### LIN310H5: Contrastive Linguistics

### Prerequisites:

(LIN101H5 and (LIN102H5) or LIN205H5) LIN100Y5 and 1.0 credit in LIN at the 200-level (excluding LIN204H5).

### Rationale:

LIN100Y5 has been retired long enough to remove it from the Prerequisite. LIN310H5 belongs to the pool of 300- and 400-level courses which count toward fulfillment of the ELL minor program. In this round of changes, we have proposed to remove LIN102H5 from the ELL minor program requirements, and, as a consequence, the upper-level courses in this pool that have LIN102H5 as a prerequisite must be amended so that they are still open to ELL minor students. Making the syntax/semantics prerequisite more flexible, so that either LIN102H5 or LIN205H5 satisfy it, solves the problem. The 1.0 credit in LIN at the 200-level should exclude LIN204H5 since it is the entry-level course that precedes LIN205H5.

#### **Resources:**

No resource Implications as a result of this change.

### LIN357H5: English Worldwide

#### Prerequisites:

LIN101H5 and (LIN102H5 or LIN205H5) and (LIN256H5 or JAL253H5) LIN256/JAL253

#### Rationale:

LIN357H5 belongs to the pool of 300- and 400-level courses which count toward fulfillment of the ELL minor program. In this round of changes, we have proposed to remove LIN102H5 from the ELL minor program requirements, and, as a consequence, the upper-level courses in this pool that have LIN102H5 as a prerequisite must be amended so that they are still open to ELL minor students. Making the syntax/semantics prerequisite more flexible, so that either LIN102H5 or LIN205H5 satisfy it, solves the problem.

#### **Resources:**

### LIN476H5: Language Diversity and Language Universals

#### Description:

This course examines cross-linguistic cross-linguistics typological features found in the languages of the world. Special attention is given to investigating the remarkable range of describing phonological, morphological and or syntactic diversity patterns found in the world's languages cross-linguistically. One of the primary goals The goal of the course is to examine draw on the notion range of variation in order to uncover language universals in light of such diversity. [24L]

#### **Prerequisites:**

LIN232H5 and (LIN229H5 or LIN231H5) and 0.5 credit in a 300-level LIN course.

#### **Exclusions:**

Previous: LIN406H5 New: LIN402H1 and LIN456H1

### Recommended Preparation:

Previous: LIN231H5 New:

#### Rationale:

Additional prerequisites: In order to properly meet the aims of a 400-level course, LIN476H5 requires students to have a slightly stronger foundation in formal approaches to morphology or phonology, thus the addition of LIN231H5 or LIN229H5. Exclusion amended as there are two very similar courses offered

at UTSG which should be exclusions to this course: LIN402H1 and LIN456H1. Removed LIN406H5 as it has been off the books long enough that we can safely remove it. With the addition of LIN231 as a prerequisite, we can remove the Recommended Prep.

#### **Resources:**

No resource implications as a result of updating the description and course prerequisites.

### LTL380H5: Theoretical Issues In Second Language Teaching and Learning

#### Prerequisites:

FRE227H5 FRE225Y5 and (FRE282H5 and FRE283H5) or (ITA200Y5 and an additional 0.5 credit in ITA at the 200-level or higher). FRE280Y5

#### Rationale:

Prerequisite was updated to reflect the changes in FRE courses (FRE225Y5 was replaced with FRE227H5 and FRE280Y5 was replaced with FRE282H5 and FRE283H5) and include ITA course requirements.

#### **Resources:**

No resource implications-prerequisite updated.

### LTL381H5: Methodologies for Teaching English as a Second Language

### Prerequisites:

(LIN101H5 and LIN102H5 and a minimum of 0.5 credit in LIN or LTL at the 200-level or higher) or [(FRE282H5 FRE280Y5 and FRE283H5 FRE225Y5) and FRE227H5] or (ITA200Y5 and an additional 0.5 credit in ITA at the 200-level or higher)

### Rationale:

Prerequisite was updated to reflect the changes in FRE courses (FRE225Y5 was replaced with FRE227H5 and FRE280Y5 was replaced with FRE282H5 and FRE283H5). Also included ITA language course requirements.

#### Resources:

No resource implications-prerequisite updated.

### LTL382H5: Teaching Second Language Speaking and Listening

#### Prerequisites:

(LIN101H5 and LIN102H5 and a minimum of 0.5 credit in LIN or LTL at the 200-level or higher) or [(FRE282H5 FRE280Y5 and FRE283H5) and FRE227H5 FRE225Y5) or (ITA200Y5 and an additional 0.5 credit in ITA at the 200-level or higher)

Rationale:

Prerequisite was updated to reflect the changes in FRE courses (FRE225Y5 was replaced with FRE227H5 and FRE280Y5 was replaced with FRE282H5 and FRE283H5). Also added inclusion of ITA language course requirements.

### **Resources:**

No resource implications-prerequisite updated.

### LTL383H5: Teaching Second Language Reading and Writing

#### Prerequisites:

(LIN101H5 and LIN102H5 and a minimum of 0.5 credit in LIN or LTL at the 200-level or higher) or [(FRE282H5 FRE280Y5 and FRE283H5 FRE225Y5) and FRE227H5] or (ITA200Y5 and an additional 0.5 credit in ITA at the 200-level or higher)

#### Rationale:

Prerequisite was updated to reflect the changes in FRE courses (FRE225Y5 was replaced with FRE227H5 and FRE280Y5 was replaced with FRE282H5 and FRE283H5) and include ITA course requirements.

#### Resources:

No resource implications-prerequisite updated.

### LTL387H5: Theoretical Issues in Teaching and Learning Second Language Vocabulary

#### Prerequisites:

(FRE282H5 and FRE283H5 and FRE227H5) FRE272H5 or (ITA200Y5 and an additional 0.5 credit in ITA at the 200-level or higher) FRE272Y5

#### Rationale:

Updated prerequisites to include Italian language course requirements

#### **Resources:**

### 3 Program Revisions:

### English Language Linguistics - Minor (Arts)

### **Enrolment Requirements:**

*Limited Enrolment* — Enrolment in the Minor program is limited to students who have achieved at least 63% in both <u>LIN101H5</u> and <u>LIN205H5 LIN102H5</u>. Second year entry requirements (for those students Students who have do not met the enrolment requirement requirements in the their first year): A can apply for the Minor with a grade of 67% 70% in at least two (2) of the following ten courses: JAL253H5, LIN208H5, <u>LIN228H5</u>, <u>LIN229H5</u>, <u>LIN231H5</u>, LIN233H5, <u>LIN232H5</u>, <u>LIN237H5</u>, <u>LIN256H5</u>, <u>LIN288H5</u>. Students cannot be enrolled simultaneously in the Linguistic Studies Major program and either the Linguistic Studies or the English Language and Linguistics Minor programs

### **Completion Requirements:**

4.0 4.5 credits are required.

### First Year:

LIN101H5<del>, LIN102H5</del>, LIN204H5, LIN205H5

### Upper Years:

- 1. 1.5 credits: LIN233H5, LIN208H5, JAL253H5/LIN288H5
- 1.0 credit at the 300 or 400 level to be selected from the following list: LIN310H5, LIN311H5, LIN325H5, LIN352H5, LIN353H5, LIN357H5, LIN372H5, JAL355H5, LIN388H5, JFL389H5, LIN452H5, LIN486H5, CHI411H5

### Notes:

No more than 1.5 credits can be double counted towards two minor programs of study in Linguistics.

### Description of Proposed Changes:

Amendment to limited enrolment; Removal of LIN102H5 from the program; Removal of certain 300-level courses from upper level listing; and Removal of the restriction on enrolling in both the Linguistic Studies Major and the ELL Minor.

### Rationale:

Amendment to limited enrolment: We may have been too hasty at 70%. 67% is more aligned with the average grade in our second-year courses; the reduction to a C+ grade allows a portion of students to gain entry into the minor program and achieve the learning outcomes. In addition, this slight reduction will prevent a number of students from moving through the curriculum, achieving the learning outcomes, and yet failing to gain entrance to the program due to lower grades at the 200-level or having to retake the 200-level courses in order to achieve the threshold for program enrolment.

Removal of 102H5 from the program: The redesign of LIN204H5 and LIN205H5 renders LIN102H5 in large part redundant. The removal of the course from the foundational requirements brings the ELL Minor

program to a more common and attainable 4.0 credits. This also has the desirable effect of making LIN102H5 exclusive to the Linguistic Studies Programs (ERMAJ1850 and ERMIN0506).

Removal of LIN311H5 and LIN388H5 from upper-level options and the replacement with LIN352H5 and LIN452H5, two courses that are exclusive to the ELL minor program: LIN311H5 and LIN388H5 are more suited to the Linguistics Studies Programs and have been replaced with two courses crafted specifically to meet the unique learning outcomes of the ELL minor program.

Removal of the restriction on enrolling in both the Linguistic Studies Major and the ELL Minor: The ELL Minor is distinct in its curriculum (distinct courses for the foundation courses and many distinct courses at the upper-level) and only 1.5 credits can be double counted.

These changes do not impact the learning outcomes of the ELL Minor program.

### Resource Implications:

No resource implication as a result of changes to ERMIN1200

### Linguistic Studies - Major (Arts)

### **Enrolment Requirements:**

*Limited Enrolment* — Enrolment in the Major program is limited to students who have achieved at least 63% in both LIN101H5 and LIN102H5. Second year entry requirements(for those students who have not met the enrolment requirement in the first year): A minimum grade of 67% 70% in at least two of the following seven courses: LIN228H5, LIN229H5, LIN231H5, LIN232H5, LIN237H5, LIN256H5, LIN288H5.

Students cannot be enrolled simultaneously in the Linguistics Studies Major and <del>either of</del> the Linguistics Studies or the English Language and Linguistics Minor programs.

### **Completion Requirements:**

8.0 credits are required.

### First Year:

(LIN101H5 and LIN102H5) or LIN100Y5

### Upper Years:

- 1. Core requirement: LIN228H5 and LIN229H5 and (LIN231H5 or LIN237H5) and LIN232H5 and (LIN256H5 or LIN288H5).
- Language requirement: 1.0 credit in a language course. This credit must involve the same language and must be taken either concurrently with LIN101H5 and LIN102H5 (or LIN100Y5) or after their completion. The language must be one other than the student's first language; English language courses are excluded.
- 3. Upper Year requirements: 1.5 credits from 3 of the categories below (only 0.5 credit per category is permitted)
  - a. Method and analysis: LIN318H5 or LIN411H5 or LIN418H5 or LIN419H5
  - b. Phonetics/Phonology: (LIN327H5 or JLP384H5) or LIN328H5 or LIN329H5 or LIN421H5

- c. Syntax and Morphology: (LIN331H5 or LIN332H5) or (LIN406H5 or LIN476H5)
- d. Semantics/Pragmatics: LIN337H5 or LIN338H5
- e. Language teaching, learning, and acquisition: JFL389H5 or LIN380H5 or LIN385H5 or LIN454H5 or LIN456H5 or LIN487H5
- f. Language variation, contact, and change: LIN360H5 or LIN366H5 or (LIN369H5 <del>or</del> LIN376H5) or LIN458H5 or LIN460H5 or LIN466H5 or LIN469H5
- g. Computational Linguistics: LIN340H5 or LIN341H5 or LIN447H5
- 4. The remaining 2.0 credits to be chosen from those courses not yet taken from the list above, or from the following: any 300/400 level LIN/JAL/JFL/JLP course or ANT362H5 or ANT358H5 or FRE454H5 or FRE459H5 or ITA437Y5 or ITA373H5 or LTL488H5 or PHL350H5 or PHL451H5 or PSY315H5 or PSY374H5 or PSY376H5 or SAN392Y5.

Students must have a minimum of 0.5 credits at the 400-level. No more than 1.0 credits outside of LIN/JAL/JFL/JLP offerings (excluding language courses in requirement #2 <del>2)</del> can be used towards program requirements.

### Notes:

No more than 1.5 credits can be double counted towards two programs of study in Linguistics.

### Description of Proposed Changes:

Program enrolment amendment and inclusion of missing courses as well as inclusion mention of courses with designators JFL and JLP.

### Rationale:

We may have been too hasty at 70%. 67% is more aligned with the average grade in our second-year courses; the reduction to a C+ grade allows a portion of students to gain entry into the major program and achieve the learning outcomes. In addition, this slight reduction will prevent a number of students from moving through the curriculum, achieving the learning outcomes, and yet failing to gain entrance to the program due to lower grades at the 200-level or having to retake or take additional 200-level courses in order to achieve the threshold for program enrolment. Inclusion of courses with JFL and JLP designators as well as other course options. Removed mention of retired course LIN100Y5 (has not been offered in past 5 years)

### **Resource Implications:**

No resource implications.

### Linguistic Studies - Minor (Arts)

### **Enrolment Requirements:**

*Limited Enrolment* — Enrolment in the Minor program is limited to students who have achieved at least 63% in both LIN101H5 and LIN102H5. Second year entry requirements(for those students who have not met the enrolment requirement in the first year): A grade of 67% 70% in at least two of the following seven courses: LIN228H5, LIN229H5, LIN231H5, LIN232H5, LIN237H5, LIN256H5, LIN288H5.

Students cannot be enrolled simultaneously in the Linguistic Studies Major <del>program</del> and <del>either</del> the Linguistic Studies <del>or the English Language and Linguistics</del> Minor programs.

### **Completion Requirements:**

4.0 credits are required.

## First Year:

LIN101H5 and LIN102H5

### Upper Years:

The remaining courses to be chosen from the following list:

- 1. Minimum 1.0 credit from the following list: LIN228H5, LIN229H5, LIN231H5, LIN232H5, LIN237H5, LIN256H5, LIN288H5.
- 2. Minimum 1.0 credit from the following list: any 300 and 400 level LIN, JAL, or JLP courses.
- 3. 1.0 credit from any remaining courses listed in (1) or (2) or from the following list: FRE454H5, FRE489H5, ITA373H5, ITA437Y5, JFL389H5, and SAN392Y5.

### Notes:

Some of the courses listed above have prerequisites which would not count towards this program. No more than 1.5 credits can be double counted towards two minor programs of study in Linguistics.

### Description of Proposed Changes:

Amended program entry requirements and updated course listing

### Rationale:

We may have been too hasty at 70%. 67% is more aligned with the average grade in our second-year courses; the reduction to a C+ grade allows a portion of students to gain entry into the minor program and achieve the learning outcomes. In addition, this slight reduction will prevent a number of students from moving through the curriculum, achieving the learning outcomes, and yet failing to gain entrance to the program due to lower grades at the 200-level or having to retake or take additional 200-level courses in order to achieve the threshold for program enrolment. Course listing was updated to reflect designator changes.

### **Resource Implications:**

No resource implications.

## Study of University Pedagogy (UTM), Institute for the

### 4 New Courses:

### ISP200H5: Advanced Writing for University and Beyond

### Contact Hours:

Seminar: 36

### Description:

This course advances the writing- and reading-related skills that are necessary for success within the academic setting. The course builds on the 'Writing About Writing' approach to help students develop their understanding of the writing process and writing related theory, especially within the university context. The class will involve writing in and out of class, as well as exercises in effective and constructive critique of one another's work.

### Prerequisites:

ISP100H5

Corequisites:

Exclusions:

Recommended Preparation:

### Rationale:

As ISUP continues to expand, we aim to offer a wider selection of courses for students. We will be hiring additional faculty members this year with diverse interests and specialties to contribute to a more rounded and inclusive approach to the area of writing studies. We aim to emphasize that writing is not a 'one and done' skill. Writing requires continuous development, especially in the academic context. Students in ISP100H5 have also indicated an interest in progressing their writing skills beyond the constraints of a first-year introductory course.

### Consultation:

Consultation with ISUP curriculum committee confirmed on February 11, 2022.

### Resources:

Resource Form Submitted.

### ISP250H5: Special Topics in Writing Studies

Contact Hours: Lecture: 24

Description:

This course covers a special topic in Writing Studies. Content relates to instructor's area of interest, thus the course varies in focus from year to year. This course may satisfy either the Humanities or Social Sciences distribution requirement, depending on the topic offered. The contact hours for this course may vary in terms of contact type (L,S,T,P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

### Prerequisites:

ISP100H5

Corequisites:

**Exclusions:** 

**Recommended Preparation:** 

### Rationale:

As ISUP continues to expand, we aim to offer a wider selection of courses for students. We will be hiring additional faculty members this year with diverse interests and specialties to contribute to a more rounded and inclusive approach to the area of writing studies. We aim to emphasize that writing is not a 'one and done' skill. Writing requires continuous development, especially in the academic context. Students in ISP100H5 have also indicated an interest in progressing their writing skills beyond the constraints of a first-year introductory course.

### Consultation:

Consultation with ISUP curriculum committee confirmed on February 11, 2022.

Resources:

Resource Form Submitted

### ISP350H5: Special Topics in Writing Studies

Contact Hours: Lecture: 24

### Description:

This course covers an in-depth special topic in Writing Studies. Content relates to instructor's area of interest, thus the course varies in focus from year to year. This course may satisfy either the Humanities or Social Sciences distribution requirement, depending on the topic offered. The contact hours for this course may vary in terms of contact type (L,S,T,P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

Prerequisites: ISP100H5

Corequisites:

### Exclusions:

### **Recommended Preparation:**

### Rationale:

As ISUP continues to expand, we aim to offer a wider selection of courses for students. We will be hiring additional faculty members this year with diverse interests and specialties to contribute to a more rounded and inclusive approach to the area of writing studies. We aim to emphasize that writing is not a 'one and done' skill. Writing requires continuous development, especially in the academic context. Students in ISP100H5 have also indicated an interest in progressing their writing skills beyond the constraints of a first-year introductory course.

### Consultation:

Consultation with ISUP curriculum committee confirmed on February 11, 2022.

### Resources:

Resource form submitted

### ISP450H5: Advanced Special Topics in Writing Studies

## Contact Hours:

*Lecture:* 24

### **Description:**

This course covers an advanced special topic in Writing Studies. Content relates to instructor's area of interest, thus the course varies in focus from year to year. This course may satisfy either the Humanities or Social Sciences distribution requirement, depending on the topic offered. The contact hours for this course may vary in terms of contact type (L,S,T,P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

### Prerequisites:

ISP100H5

Corequisites:

Exclusions:

### Recommended Preparation:

### Rationale:

As ISUP continues to expand, we aim to offer a wider selection of courses for students. We will be hiring additional faculty members this year with diverse interests and specialties to contribute to a more rounded and inclusive approach to the area of writing studies. We aim to emphasize that writing is not a 'one and done' skill. Writing requires continuous development, especially in the academic context.

Students in ISP100H5 have also indicated an interest in progressing their writing skills beyond the constraints of a first-year introductory course.

### Consultation:

Consultation with ISUP curriculum committee confirmed on February 11, 2022.

### Resources:

Resource Form Submitted

## Visual Studies (UTM), Department of

5 New Courses:

### CIN210H5: Contemporary Southeast Asian Cinemas

### Contact Hours:

Lecture: 24 / Practical: 36 / Tutorial: 12

### Description:

This course is an introduction to contemporary Southeast Asian cinemas from the 2000s to the present. Since the turn of the millennium, the cinematic innovation of Southeast Asia has been aided by an increase in productive interaction and transnational modes of collaborations and co-productions. These waves of cinema augur new possibilities for considering cross-cultural, cross-boundary ways of being, seeing and knowing that can challenge formulaic and essentialist understandings of the region. Through formal aesthetic analysis of short and feature-length films, and the study of Asia-based and international institutions of cinema, we will examine the multifarious potential of contemporary Southeast Asian in spurring the rethinking of the histories, concepts, and borders of the region.

**Prerequisites:** 

Corequisites:

Exclusions:

**Recommended Preparation:** CIN101H5

### Rationale:

Addition of introductory Southeast Asian Cinema course at the 200-level. The course will also emphasize short films from the UTM Library's Asian Short Film collection

### Consultation:

In consultation with DVS Library Liaison.

### Resources:

DVD, films from Library. Resource Form Submitted.

CIN408H5: Potential Cinema: Theories, Visions, and Practices of Decoloniality from East and Southeast Asia

Contact Hours:

Practical: 36 / Seminar: 24

Description:

Inspired by Ariella Aïsha Azoulay's *Potential History: Unlearning Imperialism*, this course investigates films from East and Southeast Asia and considers the ways in which we might recognize theories, visions, and practices that might constitute "cinemas of decoloniality." In this course, we will look to filmmakers' aesthetic engagement with archival and imagined time and the collision of pasts, presents, and futures in order to consider how contentious histories of memory and forgetting can have effects on the politics of the present. How, through and with cinema, could there be space not only to retell and reframe histories of coloniality and decolonization but also to experience and practice the potential decolonization of ways of being, seeing, and thinking?

### Prerequisites:

CIN101H5 or a minimum 2.0 credits in courses that count towards Cinema Studies programs.

Corequisites:

Exclusions:

Recommended Preparation:

### Rationale:

Addition of East and Southeast Asian cinema course at the 400 level to build curriculum for Cinema program.

### Consultation:

In current consultation with DVS Library Liaison.

### **Resources:**

DVDs, films from Library. Resource form submitted.

### FAH362H5: Modern Craft

Contact Hours: Seminar: 24

### Description:

This course examines ideas, practices, and politics of craft that have emerged in the modern period in response to the industrial and digital revolutions, and other significant social and political changes. Topics covered include the place of craft in modern and contemporary art; gendered, classed, and raced understandings of craft; craft's relationship to the environment; and Indigenous perspectives and practices.

### Prerequisites:

FAH101H5 and (FAH287H5 or FAH288H5)

### Corequisites:

### Exclusions:

### FAH392H5 (Craft - 20209)

### **Recommended Preparation:**

### Rationale:

Permanent faculty member who has taught this as a topics course would like to add it to the books as she will continue to teach it.

#### Consultation:

#### Resources:

Books for Library. Resource form submitted.

### FAH462H5: Islamic Art and the Museum

Contact Hours: Seminar: 24

### Description:

This course explores how museum displays construct cultural narratives for the consumption of the viewer. It focuses on Islamic art. By examining recent (21st-century) Islamic art museums and gallery installations in North America and Europe, the course addresses the topics of art collecting, orientalism, the colonial gaze, Islamophobia, and the current visual narratives of Islam and Muslims through the arts.

In the first part of the course students are introduced to Islamic art through the collections of some of the main international museums including the British Museum (BM) in the UK, the Louvre in France, the Royal Ontario Museum (ROM) in Canada, and the Metropolitan Museum of Art (MET) in New York. Students will explore the ways in which Islamic art galleries and exhibitions have evolved to reflect academic approaches including post-colonial and object studies. Students will then use the skills acquired in the course and on-line museum collections to develop and propose an Islamic art exhibition thus experiencing the process of developing an object-based narrative, writing it, presenting it, as well as responding to peer review.

#### Prerequisites:

[FAH101H5 and (FAH281H5 or FAH282H5) and at least 1.0 credit in FAH/VCC at the 300/400 level] or permission of instructor.

#### Corequisites:

### Exclusions:

FAH486H1 (20201) or FAH495H5 (20189) or FAH495H5 (20201) or FAH495H5 (20211).

### **Recommended Preparation:**

#### Rationale:
This course has successfully been taught a few times under a topics course. The course enables students to gain a critical understanding of museum practices and the role of museums in shaping and constructing cultural narratives. It complements Department of Visual Studies courses on curatorial practices FAH310, FAH451, FAH479, and FAH498. It also provides students with the opportunity to critically engage with two major Islamic art museum collections located in Toronto (the ROM and the Aga Khan Museum).

## Consultation:

DVS Library Liaison

## **Resources:**

Books for Library. Resource form submitted.

## VST410Y5: Internship in Visual Studies

Contact Hours: Seminar: 24

## Description:

This internship course provides an opportunity for students to gain practical experience at an institution or business closely related to the arts and to visual studies. This is especially tailored for mature and selfdisciplined students in their final year of study, who are ready to apply knowledge acquired in previous courses and are planning a career in the arts and cultural sector. Students registered in any DVS program are eligible to apply. Students work closely with the DVS internship coordinator to establish suitability. Regular updates and a final report and presentation will be required. The final grade for the course will be based on these, along with the assessment of the employer.

#### Prerequisites:

Minimum of 5.5 credits in DVS program courses and 8.0 additional credits and minimum CGPA 2.5 and permission of internship coordinator.

Corequisites:

Exclusions: VST410H5

#### **Recommended Preparation:**

#### Rationale:

We would like to revive the year-long internship course. A longer approach to an internship will enrich students preparedness for the workplace. It will allow the course to explore workplace rights and responsibilities, help the student to understand employment laws and overall structure the course in a better way.

#### **Resources:**



# **University of Toronto Mississauga**

Sciences Curriculum Proposals Report Meeting Date: March 1, 2022

## Contents

Contents	2
Mathematical and Computational Sciences (UTM), Department of	3
5 New Courses:	3
29 Course Modifications:	10
2 Retired Courses:	22
7 Minor Program Modifications:	23
Psychology (UTM), Department of	32
5 New Courses:	
4 Program Revisions:	

## Mathematical and Computational Sciences (UTM), Department of

5 New Courses:

CSC397H5: Topics in Computer Science

Contact Hours: Lecture: 24

## **Description:**

Introduction to a topic of current interest in computer science intended for CSC majors and specialists. Content will vary from year to year. The contact hours for this course may vary in terms of contact type (L, T, P) from year to year, but will be between 24-48 contact hours in total. See the UTM Timetable.

## Prerequisites:

Appropriate prerequisite requirement(s) will be available on the UTM timetable along with the topic title prior to course registration.

**Corequisites:** 

**Exclusions:** 

**Recommended Preparation:** 

#### Rationale:

We are seeing increased interest from both instructors and students in special topics courses, to the point where we are running out of special topics courses each year. This will help remedy this and give us the ability to offer as many such courses as needed.

**Resources:** 

None.

CSC496H5: Topics in Robotics

Contact Hours: Lecture: 24

## Description:

Introduction to a topic of current interest in robotics intended for CSC majors and specialists. Content will vary from year to year but will always maintain a robotics focus. The contact hours for this course may vary in terms of contact type (L, T, P) from year to year, but will be between 24-48 contact hours in total. See the UTM Timetable.

## Prerequisites:

CSC376H5. Additional required prerequisite(s) will be available on the UTM timetable along with the topic title prior to course registration.

#### **Corequisites:**

**Exclusions:** 

**Recommended Preparation:** 

#### **Rationale:**

Some of our special topics courses these days are in the area of robotics; this is a result of our increased hiring in this area. Students sometimes do not have the prerequisites for special topics robotics courses, and it is hard for them to anticipate such gaps prior to our special topics courses being announced. Having a separate special topics course for robotics will remedy this and clarify messaging to students. CSC376H5 is needed for any advanced study in robotics.

## **Resources:**

None

## MAT137H5: Differential Calculus for Mathematical Sciences

#### **Contact Hours:**

Lecture: 40 / Tutorial: 24

#### **Description:**

A conceptual approach to calculus. A focus on theoretical foundations and proofs as well as some emphasis on geometric and physical intuition. Limits and continuity, differentiation, the mean value, extreme value and inverse function theorems. Applications typically include related rates and optimization.

#### **Prerequisites:**

Minimum 70% in Grade 12 Advanced Functions (MHF4U) and Minimum 70% in Grade 12 Calculus and Vectors (MCV4U).

#### **Corequisites:**

#### Exclusions:

MAT132H5 or MAT133Y5 or MAT134Y5 or MAT135H5 or MAT137Y5 or MAT135Y5 or MAT157H5 or MAT157Y5 or MAT133Y1 or MAT135Y1 or MAT135H1 or MAT137Y1 or MAT157Y1 or MATA30H3 or MATA31H3 or MATA32H3 or MATA33H3 or MATA35H3 or MATA36H3 or MATA37H3

#### **Recommended Preparation:**

## **Rationale:**

- 1. About 5 years ago, we changed two first-year Calculus offerings, MAT134Y5 and MAT135Y5 into two pairs of H courses: MAT132H5+MAT134H5, and MAT135H5+MAT136H5. After years of experience with the change, we have found little to no real downside, but significant upsides for students. For example, students who fail MAT132H5 are students who were likely to fail MAT134Y5 in the past; these students are now able to retake MAT132H5 in the Winter semester and then take MAT134H5 in the Summer in order to 'stay on track'. Those students might attempt to take the double-speed version of MAT134Y5 in the summer to stay on track, resulting in many double-fails. And those that didn't, would be delayed until the following Fall. In any case, failing an H course is less of a blow and something easier to reorganize around, compared to failing a Y course.
- 2. Splitting MAT137Y5 and MAT157Y5 will provide similar benefits to students to the splits of MAT134Y5 and MAT135Y5, but will also introduce some new benefits. For example, a student who takes and barely passes MAT157H5 or MAT137H5 might have struggled to pass the Y-version of these courses, but will now have the option to "drop down" to the second semester Calculus course at the level just below (i.e. to the new MAT139H5 or to MAT136H5, respectively). This would offer real relief to a student 'trapped' in MAT137/157 who wishes they could jump down to the 135/137 level.
- 3. This could also help us retain students in the MAT Major/Specialist programs, by giving a strong student who is interested in pursuing one of these programs an option to stay in an advanced Calculus course (e.g. dropping from MAT159 to MAT139 or 139 to 136) even if they find the higher level course to be too difficult and then gain a better overall cGPA in the year (e.g. a 60 and a 80 in two H courses, versus a 55 in a single Y course), making program entry more likely.
- 4. There could also be a small number of students who do exceptionally well in MAT137H5 or MAT135H%, for example, and will want to 'level up' to MAT139H5 or MAT159H5. While we do not record this as an explicit option in the prerequisites, we would communicate to students that this could be possible with a prerequisite waiver request accompanying a very strong record.
- 5. Overall, this change will allow students much more flexibility to get themselves into the right Calculus courses in first-year, and finish the year strong. We will pair this change with an improved communication strategy to make students aware of their options.
- 6. Beyond benefits to students, there are other benefits in terms of departmental resource allocation planning: MAT137Y5 enrollment typically goes down enough from Fall to Winter, such that an LEC section and several TUT sections need to be closed in the Winter, and students shifted around etc. With two half-courses, we should be able to plan better and be more flexible in terms of hiring and assigning TAs and instructors. We would also have more flexibility in re-offering, say, MAT137H5 in the Winter and/or offering MAT139H5 in the Summer.
- Regarding the course numberings chosen, we are avoiding "MAT138H5" intentionally to avoid confusion with MAT138H1, which is not a Calculus course. And we wanted the codes for the MAT157 replacement courses (157+159) to match the codes for the MAT137 replacements (137+139) - i.e. both ending in '7' and '9'.
- 8. Instructors of all UTM Calculus courses (and indeed all UTM MAT Teaching faculty, as well as faculty from CSC and STA) have been consulted, and the strong consensus was that this was a good change for students.
- 9. Note that UTSC has for years had two H courses instead of MAT137Y (and does not offer a course comparable to MAT157Y), while UTSG continues to offer MAT137 and MAT157 as Y courses.

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

## **Resources:**

Little to none. Here is one minor implication and one observation:

- 1. Since Y courses do not have Fall final exams, there will be some small additional overhead, say in terms of TA hours, in order to facilitate the additional annual final exams.
- 2. The total number of LEC and TUT hours for MAT137Y5 will essentially be split in half with this change, and we do not expect an increased need for instructors or TAs as a result of this change (modulo any efficiencies gained through better timetable planning as a result of the splits).

## MAT139H5: Integral Calculus for Mathematical Sciences

#### **Contact Hours:**

Lecture: 40 / Tutorial: 24

## **Description:**

A conceptual sequel to MAT137H5. Integration, the fundamental theorem of calculus, sequences and series, power series and Taylor's theorem. Applications typically include approximation, integration techniques, areas and volumes.

## Prerequisites:

MAT137H5 or MAT157H5

## **Corequisites:**

#### Exclusions:

MAT133Y5 or MAT134H5 or MAT134Y5 or MAT135Y5 or MAT136H5 or MAT137H5 or MAT157H5 or MAT157Y5 MAT133Y1 or MAT135Y1 or MAT135H1 or MAT137Y1 or MAT157Y1 or MATA30H3 or MATA31H3 or MATA32H3 or MATA33H3 or MATA35H3 or MATA36H3 or MATA37H3

#### **Recommended Preparation:**

#### **Rationale:**

- 1. About 5 years ago, we changed two first-year Calculus offerings, MAT134Y5 and MAT135Y5 into two pairs of H courses: MAT132H5+MAT134H5, and MAT135H5+MAT136H5. After years of experience with the change, we have found little to no real downside, but significant upsides for students. For example, students who fail MAT132H5 are students who were likely to fail MAT134Y5 in the past; these students are now able to retake MAT132H5 in the Winter semester and then take MAT134H5 in the Summer in order to 'stay on track'. Those students might attempt to take the double-speed version of MAT134Y5 in the summer to stay on track, resulting in many double-fails. And those that didn't, would be delayed until the following Fall. In any case, failing an H course is less of a blow and something easier to reorganize around, compared to failing a Y course.
- 2. Splitting MAT137Y5 and MAT157Y5 will provide similar benefits to students to the splits of MAT134Y5 and MAT135Y5, but will also introduce some new benefits. For example, a student who takes and barely passes MAT157H5 or MAT137H5 might have struggled to pass the Y-version of these courses, but will now have the option to "drop down" to the second semester Calculus course at the level just below (i.e. to the new MAT139H5 or to MAT136H5, respectively). This would offer

real relief to a student 'trapped' in MAT137/157 who wishes they could jump down to the 135/137 level.

- 3. This could also help us retain students in the MAT Major/Specialist programs, by giving a strong student who is interested in pursuing one of these programs an option to stay in an advanced Calculus course (e.g. dropping from MAT159 to MAT139 or 139 to 136) even if they find the higher level course to be too difficult and then gain a better overall cGPA in the year (e.g. a 60 and a 80 in two H courses, versus a 55 in a single Y course), making program entry more likely.
- 4. There could also be a small number of students who do exceptionally well in MAT137H5 or MAT135H%, for example, and will want to 'level up' to MAT139H5 or MAT159H5. While we do not record this as an explicit option in the prerequisites, we would communicate to students that this could be possible with a prerequisite waiver request accompanying a very strong record.
- 5. Overall, this change will allow students much more flexibility to get themselves into the right Calculus courses in first-year, and finish the year strong. We will pair this change with an improved communication strategy to make students aware of their options.
- 6. Beyond benefits to students, there are other benefits in terms of departmental resource allocation planning: MAT137Y5 enrollment typically goes down enough from Fall to Winter, such that an LEC section and several TUT sections need to be closed in the Winter, and students shifted around etc. With two half-courses, we should be able to plan better and be more flexible in terms of hiring and assigning TAs and instructors. We would also have more flexibility in re-offering, say, MAT137H5 in the Winter and/or offering MAT139H5 in the Summer.
- Regarding the course numberings chosen, we are avoiding "MAT138H5" intentionally to avoid confusion with MAT138H1, which is not a Calculus course. And we wanted the codes for the MAT157 replacement courses (157+159) to match the codes for the MAT137 replacements (137+139) - i.e. both ending in '7' and '9'.
- 8. Instructors of all UTM Calculus courses (and indeed all UTM MAT Teaching faculty, as well as faculty from CSC and STA) have been consulted, and the strong consensus was that this was a good change for students.
- 9. Note that UTSC has for years had two H courses instead of MAT137Y (and does not offer a course comparable to MAT157Y), while UTSG continues to offer MAT137 and MAT157 as Y courses.

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

## **Resources:**

Little to none. Here is one minor implication and one observation:

- 1. Since Y courses do not have Fall final exams, there will be some small additional overhead, say in terms of TA hours, in order to facilitate the additional annual final exams.
- 2. The total number of LEC and TUT hours for MAT137Y5 will essentially be split in half with this change, and we do not expect an increased need for instructors or TAs as a result of this change (modulo any efficiencies gained through better timetable planning as a result of the splits).

## MAT159H5: Analysis II

Contact Hours: Lecture: 36 / Tutorial: 24

## Description:

A rigorous and proof-intensive sequel to MAT157H5 for students with a serious interest in mathematics. Topics typically include sequences, series, and integration of single variable real-valued functions.

#### **Prerequisites:**

MAT157H5

## **Corequisites:**

Exclusions: MAT157Y5 or MAT157Y1 or MATA37H3

## **Recommended Preparation:**

## **Rationale:**

- 1. About 5 years ago, we changed two first-year Calculus offerings, MAT134Y5 and MAT135Y5 into two pairs of H courses: MAT132H5+MAT134H5, and MAT135H5+MAT136H5. After years of experience with the change, we have found little to no real downside, but significant upsides for students. For example, students who fail MAT132H5 are students who were likely to fail MAT134Y5 in the past; these students are now able to retake MAT132H5 in the Winter semester and then take MAT134H5 in the Summer in order to 'stay on track'. Those students might attempt to take the double-speed version of MAT134Y5 in the summer to stay on track, resulting in many double-fails. And those that didn't, would be delayed until the following Fall. In any case, failing an H course is less of a blow and something easier to reorganize around, compared to failing a Y course.
- 2. Splitting MAT137Y5 and MAT157Y5 will provide similar benefits to students to the splits of MAT134Y5 and MAT135Y5, but will also introduce some new benefits. For example, a student who takes and barely passes MAT157H5 or MAT137H5 might have struggled to pass the Y-version of these courses, but will now have the option to "drop down" to the second semester Calculus course at the level just below (i.e. to the new MAT139H5 or to MAT136H5, respectively). This would offer real relief to a student 'trapped' in MAT137/157 who wishes they could jump down to the 135/137 level.
- 3. This could also help us retain students in the MAT Major/Specialist programs, by giving a strong student who is interested in pursuing one of these programs an option to stay in an advanced Calculus course (e.g. dropping from MAT159 to MAT139 or 139 to 136) even if they find the higher level course to be too difficult and then gain a better overall cGPA in the year (e.g. a 60 and a 80 in two H courses, versus a 55 in a single Y course), making program entry more likely.
- 4. There could also be a small number of students who do exceptionally well in MAT137H5 or MAT135H%, for example, and will want to 'level up' to MAT139H5 or MAT159H5. While we do not record this as an explicit option in the prerequisites, we would communicate to students that this could be possible with a prerequisite waiver request accompanying a very strong record.
- 5. Overall, this change will allow students much more flexibility to get themselves into the right Calculus courses in first-year, and finish the year strong. We will pair this change with an improved communication strategy to make students aware of their options.
- 6. Beyond benefits to students, there are other benefits in terms of departmental resource allocation planning: MAT137Y5 enrollment typically goes down enough from Fall to Winter, such that an LEC section and several TUT sections need to be closed in the Winter, and students shifted around etc. With two half-courses, we should be able to plan better and be more flexible in terms of hiring and

assigning TAs and instructors. We would also have more flexibility in re-offering, say, MAT137H5 in the Winter and/or offering MAT139H5 in the Summer.

- Regarding the course numberings chosen, we are avoiding "MAT138H5" intentionally to avoid confusion with MAT138H1, which is not a Calculus course. And we wanted the codes for the MAT157 replacement courses (157+159) to match the codes for the MAT137 replacements (137+139) - i.e. both ending in '7' and '9'.
- 8. Instructors of all UTM Calculus courses (and indeed all UTM MAT Teaching faculty, as well as faculty from CSC and STA) have been consulted, and the strong consensus was that this was a good change for students.
- 9. Note that UTSC has for years had two H courses instead of MAT137Y (and does not offer a course comparable to MAT157Y), while UTSG continues to offer MAT137 and MAT157 as Y courses.

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

## **Resources:**

Little to none. Here is one minor implication and one observation:

- 1. Since Y courses do not have Fall final exams, there will be some small additional overhead, say in terms of TA hours, in order to facilitate the additional annual final exams.
- 2. The total number of LEC and TUT hours for MAT137Y5 will essentially be split in half with this change, and we do not expect an increased need for instructors or TAs as a result of this change (modulo any efficiencies gained through better timetable planning as a result of the splits).

## 28 Course Modifications:

## CSC263H5: Data Structures and Analysis

#### Prerequisites:

CSC207H5 and CSC236H5 and (STA107H5 or STA246H5 or STA256H5 or ECO227Y5)

## **Rationale:**

ECO227Y5 can be substituted for STA256H5 or STA246H5

#### **Resources:**

None

## CSC310H5: Information Theory

## Prerequisites:

CSC148H5 and MAT223H5 and (STA246H5 or STA256H5 or ECO227Y5)

#### **Rationale:**

ECO227Y5 can be substituted for STA256H5 or STA246H5.

## Resources:

None

## CSC318H5: The Design of Interactive Computational Media

#### Prerequisites:

**Previous**: Any CSC half-course and (CGPA 3.0 or enrolment in CSC specialist or major program) **New**: CSC207H5

## Exclusions:

CSC318H1 or CSCC10H3

#### **Rationale:**

- 1. CSCC10H3 is equivalent to CSC318H5.
- 2. Updating the prerequisite requirement for this course. CSC207H5 is the appropriate one.

#### **Resources:**

None

## CSC384H5: Introduction to Artificial Intelligence

## Prerequisites:

CSC263H5 and (STA246H5 or STA256H5 or ECO227Y5)

#### **Rationale:**

ECO227Y5 can be substituted for STA256H5 or STA246H5.

#### **Resources:**

None

## CSC338H5: Numerical Methods

#### **Prerequisites:**

CSC148H5 and (MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5)and (MAT223H5 or MAT240H5) and (CSC263H5 or 1.0 MAT credit at the 200+ level).

### **Rationale:**

Pre-requisite change to reflect retirement of MAT137Y5 and MAT157Y5, and introduction of 4 new 100-level MAT courses (MAT137H5, MAT139H5, MAT157H5, MAT159H5).

#### **Resources:**

None

#### CSC398H5: Topics in Computer Science

#### **Prerequisites:**

**Previous**: A minimum of 8.0 credits and permission of instructor **New**: Appropriate prerequisite requirement(s) will be available on the UTM timetable along with the topic title prior to course registration.

#### **Rationale:**

Prerequisites will differ according to different topics offer each time. Minimum CGPA is not required.

**Resources:** 

## CSC420H5: Introduction to Image Understanding

#### Prerequisites:

CSC263H5 and (CSC338H5 or CGPA 3.5)

#### **Rationale:**

In the past few years, the instructor has been regularly allowing students that don't have CSC338H5 but do have a CGPA of 3.5 (or higher) enroll in this course on exception. With student success from this exception, the instructor is proposing to make this a permanent and standard pre-requisite for the course.

## Resources:

None

## CSC428H5: Human-Computer Interaction

#### **Prerequisites:**

**Previous**: CSC318H5 and (STA246H5 or STA256H5) and (CSC207H5 or proficiency in Java) and (CGPA 3.0 or enrolment in a CSC subject Post) **New**: CSC318H5 and (STA246H5 or STA256H5 or ECO227Y5)

## **Rationale:**

- 1. ECO227Y5 can be substituted for STA256H5 or STA246H5.
- 2. CSC318H5 will require CSC207H5 as pre-requisite in 2023-2024 Calendar.

#### **Resources:**

None

## CSC490H5: Capstone Design Course

## **Prerequisites:**

**Previous**: Permission of the instructor and CGPA 3.0 / enrolment in a CSC Subject Post. **New**: Appropriate prerequisite requirement(s) will be available on the UTM timetable along with the topic title prior to course registration.

#### **Rationale:**

Prerequisites will differ according to different topics offer each time. Minimum CGPA is not required.

**Resources:** 

## CSC497H5: Topics in Computer Science

## **Prerequisites:**

**Previous**: A minimum of 8.0 credits and permission of instructor **New**: Appropriate prerequisite requirement(s) will be available on the UTM timetable along with the topic title prior to course registration.

#### Rationale:

Prerequisites will differ according to different topics offer each time. Minimum CGPA is not required.

## **Resources:**

None

## CSC498H5: Topics in Computer Science

#### **Prerequisites:**

**Previous**: A minimum of 8.0 credits and permission of instructor **New**: Appropriate prerequisite requirement(s) will be available on the UTM timetable along with the topic title prior to course registration.

#### **Rationale:**

Prerequisites will differ according to different topics offer each time. Minimum CGPA is not required.

#### **Resources:**

#### MAT132H5: Differential Calculus for Life Sciences

#### Prerequisites:

Minimum 70% in Grade 12 Advanced Functions (MHF4U) Highly Recommended: Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)

#### Exclusions:

MAT135H5 or MAT133Y5 or MAT134Y5 or MAT135H5 or MAT135Y5 or MAT137H5 or MAT137Y5 or MAT157H5 or MAT157Y5 or MAT133Y1 or MAT135Y1 or MAT135H1 or MAT137Y1 or MAT157Y1 or MAT157Y1 or MAT157Y5 or MATA29H3 or MATA30H3 or MATA31H3 or MATA32H3

#### **Recommended Preparation:**

#### Previous:

New: Highly Recommended: Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)

#### **Rationale:**

Updating exclusions to reflect the splitting of MAT137Y5 into MAT137H5, MAT139H5 and MAT157Y5 into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

#### MAT134H5: Integral Calculus for Life Sciences

#### **Prerequisites:**

MAT132H5 or MAT135H5 or MAT137H5 or MAT157H5 or MAT135H1 or MATA29H3 or MATA30H3 or MATA31H3

#### **Exclusions:**

MAT133Y5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT139H5 or MAT133Y1 or MAT135Y1 or MAT136H1 or MAT136H5 or MAT137Y1 or MAT157Y1 or MAT157Y5 or MAT159H5 or MATA33H3 or MATA35H3 or MATA36H3 or MATA37H3

#### **Rationale:**

Updating pre-requisites and exclusions to reflect the splitting of MAT137Y5 into MAT137H5 and MAT139H5 and MAT157Y5 into MAT157H5 and MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

## MAT135H5: Differential Calculus

#### **Prerequisites:**

Minimum 70% in Grade 12 Advanced Functions(MHF4U) Highly Recommended: Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)

## **Exclusions:**

MAT132H5 or MAT133Y5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT137H5 or MAT133Y1 or MAT135Y1 or MAT135H1 or MAT137Y1 or MAT157Y1 or MAT157Y5 or MAT157H5 or MATA29H3 or MATA30H3 or MATA31H3 or MATA32H3

## **Recommended Preparation:**

Previous:

New: Highly Recommended: Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)

#### **Rationale:**

Updating exclusions to reflect splitting of MAT137Y5 into MAT137H5 and MAT139H5 and MAT157Y5 into MAT157H5 and MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

## Resources:

None

## MAT136H5: Integral Calculus

**Prerequisites:** 

MAT132H5 or MAT135H5 or MAT137H5 or MAT157H5 or MAT135H1 or MATA29H3 or MATA30H3 or MATA31H3

#### Exclusions:

MAT133Y5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT139H5 or MAT133Y1 or MAT135Y1 or MAT136H1 or MAT134H5 or MAT137Y1 or MAT157Y1 or MAT157Y5 or MAT159H5 or MATA33H3 or MATA35H3 or MATA36H3 or MATA37H3

#### **Rationale:**

Updating course requisites to reflect the splitting of MAT137Y5 into MAT137H5 and MAT139H5 and MAT157Y5 into MAT157H5 and MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

#### MAT202H5: Introduction to Discrete Mathematics

#### **Prerequisites:**

MAT102H5 and (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT136H5 or MAT137Y5 or MAT139H5 or MAT157Y5 or MAT159H5 or MAT233H5)

#### **Rationale:**

Updating pre-requisites to reflect splitting MAT137Y5 into MAT137H5, MAT139H5; and MAT157Y5 splitting into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

#### MAT232H5: Calculus of Several Variables

#### Prerequisites:

MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT136H5 or MAT137Y5 or MAT139H5 or MAT157Y5 or MAT159H5

#### **Exclusions:**

MAT233H5 or MAT235Y1 or MAT237Y1 or MAT257Y1 or MAT257Y5 or MAT257Y1 or MATB41H3

## **Rationale:**

Updating pre-requisites to reflect splitting of MAT137Y5 into MAT137H5, MAT139H5; and MAT157Y5 into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

## MAT233H5: Calculus of Several Variables

#### **Prerequisites:**

MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT136H5 or MAT137Y5 or MAT139H5 or MAT157Y5 or MAT159H5 or 65% in MAT133Y5

#### Rationale:

Updating pre-requisites to reflect the splitting of MAT137Y5 into MAT137H5, MAT139H5; and MAT157Y5 into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

## MAT244H5: Differential Equations I

#### Prerequisites:

(MAT134H5 or MAT134Y5 MAT136H5 or MAT135Y5 MAT134Y or MAT136H5 MAT135Y or MAT137Y5 or MAT139H5 or MAT157Y5 or MAT159H5 or MAT233H5)and (MAT223H5 or MAT240H5).

#### **Rationale:**

Updating pre-requisites to reflect the splitting of MAT137Y5 into MAT137H5, MAT139H5; and MAT157Y5 into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22. Resources: None

## MAT257Y5: Analysis II

Title: Analysis III <mark>#</mark>

#### Description:

A rigorous and proof-intensive theoretical second course in multivariable calculus for students with a serious interest in mathematics. Topology of metric spaces; R^n; compactness, functions and continuity, the extreme value theorem. Derivatives; inverse and implicit function theorems, maxima and minima, Lagrange multipliers. Integration; Fubini's theorem, partitions of unity, change of variables. Differential forms. Integration Manifolds in R^n; integration on manifolds; Stokes' theorem for differential forms and classical versions. [72L, 48T] Note: MAT257Y5 will be accepted anywhere where MAT232H5 or MAT236H5 are accepted.

#### **Prerequisites:**

(MAT157Y5 or MAT159H5) and MAT240H5

#### **Rationale:**

The current course description is not as accurate as it could be about the topics covered, and the expectations of students. Also, with the split of MAT157Y5 into MAT157H5 + MAT159H5, the course title needed to be adjusted.

Impact to students: Students will have more clarity about what is covered currently in the course.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

#### MAT315H5: Introduction to Number Theory

#### **Prerequisites:**

MAT102H5 and [(MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT136H5 or MAT137Y5 or MAT139H5 or MAT157Y5 or MAT159H5) or (MAT133Y5 and MAT233H5)] and (MAT224H5 or MAT240H5) and MAT301H5

#### **Rationale:**

Updating pre-requisites to reflect the splitting of MAT137Y5 into MAT137H5, MAT139H5; and MAT157Y5 into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

## MAT354H5: Complex Analysis

#### **Prerequisites:**

MAT257Y5 or [(MAT137Y5 or MAT139H5 or MAT157Y5 or MAT159H5) and (MAT202H5 or MAT240H5 or MAT337H5) and (MAT232H5 or MAT233H5)]

#### **Rationale:**

Updating pre-requisites to reflect splitting of MAT137Y5 into MAT137H5, MAT139H5; and MAT157Y5 into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

## MAT382H5: Mathematics for Teachers

#### **Prerequisites:**

Minimum 60% in (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT136H5 or MAT137Y5 or MAT139H5 or MAT157Y5 or MAT159H5 or MAT233H5) and minimum 60% in MAT102H5 and (MAT223H5 or MAT240H5) and 0.5 at least one additional credit of MAT half-course at the 200+ level.

#### **Rationale:**

Updating pre-requisites to reflect the splitting of MAT137Y5 into MAT137H5, MAT139H5; and MAT157Y5 into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

## MAT392H5: Ideas of Mathematics

#### **Prerequisites:**

**Previous**: Completion of the second-year requirements for the Major and Specialists Programs in Mathematical Sciences.

**New**: MAT202H5 and MAT244H5 and (MAT236H5 or MAT257H5) and (MAT224H5 or MAT247H5)

#### **Rationale:**

Currently the prerequisites are listed as "Completion of the second-year requirements for the Major and Specialists Programs in Mathematical Sciences." We would like to make this list explicit. This will mean that coding of the prerequisites for this course will not have to be updated if/when the program requirements for the MAT Major/Specialist change in the future (e.g. we recently added MAT236H5/MAT257Y5 as a requirement for both programs.)

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

#### STA246H5: Computational Probability and Statistics

## **Description:**

This course covers probability including its role in statistical and computational modeling. Topics include classical and computational perspectives on cumulative, mass and distribution functions, random variables, expectation, limiting results, the normal distribution. Computational topics include generating and sampling random numbers, combinatorial objects and probability functions for simulation and statistical analysis. Additional techniques include resampling, hypothesis testing, model fit and cross validation. IMPORTANT NOTE: STA246H5 will not be permitted as a pre-requisite for any other 200+ level STA courses. In addition, STA246H5 cannot count towards any program (s) in Mathematics or Applied Statistics. The course is intended only for students in Computer Science programs who will not need STA256H5 for other program requirements.

#### **Prerequisites:**

CSC148H5 and (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT136H5 or MAT137Y5 or MAT139H5 or MAT157Y5 or MAT159H5 or a minimum 65% 65%+ in MAT133Y5)

#### Exclusions:

STA256H5 or STA237H1 or STA247H1 or STA257H1 or STA257H1 or STAB52H3 or ECO227Y5

#### **Rationale:**

1. Additional comment added to course description to ensure that MCS students know which STA course they should take: STA256H5 or STA246H5.

 Change to prerequisites: Since MAT137Y5 will be splitting into MAT137H5, MAT139H5; and MAT157Y5 will be splitting into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

## Consultation:

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

## STA256H5: Probability and Statistics I

#### Prerequisites:

MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT136H5 or MAT137Y5 or MAT139H5 or MAT157Y5 or MAT159H5 or a minimum 65% 65%+ in MAT133Y5

#### **Exclusions:**

STA246H5 or STA257H1 or ECO227Y5 or ECO227Y5or STAB52H3

#### Rationale:

- Exclusion change: The two courses are not equivalent. The overlap between the two courses do not exceed 25%. Removing this exclusion will help the students who may consider taking STA256H5 after taking STA246H5.
- Prerequisite change: Since MAT137Y5 will be splitting into MAT137H5, MAT139H5; and MAT157Y5 will be splitting into MAT157H5, MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

#### **Resources:**

None

#### STA360H5: Introduction to Bayesian Statistics

#### Prerequisites:

STA246H5 or STA258H5 or STA260H5 or STA238H1 or STA255H1 or ECO227Y5 or ECO227Y1 or STA260H5 or STA246H5

#### **Rationale:**

Students from other campuses may not have a course equivalent to STA258H5. STA260H5 will be a preferable prerequisite for this course.

#### **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

Resources: None

STA413H5: Estimation and Testing

## Exclusions:

STA452H1 or STA442H1 or STAC58C3

## **Rationale:**

Based on consultation with St. G and UTSC, important that these courses which have significant overlap are added for calendar accuracy.

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

## **Resources:**

None

## 2 Retired Courses:

## MAT137Y5: Calculus

#### **Rationale:**

See rationale under Course Proposals for MAT137H5, MAT139H5. This course to be retired since the material will be split into two new courses (MAT137H5, MAT139H5).

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

## MAT157Y5: Analysis I

#### **Rationale:**

See rationale under Course Proposals for MAT157H5, MAT159H5. This course to be retired since the material will be split into two new courses (MAT157H5, MAT159H5).

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22

## 7 Minor Program Modifications:

## Applied Statistics - Minor (Science)

Completion Requirements: 4.5 -5.0 credits are required.

## First Year:

MAT133Y5 or (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT137H5 and MAT139H5) or (MAT157H5 and MAT159H5) or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5

## **Higher Years:**

- 1.0 credit made up of any combination of (PSY201H5 and PSY202H5) or (BIO360H5 and BIO361H5) or SOC350H5 or ECO220Y5 or any STA courses other than STA256H5 and STA258H5
- 2. MAT232H5 or MAT233H5 or MAT257Y5
- 3. STA256H5 and STA258H5
- 4. 1.0 additional credit of STA at the 300/400 level

## NOTES:

- 1. ECO220Y5 cannot be substituted for STA256H5 and/or STA258H5 and/or STA260H5.
- 2. ECO227Y5 can be substituted for STA256H5 and STA258H5, but not for STA260H5.
- 3. Students who include any of PSY201H5 or PSY202H5 or BIO360H5 or BIO361H5 or SOC350H5 or ECO220Y5 in this program are responsible for ensuring that these courses are completed prior to enrolling in STA256H5 and that all STA course prerequisites and exclusions are met.
- 4. STA246H5 will not be permitted as a pre-requisite for any other 200+ level STA courses. In addition, STA246H5 cannot be used towards any program (s) in Applied Statistics or Mathematics. The course is intended only for students in Computer Science programs who will not need STA256H5 for other program requirements.

## **Description of Proposed Changes:**

- 1. Entry/program requirement change: to reflect retirement of MAT137Y5 and MAT157Y5, and introduction of 4 new 100-level MAT courses (MAT137H5, MAT139H5, MAT157H5, MAT159H5).
- 2. Consistent with new language proposed at end of course description for STA246H5, we are adding program note to advise students that this course is not appropriate for Applied Statistics and Math programs. Want to ensure this messaging appears in more than one place.

## **Rationale:**

- 1. Entry/program requirement change: to reflect retirement of MAT137Y5 and MAT157Y5, and introduction of 4 new 100-level MAT courses (MAT137H5, MAT139H5, MAT157H5, MAT159H5). see brief description and/or rationale for 4 new 100-level MAT courses (MAT137H5, MAT139H5, MAT157H5, MAT159H5).
- 2. Additional comment added to program notes to ensure that MCS students know which STA course they should take: STA246H5 or STA256H5. Consistent with new language proposed at end of course description for STA246H5, we are adding program note to advise students that this course is not appropriate for Applied Statistics and Math programs. Want to ensure this messaging appears in more than one place.

## Impact:

- 1. Entry/program requirement change: see brief description and/or rationale for 4 new 100-level MAT courses (MAT137H5, MAT139H5, MAT157H5, MAT159H5).
- 2. Students will be better informed and therefore better able to determine the correct STA option, STA256 or STA246, for their program goals.

## Consultation:

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

**Resource Implications:** 

None

## **Bioinformatics - Specialist (Science)**

Completion Requirements:

14.0 credits are required.

## First Year:

- 1. BIO152H5 and BIO153H5
- 2. CHM110H5 and CHM120H5
- 3. CSC108H5 and CSC148H5
- 4. MAT102H5
- 5. (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT137H5 and MAT139H5) or (MAT157H5 and MAT159H5) or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5

#### Second Year:

- 1. BIO206H5 and BIO207H5
- 2. CHM242H5
- 3. CSC207H5 and CSC236H5 and CSC263H5
- 4. MAT223H5 or MAT240H5

## Third Year:

- 1. MAT232H5 and MAT244H5
- 2. STA246H5 or STA256H5 or ECO227Y5

#### Fourth Year:

- 1. BIO314H5 and BIO372H5 and BIO477H5
- 2. CSC413H5 or CSC321H5 or CSC411H5 or CSC311H5
- 3. CSC343H5 and CSC373H5
- 4. MAT332H5
- At least 1.0 credit from the following list of recommended courses, of which at least 0.5 credit must be at the 400-level: BIO315H5 or BIO341H5 or BIO370Y5 or BIO371H5 or BIO380H5 or BIO443H5 or BIO481Y5 or CBJ481Y5 or CHM361H5 or CSC310H5 or CSC338H5 or CSC363H5 or JCP410H5 or STA302H5 or STA348H5

## NOTES:

- 1. If BIO477H5 is not offered in the fourth year of a student's studies, he or she must take an additional 0.5 credit from the recommended 400-level courses.
- 2. Students intending to take CHM361H5 as one of their fourth year recommended courses must take CHM243H5 as a prerequisite course..

## **Rationale:**

- 1. ECO227Y5 can be substituted for STA256H5 or STA246H5
- Program requirement change: to reflect retirement of MAT137Y5 and MAT157Y5, and introduction of 4 new 100-level MAT courses (MAT137H5, MAT139H5, MAT157H5, MAT159H5).

## **Resource Implications:**

None

## Computer Science - Major (Science)

## **Enrolment Requirements:**

*Limited Enrolment* — Enrolment in this program is limited to students with a minimum of 4.0 credits, including the following:

- 1. CSC148H5(see minimum grade note below)
- 2. MAT102H5 (see minimum grade note below)
- 3. MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5
- 4. ISP100H5
- 5. A cumulative grade point average (CGPA), determined annually. It is never lower than 2.5.
- 6. All students must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as a part of the 4.0 credits required for program entry.

#### NOTES:

- 1. The minimum grade required in CSC148H5 and MAT102H5 is determined annually. It is never lower than 60%. Only CSC148H5 and MAT102H5, taken at the UTM campus, will be accepted.
- 2. Transfer students who have completed any postsecondary studies outside of UTM (including studies at other divisions at the University of Toronto) are not eligible to pursue a Specialist and/or Major in Computer Science at U of T Mississauga.

\*\*\*The Computer Science Major is a deregulated fees program and as such, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per-course basis. See www.fees.utoronto.ca for more information on the fee structures.

## Completion Requirements:

7.5-8.0 credits are required.

#### First Year:

- 1. CSC108H5 and CSC148H5 and ISP100H5
- 2. MAT102H5

 (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT137H5 and MAT139H5) or (MAT157H5 and MAT159H5) or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5

## Second Year:

- 1. CSC207H5 and CSC236H5
- 2. 1.0 credit from the following CSC209H5 or CSC258H5 or CSC263H5
- 3. MAT223H5 or MAT240H5
- 4. STA246H5 or STA256H5 or ECO227Y5

#### **Higher Years:**

2.0 credits from the following: any 300/400 level CSC course (offered at UTM) or GGR335H5 or GGR337H5 or GGR437H5. At least 0.5 credit must come from 400-level courses, and no more than 0.5 credit of GGR courses may count to this requirement.

#### NOTE:

In addition to the course requirements above, students must complete an integrative learning experience. This requirement may be met taking at least one of the following half-courses: CSC318H5 or CSC367H5 or CSC375H5 or CSC409H5 or CSC420H5 or CSC427H5 or CSC477H5 or CSC490H5.

#### **Rationale:**

- 1. We always accept UTSG and UTSC courses to meet our program requirements. We would like to have it remove to avoid student confusion.
- 2. ECO227Y5 can be substituted for STA256H5 or STA246H5.
- 3. Entry/program requirement change to reflect retirement of MAT137Y5 and MAT157Y5, and introduction of 4 new 100-level MAT courses (MAT137H5, MAT139H5, MAT157H5, MAT159H5).

## **Resource Implications:**

None

## Computer Science - Minor (Science)

Completion Requirements: 4.0 credits are required.

First Year: CSC108H5 and CSC148H5 and MAT102H5

## Second Year:

- 1. CSC207H5 and CSC236H5
- 2. One of CSC209H5 or CSC258H5 or CSC263H5

#### Third and Fourth Years:

**1.0 credit** from any of UTM CSC at the 300/400 level CSC course (400-level, except for CSC392H5 and CSC393H5 and CSC492H5 and CSC493H5) or GGR335H5 or GGR337H5 or GGR437H5. No more than 0.5 credit of GGR courses may count to this requirement.

## Notes:

- Students in the CSC minor may only complete 1.5 credits of third and fourth year computer science courses. To enroll in additional upper year courses, a student must enter a CSC specialist or major program.
- 2. Only CSC148H5 and MAT102H5, taken at the UTM campus, will be accepted.

## Rationale:

- 1. We always accept UTSG and UTSC courses to meet our program requirements. We would like to have it remove to avoid student confusion.
- 2. We accept these courses (GGR335H5, GGR337H5 or GGR437H5 ) to meet CS major or specialists requirements. We would like to accept 0.5 of them to meet the CS minor program as well.
- 3. CSC392H5 and CSC393H5 are reading course, they should be excluded.

## **Resource Implications:**

## Computer Science - Specialist (Science)

## Enrolment Requirements:

*Limited Enrolment* — Enrolment in this program is limited to students with a minimum of 4.0 credits, including the following:

- 1. CSC148H5(see minimum grade note below)
- 2. MAT102H5 (see minimum grade note below)
- 3. MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5
- 4. ISP100H5
- 5. A cumulative grade point average (CGPA), determined annually. It is never lower than 2.5.
- 6. All students must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as a part of the 4.0 credits required for program entry.

#### Notes:

- 1. The minimum grade required in CSC148H5 and MAT102H5 is determined annually. It is never lower than 65%. Only CSC148H5 and MAT102H5, taken at the UTM campus, will be accepted.
- 2. Transfer students who have completed any postsecondary studies outside of UTM (including studies at other divisions at the University of Toronto) are not eligible to pursue a Specialist and/or Major in Computer Science at U of T Mississauga.

\*\*\*The Computer Science Specialist is a deregulated fees program and as such, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per-course basis. See www.fees.utoronto.ca for more information on the fee structures.

## Completion Requirements:

11.5-12.5 credits are required.

#### First Year:

- 1. CSC108H5 and CSC148H5 and ISP100H5
- 2. MAT102H5

 (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT137H5 and MAT139H5) or (MAT157H5 and MAT159H5) or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5

## Second Year:

- 1. CSC207H5 and CSC209H5 and CSC236H5 and CSC258H5 and CSC263H5
- 2. MAT223H5 or MAT240H5
- 3. MAT232H5 or MAT257Y5
- 4. STA246H5 or STA256H5 or ECO227Y5

#### **Higher Years:**

- 1. CSC311H5 and CSC343H5 and CSC363H5 and CSC369H5 and CSC373H5
- 2. CSC358H5 or CSC458H5
- 3. 2.5 credits from the following: any 300/400 level CSC course (offered at UTM) or GGR335H5 or GGR337H5 or GGR437H5. At least 1.0 credit must come from 400-level courses, and no more than 1.0 credit of GGR courses may count to this requirement.

#### Notes:

In addition to the course requirements above, students must complete an integrative learning experience. This requirement may be met by taking at least one of the following half-courses: CSC318H5 or CSC367H5 or CSC375H5 or CSC409H5 or CSC420H5 or CSC427H5 or CSC477H5 or CSC490H5.

#### Rationale:

- 1. We always accept UTSG and UTSC courses to meet our program requirements. We would like to have it remove to avoid student confusion.
- 2. ECO227Y5 can be substituted for STA256H5 or STA246H5
- 3. Entry/program requirement change to reflect retirement of MAT137Y5 and MAT157Y5, and introduction of 4 new
- 4. 100-level MAT courses (MAT137H5, MAT139H5, MAT157H5, MAT159H5).
- 5. The proposed curricular change involves making CSC311H5, the Introduction to Machine Learning course, a requirement for the CS Specialist Post. The intent is to align ourselves with what we expect our graduating students with a CS Specialist designation should know in this era of computing. While this course was not required so far in the CS Specialist, in recent years we have experienced the pervasive nature and the rise in the use of Machine Learning techniques in a variety of computational domains. As such, we anticipate that a well-rounded graduate with the CS Specialist designation should gain some exposure to machine learning and the corresponding computational thinking skills. Currently, a large segment of our student population is taking this course already, with some taking even more advanced follow-up courses in the area of Machine Learning. Therefore, adding the introductory machine learning course (CSC311H5) as a requirement for the CS Specialist is both a necessary and a natural step forward.

#### **Resource Implications:**

None

## Information Security - Specialist (Science)

## Enrolment Requirements:

*Limited Enrolment* — Enrolment in this program is limited to students with a minimum of 4.0 credits, including the following:

- 1. CSC148H5(see minimum grade note below);
- 2. MAT102H5 (see minimum grade note below);
- 3. MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5;
- 4. ISP100H5; and
- 5. A cumulative grade point average (CGPA), determined annually. It is never lower than 2.5.
- 6. All students must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as a part of the 4.0 credits required for program entry.

#### Notes:

- 1. The minimum grade required in CSC148H5 and MAT102H5 is determined annually. It is never lower than 65%. Only CSC148H5 and MAT102H5, taken at the UTM campus, will be accepted.
- 2. Transfer students who have completed any postsecondary studies outside of UTM (including studies at other divisions at the University of Toronto) are not eligible to pursue a Specialist and/or Major in Computer Science at U of T Mississauga.

\*\*\*The Information Security Specialist is a deregulated fees program and as such, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per course basis. See www.fees.utoronto.ca for more information on the fee structures.

#### **Completion Requirements:**

12.5-13.0 credits are required.

#### First Year:

- 1. CSC108H5 and CSC148H5 and ISP100H5
- 2. MAT102H5
- 3. (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT137H5 and MAT139H5) or (MAT157H5 and MAT159H5) or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5
- 4. MAT223H5 or MAT240H5

## Second Year:

- 1. CSC207H5 and CSC209H5 and CSC236H5 and CSC258H5 and CSC263H5
- 2. MAT224H5 or MAT240H5
- 3. MAT232H5 or MAT257Y
- 4. STA246H5 or STA256H5 or ECO227Y5

### Third Year:

- 1. CSC343H5 and CSC347H5 and CSC363H5 and CSC369H5 and CSC373H5
- 2. MAT301H5 and MAT302H5

#### Fourth Year:

- 1. CSC358H5 or CSC458H5
- 2. 1.0 credit from the following: CSC422H5 or CSC423H5 or CSC427H5 or CSC490H5

## Notes:

In addition to the course requirements above, students must complete an integrative learning experience. This requirement may be met by taking at least one of the following half-courses: CSC318H5 or CSC367H5 or CSC375H5 or CSC409H5 or CSC420H5 or CSC427H5 or CSC477H5 or CSC490H5.

## Rationale:

- 1. ECO227Y5 can be substituted for STA256H5 or STA246H5
- 2. Entry/program requirement change to reflect retirement of MAT137Y5 and MAT157Y5, and introduction of 4 new 100-level MAT courses (MAT137H5, MAT139H5, MAT157H5, MAT159H5).

## **Resource Implications:**

None

## Mathematical Sciences - Minor (Science)

## Completion Requirements:

4.0 credits in MAT are required, including 1.0 credit of MAT at the 300/400 level.

## First Year:

- 1. MAT102H5
- 2. (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT137H5 and MAT139H5) or (MAT157H5 and MAT159H5) or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5

#### Second Year:

- 1. MAT223H5 or MAT240H5
- 2. [MAT232H5 and (MAT202H5 or MAT224H5 or MAT236H5 or MAT240H5 or MAT244H5 or MAT247H5 or CSC236H5)] or MAT257Y5

#### Higher Years:

1. 1.0 credit of MAT at the 300+ level

#### NOTES:

- 1. MAT223H5 may be taken in the first year.
- Students may replace the combination [(MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT137H5 and MAT139H5) or (MAT157H5 and MAT159H5) or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5] and MAT232H5 with the combination (MAT133Y5 and MAT233H5)

## **Rationale:**

Program requirement update to reflect splitting MAT137Y5 and MAT157Y5 into 2 H courses each. MAT137Y5 becomes MAT137H5 + MAT139H5, and MAT157Y5 becomes MAT157H5 + MAT159H5. See rationale under Course Proposals for MAT137H5, MAT139H5, MAT157H5, MAT159H5.

#### Impact:

See rationale under Course Proposals for MAT137H5, MAT139H5, MAT1 57H5, MAT159H5.

## **Consultation:**

Within MCS with MAT, STA and CSC Faculty Advisors and MAT, CSC Associate Chairs. Discussed 9-Feb-22.

## **Resource Implications:**

Little to none. Here is one minor implication and one observation: Since Y courses do not have Fall final exams, there will be some small additional overhead, say in terms of TA hours, in order to facilitate the additional annual final exams. The total number of LEC and TUT hours for MAT137Y5 will essentially be split in half with this change, and we do not expect an increased need for instructors or TAs as a result of this change (modulo any efficiencies gained through better timetable planning as a result of the splits).

## Psychology (UTM), Department of

5 New Courses:

## JLP384H5: Speech Communication

#### **Contact Hours:**

Lecture: 24 / Tutorial: 12

## **Description:**

Imagine an animal species where one creature can generate thoughts in other creatures' minds simply by causing the air molecules around them to vibrate. Although this sounds exotic, it is what we as humans do every time we speak and listen. In this course, we explore the perception and production of spoken language from an interdisciplinary perspective. Sample topics include perceptual and cognitive aspects of speech communication, speech signal acoustics, audio-visual speech integration, speech sound articulation, artificial speech recognition, multilingualism, and contextual influences on speech communication. Through laboratory exercises, students will replicate classic experimental findings and gain hands-on experience with acoustic and behavioural data analysis

## Prerequisites:

(PSY201H5 or LIN228H5) and one of LIN229H5 or LIN288H5 or LIN318H5 or PSY270H5 or PSY274H5 or PSY280H5 or PSY374H5

## Corequisites:

**Exclusions:** LIN328H5 and PSY384H5 and PLID50H3

## **Recommended Preparation:**

#### **Rationale:**

There is substantial overlap between two courses currently taught in Language Studies (LIN328H5, Speech Perception) and Psychology (PSY384, Speech Perception and Production). This JLP course will allow students to take the course in either department, giving them the flexibility to take the course when it works best for them. This JLP course will replace the current above mentioned LIN and PSY courses.

#### **Consultation:**

Department of Language Studies (UTM) and Department of Psychology (UTM) faculty have met several times and discussed these proposals. The curriculum committees from both departments have also reviewed the proposals. Students in both disciplines were informally polled and look forward to enrolling in JLP courses at UTM.

#### **Resources:**

Resource Implication Form submitted for review.

## JLP388H5: Bilingualism and Multiple Language Acquisition

#### **Contact Hours:**

Lecture: 24 / Tutorial: 12

#### **Description:**

What are the linguistic and psychological implications of knowing more than one language? This course will explore topics such as the bilingual brain, the nature of bilingual language input, effects of age-of-acquisition and language similarity, the status of heritage languages, schooling in a second language (for example French Immersion programs), and research methodologies used in the study of bilingualism. Bilingual/multilingual corpora will be examined.

#### **Prerequisites:**

LIN288H5 or PSY274H5 or PSY315H5

## **Corequisites:**

Exclusions: FRE388H5 and JFL388H5 and LIN388H5 and PSY376H5

#### **Recommended Preparation:**

#### **Rationale:**

Linguistics and Psychology overlap significantly in the areas of language acquisition. We identified PSY376H5 and LIN388H5 to have similar content and appeal to a similar population of students in both departments. As students in both Linguistics and Psychology manifest a strong interest in the topic of Bilingualism, this JLP course will allow them to take an interdisciplinary course, showcasing the main topics in this field. Courses with language acquisition content are in high demand in both departments. This JLP course will replace the current above mentioned LIN and PSY courses.

#### **Consultation:**

Both the Department of Language Studies (UTM) and Department of Psychology (UTM) faculty have met several times and discussed these proposals. The curriculum committees from both departments have reviewed and approved the proposals.

#### **Resources:**

Resource Implication Form submitted for review.

## JLP481H5: Topics in Developmental Psycholinguistics

#### **Contact Hours:**

Seminar: 36

#### **Description:**

How do children's language comprehension and production abilities differ from adults? What can research on language acquisition tell us about why language looks the way it does? Developmental psycholinguists use experimental techniques to explore a range of topics in the area of child language

comprehension and production. Drawing on cutting-edge interdisciplinary research, we will explore contemporary issues and debates in this area.

#### **Prerequisites:**

(LIN288H5 or PSY274H5) and 1.0 credit from the following list: LIN318H5 or LIN328H5 or LIN329H5 or LIN332H5 or LIN385H5 or LIN418H5 or LIN421H5 or PSY315H5 or PSY374H5 or PSY384H5 or any JLP course.

#### **Corequisites:**

#### Exclusions:

#### **Recommended Preparation:**

#### **Rationale:**

Linguistics and Psychology overlap significantly in the areas of language acquisition and language processing. With the significant overlap in research interests among certain faculty working in the LIN and PSY programs, this JLP course will allow students from both programs/departments to take an interdisciplinary capstone course, showcasing the fruitful research that obtains in this field, a course, which, if offered jointly, could be offered more frequently (by up to four faculty in rotation), giving students more flexibility to take the course in a year that works best for them. Courses with psycholinguistic and language acquisition content are in high demand in both departments.

#### **Consultation:**

Department of Language Studies (UTM) and Department of Psychology (UTM) faculty have met several times and discussed these proposals. The curriculum committees from both departments have also reviewed the proposals. Students in both disciplines were informally polled and look forward to enrolling in JLP courses at UTM.

#### **Resources:**

Resource Implication Form submitted for review.

## PSY368H5: Neuroimaging Laboratory

Contact Hours: Practical: 36

#### Description:

In this course, you will become familiar with theory and principles underpinning approaches to measuring the brain. The course will focus on techniques used in human neuroscience research. Students will gain skills relevant to the processing, visualization, analysis, interpretation, and reporting of brain data.

#### **Prerequisites:**

PSY201H5 and PSY202H5 and PSY290H5

## **Corequisites:**

**Exclusions:** 

#### **Recommended Preparation:**

#### **Rationale:**

The Neuroscience Specialist program has generated increased demand for research-based courses in this area. The proposed lab course could accommodate many of the students in need of research course credits and would broaden the neuroscience education and training available to students. I have appended a brief overview of the schedule for a structural MRI workshop currently being run in my lab. There are three IRP students participating in the workshop as a sort of practice run for a possible lab course. The course would follow a similar plan as the workshop. Briefly, students would begin by learning basic skills (e.g., command line coding) needed to process data as well as background information about the brain imaging technique(s) being focused on in the course. Subsequently, in a step-by-step fashion, students will learn to: organize their data for analysis, select and use tools to process brain data, identify and correct errors/distortions in the data/images, derive brain metrics from the data, perform group-level analyses (e.g., comparing brains of two groups) on various brain metrics, and interpret and report their observations. Throughout the term, students would have required readings that explain the background and development of methods/techniques, forums explaining how to implement the use of data processing and analysis tools, and would prepare reports pertaining to how they processed/analyzed data and the outcome.

#### **Consultation:**

Consultation with Psychology department and approval from Psychology undergraduate curriculum committee.

#### **Resources:**

I have already acquired the resources needed to launch this course. To offer a structural neuroimaging lab, I plan to use data gathered for my lab's MRI studies and/or publicly available MRI data. A high-powered computer appropriate for working with MRI data is needed and I have already procured one for the purposes of teaching via the Autonomy Fund. Students can access this computer in-person or remotely.

## PSY424H5: Special Topics in Well-Being

#### **Contact Hours:**

Seminar: 36

#### Description:

In depth examination of selected topics in well-being. Topics change periodically. The contact hours for this course may vary in terms of contact type (L, S, T, P) from year to year, but will always be 36 hours in total. See the UTM Timetable.

#### **Prerequisites:**
PSY320H5 or PSY321H5 or PSY324H5 or PSY325H or PSY327H5 or PSY331H5 or PSY343H5 or PSY340H5 or PSY333H5 or PSY341H5 or PSY344H5 or PSY345H5 or PSY346H5 or PSY3462Y5

Corequisites:

Exclusions:

**Recommended Preparation:** 

# **Rationale:**

Well-being is an important but interdisciplinary topic within the Health, Adaptation, and Wellness Cluster that is the focus of research for several faculty members in the Psychology department. Unfortunately, our current compliment of seminar courses (social, personality, abnormal psychology, etc.) are not an appropriate match for this area of research.

# 4 Program Revisions:

# Exceptionality in Human Learning - Specialist (Science)

# Completion Requirements:

13.0-14.5 credits are required, including at least 5.0 300/400-level credits of which 1.5 must be at the 400-level.

**First Year:** PSY100Y5; (ANT101H5, ANT102H5)/(BIO152H5, BIO153H5)/1.0 credit from BIO202H5, BIO205H5, BIO206H5, BIO207H5/SOC100H5

# Second Year:

- 1. PSY201H5/ECO220Y5/ECO227Y5/SOC350H5/STA215H5/STA218H5/STA220H5/
- 2. PSY210H5, PSY240H5
- 3. 0.5 credit from the following: PSY202H5 (or equivalent), PSY270H5, PSY274H5, PSY280H5, PSY290H5

# **Higher Years:**

- 3.0 credits from the following: PSY310H5, PSY311H5, PSY312H5, PSY313H5, PSY314H5, PSY315H5, PSY316H5, PSY317H5, PSY318H5, PSY319H5, PSY321H5, PSY325H5, PSY331H5, PSY333H5, PSY340H5, PSY341H5, PSY343H5, PSY344H5, PSY346H5, PSY353H5, PSY374H5, PSY376H5, PSY384H5, PSY391H5, PSY392H5, PSY393H5, JLP388H5
- PSY442Y5 and at least 0.5 credit from the following: PSY400Y5, PSY403H5, PSY404H5, PSY405H5, PSY406H5, PSY410H5, PSY415H5, PSY440H5, PSY474H5, PSY495H5, PSY499H5, JLP481H5
- 3. One of the following:
  - a) credits from: ANT202H5, ANT203H5, ANT204H5, ANT205H5, ANT206H5, ANT207H5, ANT211H5, ANT212H5, ANT214H5, ANT215H5, ANT220H5, ANT241H5 ANT241Y5, ANT306H5, ANT322H5, ANT331H5, ANT332H5, ANT333H5, ANT334H5, ANT335H5, ANT337H5, ANT328H5, ANT341H5, ANT350H5, ANT352H5, ANT362H5, ANT364H5, ANT365H5, ANT401H5, ANT403H5, ANT434H5, ANT437H5, ANT460H5, ANT461H5, ANT462H5
  - b) credits from: SOC205H5, SOC209H5, SOC211H5, SOC216H5, SOC219H5, SOC224H5, SOC227H5, SOC240H5, SOC244H5, SOC263H5, SOC275H5, SOC304H5, SOC307H5, SOC310H5, SOC316H5, SOC323H5, SOC332H5, SOC333H5, SOC341H5, SOC352H5, SOC356H5, SOC359H5, SOC371H5, SOC375H5, SOC380H5, SOC456H5, SOC457H5
  - c) credits from: BIO202H5, BIO205H5, BIO206H5, BIO207H5, BIO210Y5, BIO315H5, BIO341H5, BIO370Y5, BIO371H5, BIO372H5, BIO375H5, BIO380H5, BIO403H5, BIO407H5, BIO434H5, BIO443H5, BIO476H5, BIO477H5; ANT202H5, ANT203H5, ANT331H5, ANT332H5, ANT333H5, ANT334H5
- 4. 2.5 additional credits to be selected from the following (no more than 1.0 credit from any one discipline):

ANT - Any course in 3 (a) not counted previously
SOC - Any course in 3 (b) not counted previously
BIO - Any course in 3 (c) not counted previously
CHM - CHM242H5, CHM243H5, CHM341H5, CHM345H5, CHM347H5, CHM361H5, CHM362H5
ENG - ENG234H5, ENG384H5

FRE - FRE225Y5, FRE355H5
HIS - HIS310H5, HIS326Y5, HIS338H5
LIN - LIN101H5, LIN102H5, LIN200H5, LIN256H5, LIN258H5, LIN358H5, LIN380H5
JAL - JAL253H5, JAL355H5
PHL - PHL243H5, PHL244H5, PHL255H5, PHL267H5, PHL271H5, PHL272H5, PHL274H5, PHL277Y5, PHL282H5, PHL283H5, PHL290H5, PHL350H5, PHL355H5, PHL357H5, PHL358H5, PHL367H5, PHL370H5, PHL374H5, PHL376H5
RLG - RLG314H5
WGS - Any course

# **Rationale:**

Addition of proposed JLP courses.

Correction of ANT241H5, previously listed as Y courses, but this is inconsistent with how the course is currently offered.

#### **Resource Implications:**

# Neuroscience - Specialist (Science)

# Completion Requirements:

11.5-12.0 credits are required, including at least 3.0 credits at the 300/400 level and 1.0 credit at the 400 level.

**First Year:** PSY100Y5; BIO152H5, BIO153H5; CHM110H5, CHM120H5; (MAT132H5, MAT134H5)/(MAT135H5, MAT136H5)/MAT134Y5/MAT135Y5/MAT137Y5/MAT157Y5

#### Second Year:

- 1. (PSY201H5, PSY202H5)/(STA220H5, STA221H5)/(STA215H5, BIO360H5) or equivalent
- 2. BIO202H5; BIO206H5; BIO207H5; PSY290H5
- 3. One of the following: PSY210H5, PSY270H5, PSY274H5, PSY280H5

# Third Year:

1.0 credit from each of the following three areas:

- a) **Behavioural Neuroscience area:** BIO318Y5, BIO320H5, BIO328H5, PSY316H5, PSY318H5, PSY346H5, PSY352H5, PSY353H5, PSY354H5, PSY355H5, PSY368H5, PSY369H5, PSY389H5, PSY391H5, PSY392H5, PSY393H5, PSY395H5, PSY397H5, PSY398H5
- b) **Molecular/Cellular Biology area:** BIO314H5, BIO315H5, BIO341H5, BIO347H5, BIO372H5, BIO407H5, BIO476H5, PSY355H5, PSY392H5
- c) **Neurobiology area:** BIO304H5, BIO310H5, BIO380H5, BIO404H5, BIO409H5, PSY318H5, PSY346H5, PSY369H5, PSY393H5, PSY397H5

#### Fourth Year:

- 1. One seminar from the following: BIO403H5, BIO404H5, BIO406H5, BIO407H5, BIO408H5, PSY472H5, PSY480H5, PSY490H5, PSY495H5
- 2. One thesis/research project from the following: BIO481Y5, PSY400Y5, PSY403H5/PSY404H5/PSY405H5/PSY406H5/PSY499H5

# NOTES:

- 1. In second year, students are encouraged to consider taking the following courses depending on their planned course of study:
  - BIO202H5 required for several courses in the Neurobiology area.
  - PSY210H5 required for several courses in the Behavioural Neuroscience area.
- 2. Students interested in taking PSY400Y5 in their last year are advised to take PSY309H5 in their third year.

#### **Description of Proposed Changes:**

# **Rationale:**

Addition of new course, PSY368H5.

#### **Consultation:**

Psychology undergraduate curriculum committee

#### **Resource Implications:**

# Psychology - Major (Science)

# Completion Requirements:

6.5-7.0 credits in Psychology are required, including 2.0 at the 300/400 level.

#### **First Year:**

PSY100Y5

#### **Higher Years:**

- a. PSY201H5/ECO220Y5/ECO227Y5/SOC350H5/STA215H5/STA218H5/STA220H5
- b. PSY210H5, PSY290H5
- c. one of the following: PSY270H5, PSY274H5, PSY280H5
- d. one of the following: PSY220H5, PSY230H5, PSY240H5
- e. 1.5 credits from the following courses: 0.5 credit must be taken from each group:
- f. Biological Bases of Behaviour: PSY318H5, PSY346H5, PSY351H5, PSY352H5, PSY353H5, PSY354H5, PSY355H5, PSY362H5, PSY372H5, PSY391H5, PSY392H5, PSY393H5, PSY395H5, PSY397H5, PSY398H5; BIO304H5, BIO310H5, BIO318Y5, BIO328H5
- g. Perception/Cognition/Communication: PSY312H5, PSY315H5, PSY316H5, PSY360H5, PSY362H5, PSY371H5, PSY372H5, PSY374H5, PSY376H5, PSY384H5, PSY385H5, PSY387H5, PSY393H5, PSY397H5, JLP384H5, JLP388H5
- Developmental/Abnormal/Social/Personality: PSY310H5, PSY311H5, PSY312H5, PSY313H5, PSY314H5, PSY315H5, PSY316H5, PSY317H5, PSY318H5, PSY320H5, PSY321H5, PSY324H5, PSY325H5, PSY327H5, PSY328H5, PSY330H5, PSY331H5, PSY333H5, PSY340H5, PSY341H5, PSY343H5, PSY344H5, PSY345H5, PSY346H5, PSY353H5
- i. 1.5 additional credits in Psychology. At least 0.5 must be at the 300/400 level

#### Notes:

A single course can be used to satisfy only one Psychology program requirement.

# Rationale:

Inclusion of proposed courses (JLP384H5, JLP388H5) Removal of PSY360H5. No longer offered or listed in calendar.

# **Consultation:**

Psychology undergraduate curriculum committee

#### **Resource Implications:**

# Psychology - Specialist (Science)

# Completion Requirements:

10.0-10.5 credits in Psychology are required.

First Year: PSY100Y5

# Second Year:

- 1. PSY201H5 and PSY202H5 (or equivalent)
- 2. PSY210H5 and PSY290H5
- 3. PSY270H5 or PSY274H5 or PSY280H5
- 4. PSY220H5 or PSY230H5 or PSY240H5
- 5. 0.5 additional PSY credit at the 200-level

# Third Year:

- 1. PSY309H5
- 2. One laboratory course from the following: PSY319H5 or PSY329H5 or PSY368H5 or PSY369H5 or PSY379H5 or PSY389H5
- 3. 3.0 credits from the following courses (with a min. 0.5 credit from each grouping):
- 4. **Biological Bases of Behaviour:** PSY318H5, PSY346H5, PSY351H5, PSY352H5, PSY353H5, PSY354H5, PSY355H5, PSY362H5, PSY372H5, PSY391H5, PSY392H5, PSY393H5, PSY395H5, PSY397H5, PSY398H5; BIO304H5, BIO310H5, BIO318Y5, BIO328H5
- Perception/Cognition/Communication: PSY312H5, PSY315H5, PSY316H5, PSY360H5, PSY362H5, PSY371H5, PSY372H5, PSY374H5, PSY376H5, PSY384H5, PSY385H5, PSY387H5, PSY393H5, PSY397H5, JLP384H5, JLP388H5
- Developmental/Abnormal/Social/Personality: PSY310H5, PSY311H5, PSY312H5, PSY313H5, PSY314H5, PSY315H5, PSY316H5, PSY317H5, PSY318H5, PSY320H5, PSY321H5, PSY324H5, PSY325H5, PSY327H5, PSY328H5, PSY330H5, PSY331H5, PSY333H5, PSY340H5, PSY341H5, PSY343H5, PSY344H5, PSY345H5, PSY346H5, PSY353H5

#### Fourth Year:

- 1. PSY400Y5 or PSY403H5 or PSY404H5 or PSY405H5 or PSY406H5 or PSY499H5
- 2. 1.0 credit from the following courses: PSY402H5 or PSY410H5 or PSY415H5 or PSY420H5 or PSY424H5 or PSY430H5 or PSY435H5 or PSY440H5 or PSY442Y5 or PSY471H5 or PSY480H5 or PSY490H5 or PSY495H5 or JLP481H5 or BIO403H5 or BIO407H5 or STA441H5

#### Notes:

A single course can be used to satisfy only one Psychology program requirement.

# **Rationale:**

Addition of new proposed courses (PSY424H5, JLP384H5, JLP388H5, JLP481H5) Removed PSY360H5. Haven't offered it in years. No longer in calendar.

# **Resource Implications:**



# **University of Toronto Mississauga**

Social Sciences Curriculum Proposals Report Meeting Date: March 7, 2022

# Contents

Contents	2
Anthropology (UTM), Department of	3
1 Course Modification:	3
Communication, Culture, Information, & Technology (UTM), Institute of	4
5 Course Modifications:	4
Management (UTM), Department of	7
4 Course Modifications:	7
1 Minor Program Modification:	10
Political Science (UTM), Department of	12
3 New Courses:	12
2 Course Modifications:	15
6 Retired Courses:	17
Study of University Pedagogy (UTM), Institute for the	19
4 New Courses:	19

# Anthropology (UTM), Department of

# 1 Course Modification:

# ANT335H5: Anthropology of Gender

#### **Contact Hours:**

Previous: *Lecture:* 24 New: *Lecture:* 24 / *Seminar:* 12

# **Description:**

Survey of the function of gender roles from evolutionary and cultural perspectives. Cross-cultural variation in human sexual behaviour and gender will be examined. In some years, as part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. See Anthropology department website for more details. [24L]

# **Rationale:**

In response to feedback received from students (who took the course in the past), the instructor would like to add an extra hours to this 2 hours class to address the desires of the students. They expressed a desire for class time to be longer to allow them to have more time to digest and reflect upon what they just learned.

**Consultation:** 

# Communication, Culture, Information, & Technology (UTM), Institute of

5 Course Modifications:

# CCT354H5: Digital Marketing II

#### **Exclusions:**

CCT356H5 or MGT414H5 (Winter 2022) or MGT450H5

# **Rationale:**

We are adding MGT414H5 and MGT450H5 exclusions. The courses contain substantially similar material. Impact to DEM students will be minimal as the courses are not typically open to DEM students.

# **Consultation:**

Approved by ICCIT Curriculum Committee February 2022.

#### **Resources:**

# CCT411H5: CCIT Internship II

#### **Description:**

This course is a practical internship and is available upon application from students registered in any CCIT program who have completed CCT410H5. The course is intended for students who have the opportunity to continue their CCT410H5 internship for a second semester. A report and presentation will be required at the end of the placement. These, along with the employer's assessment, will provide the main part of the course mark. [125]

#### **Prerequisites:**

(Completion of 13.0 university credits including CCT409H5 or CCT410H5 or WRI410H5) and minimum a CGPA of 2.5 and permission of Internship Coordinator. internship coordinator.

#### **Exclusions:**

Previous: New: WRI411H5

#### Rationale:

We are adding prerequisites of CCT409H5 or WRI410H5 and exclusion of WRI411H5. The updates provide clarity. Students may take a combination of CCT410H5 and WRI411H5 or WRI410H5 and CCT411H5.

#### **Consultation:**

Approved by the ICCIT Curriculum Committee February 2022.

# CCT475H5: Integrated Learning in Digital Media, Communication, and Technology

# Title:

Thesis in Integrated Learning in Digital Media, Communication, and Technology

# **Contact Hours:**

Previous: *Seminar:* 12 New:

# **Description:**

This capstone project course carried out independently under the supervision of a faculty member requires students to reflect on the experiences they gained during their two work placements connected with the Professional Experience Certificate in Digital Media, Communication, and Technology, and develop a comprehensive case study that integrates theories learned learning within their ICCIT and their work placements studies with workplace applications. Students will be required to participate in one-on-one consultations with the course instructor between weekly group seminars. Consultations are approximately one hour per week for a total of 12 hours (in addition to the scheduled group seminars).

# **Rationale:**

We are updating the course title and description to accurately reflect the pedagogical structure of the course.

#### Consultation:

Approved by ICCIT Curriculum Committee, February 2022.

# **Resources:**

None

# WRI306H5: Writing for the Academic

Title: Writing for the Academic Sciences

#### **Rationale:**

We are updating the course title to align with the interdisciplinary learning content.

#### **Consultation:** ICCIT Curriculum Committee, February 2022.

Resources:

None

# WRI411H5: Professional Writing and Communication Internship II

# **Prerequisites:**

(Completion WRI410H5 and completion of 13.0 13 university credits including WRI410H5 or CCT410H5 or CCT409H5) and minimum CGPA of 2.5 and permission of the Internship Coordinator.

Exclusions: CCT410H5 or CCT411H5

# **Rationale:**

We are adding prerequisites of CCT410H5 and CCT409H5 and removing CCT410H5 as an exclusion. The updates provide clarity. Students may take a combination of CCT410H5 and WRI411H5 or WRI410H5 and CCT411H5.

# **Consultation:**

Approved by the ICCIT Curriculum Committee February 2022.

# Management (UTM), Department of

# 4 Course Modifications:

# MGT252H5: Principles of Marketing

#### Exclusions:

CCT322H5 or MGM252H5 or CCT221H5 or RSM250H1 or MGIA01H3

#### **Rationale:**

CCT322 is no longer being offered by the ICCIT. CCT221H5 lists MGT252H5 as an exclusion. Therefore, MGT252H5 must list CCT221H5 as an exclusion.

#### **Consultation:**

The ICCIT was consulted on 15/02/2022 and confirmed that CCT322H5 is no longer being offered by their department. Marketing faculty at the Department of Management were also consulted and compared MGT252H5 to CCT221H5 to make sure that it should be listed as an exclusion.

#### **Resources:**

# MGT325H5: Critical Thinking, Analysis and Decision Making I

#### **Description:**

(Formerly MGT320H5 MGT320) This course introduces students to integration of different areas of studies, stressing the pervasive competencies and critical thinking skills required from business school graduates, future professional accountants and advisors. This course focuses on developing students' decision-making and written communication skills. [36L]

#### **Prerequisites:**

MGT220H5 and MGT223H5 and (MGT224H5 or MGT225H5) and MGT231H5 and MGT232H5

#### **Corequisites:**

MGT321H5 and MGT322H5\*and MGT323H5

\*Students who have completed MGT224H5 are required to enrol in MGT322H5 as corequisite or prerequisite. Students who have completed MGT225H5 do not require MGT322H5 as corequisite or prerequisite.

#### **Exclusions:**

Previous: New: MGT320H5

#### **Rationale:**

MGT325 is a minor capstone course that builds on the fundamental knowledge accounting students have learnt in their introductory finance, accounting, auditing and managerial accounting courses. One

of the first modules in MGT325 deals with the valuation of a firm, which is a topic covered in MGT232. MGT231 and MGT232 together cover the foundational finance knowledge for all commerce and management students.

#### **Resources:**

# MGT431H5: Advanced Topics in Corporate Finance

#### Description:

Application and development of the ideas in MGT231H5 MGT338H5, MGT232H5 MGT339H5 to corporate finance problems such as initial public offerings and project evaluation. [24L]

#### **Rationale:**

The courses MGT338 and MGT339 were recoded to MGT231 and MGT232, respectively.

**Resources:** 

# MGT443H5: Topics in Asset Pricing

#### Title:

**Previous**: Topics in Asset Pricing **New**: Quantitative Finance

#### **Description:**

This course represents a hands-on introduction to tools and techniques required to modern quantitative finance implement asset pricing and risk-management models in practice. The course will enable students to build computer algorithms tailored to financial problems. Emphasis is placed on high-frequency trading data, portfolio optimization and techniques, factor models for security pricing, machine learning and prediction, risk quantification and management, and option pricing algorithms, and the management of large high-frequency trading data sets.

#### Prerequisites:

ECO220Y5 or STA256H5

#### **Exclusions:**

MGT412H5 Special Topics in Management: Computational Finance (Winter 2020 & Winter 2021)

#### **Rationale:**

The "Quantitative Finance" title better reflects the content of the course and is more informative for students. The course is very data-intensive and relies heavily on the type of algorithms and techniques that are typically used by quantitative asset managers (e.g., quantitative portfolio re-allocation, stochastic processes, some machine learning components). The course is therefore very practical and hands-on in nature. In contrast, a title like "Topics in Asset Pricing" suggests more of a theoretical course of asset pricing, equilibrium models or such (which sounds a bit like a PhD class) and it is less obvious to students why it is useful and what career path it prepares them for.

# 1 Minor Program Modification:

# Management - Specialist (BBA)

Completion Requirements: This program has a total of 13.5 credits.

# First Year:

For students who began studies prior to September 2018 (2.0 credits):

- MGM101H5 and MGM102H5; and
- (ECO101H5 and ECO102H5) or ECO100Y5

For students who began studies in September 2018 and onwards (3.0 credits):

- MGM101H5 and MGM102H5; and
- (ECO101H5 and ECO102H5) or ECO100Y5; and
- MAT133Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or (MAT135H5 and MAT136H5) or (MAT132H5 and MAT134H5)

# Higher Years (10.5 credits):

- Core courses (2.0 credits): MGT260H5 and MGT262H5 and MGT270H5 and MGT492H5
- Management Disciplines (7.0 credits): (MGT120H5 or MGT221H5) and MGT218H5 and MGM222H5 and MGM320H5 and MGM390H5 and MGT231H5 and MGT232H5 and MGT252H5 and MGT353H5 and MGT363H5 and MGT371H5 and MGT374H5 and (ECO200Y5 or ECO204Y5 or ECO205Y5)
- Electives (1.5 credits): Any 300/400-level MGT or MGM courses. Cannot include any courses already used above.

\*\* STA218H5 will no longer be accepted as an appropriate course for this program AFTER the 2022-2023 Academic year. Beginning in the 2023-2024 Academic year all students will be required to complete MGT218H5 as the statistics course for this program.

#### **Description of Proposed Changes:**

The Management - Specialist (BBA) will now accept ECO204Y5 as a substitute for ECO200Y5 or ECO205Y5.

#### **Rationale:**

Since the requirement for Management - Specialist (BBA) students is to take MAT133 (or equivalent) in their 1st year, many Management Specialist students are taking or have taken ECO204Y5 instead of ECO205Y5 (or ECO200Y5). ECO205Y5 was implemented to bridge the gap for students that had not taken MAT133 when it became a requirement for entry into the Management program.

#### Impact:

It will allow students in the Management - Specialist (BBA) to use ECO204Y5 as part of their required ECO courses under Management Disciplines.

# **Consultation:**

The Economics Department was consulted on 14/02/2022 regarding this change and they will accept if Management Specialist students take ECO204Y5.

# **Resource Implications:**

# Political Science (UTM), Department of

3 New Courses:

POL404H5: Political Theory for the Present

# Contact Hours: Lecture: 24

# Description:

Covers 20th- and 21st-century political theory. Topics will vary by faculty offering the course and may include but are not limited to topics in feminist political theory, post-colonial and de-colonial political theory, and political economy.

# **Prerequisites:**

POL200Y5

**Corequisites:** 

Exclusions:

# **Recommended Preparation:**

POL320Y5 or other 300-level coursework relevant to the course theme

# **Rationale:**

This course can be taught by any of the tenure-stream political theory faculty at UTM (Chang, Nacol, Philips). It will replace POL 404Y, which we have agreed to retire. We prefer to offer this .5 course in its place, and to keep the description flexible so that our faculty can fill out the thematic content based on their respective areas of expertise, while still offering it consistently as a 20th and 21st-century political thought course. POL404Y5 will not be needed as an exclusion as it has not been offered in 5+ years.

# **Consultation:**

Our department had a curriculum workshop in December 2021, and we agreed to retire POL 404Y and replace it with this .5 course that could be taught by any of our tenure-stream theory faculty.

**Resources:** Resource form submitted.

# POL406H5: Insurgents, Criminals, and Warlords

# Contact Hours: Seminar: 24

# Description:

This course provides a theoretical and empirical overview of the role played by violent non-state actors in international politics. Examining insurgents, criminals, and warlords, the course explores why these

actors resort to violence, the strategies and tactics they employ, and the connections that link them together.

Prerequisites: POL209H5

**Corequisites:** 

Exclusions:

**Recommended Preparation:** 

#### **Rationale:**

This course has been taught as a topics course by a new professor for 2 years. It attracted strong demand, with full enrollment and a long waiting list. The course fulfills an important substantive gap in the security studies/international security subfield—there are no other courses with a focus on non-state violent actors. The course also provides an empirical methods focus to further develop students' research skills.

# **Consultation:**

This course was discussed at our curriculum workshop in December 2021.

#### **Resources:**

A classroom with the ability to connect a laptop and project slides. Resource form submitted.

# POL414H5: The Future of Work

Contact Hours: Seminar: 24

#### **Description:**

This course is a critical study of the meaning and value of work in social and political life. Sources include both historical and contemporary political theories of work and labour.

Prerequisites:

POL200Y5

#### Corequisites:

Exclusions: POL485H5 (Winter 2021)

# **Recommended Preparation:**

POL320Y5

Rationale:

The instructor (Emily Nacol) piloted this course as a special topics course in Winter 2021. It was enrolled to capacity at that time. As a permanent course, it would offer students the opportunity to take a 4th-year seminar in political theory, and would build on 200- and 300-level courses in political theory and political economy.

Attached is the course outline for POL485H5 (Winter 2021). This was a special topics course the instructor used to pilot The Future of Work as a 400-level seminar.

# **Consultation:**

This course was discussed as part of a POL department curriculum workshop held in Dec 2021.

# **Resources:**

Resource form submitted.

# 2 Course Modifications:

# POL200Y5: Political Theory

Title: Justice and Power in Political Life Theory

#### Abbreviated Title:

**Previous**: Political Theory **New**: Justice & Power in Pol Life

# Description:

Studies the themes of power and justice in the history The development of political thought, from to the ancient world until 17th century. Among the 1700s. Readings may include work from theorists examined are Plato, Aristotle, Machiavelli, Hobbes and Locke. [48L, 23T]

#### **Rationale:**

The new title and description better reflect the materials covered in the course.

#### **Consultation:**

Our department had a curriculum workshop in December 2021, and we agreed to update the course title to reflect the content better.

#### **Resources:**

# POL320Y5: Modern Political Thought

# Title:

**Previous**: Modern Political Thought **New**: Modernity and Resistance

#### Abbreviated Title:

**Previous**: Mod Politic Thought **New**: Modernity & Resistance

#### **Description:**

**Previous**: The development of political thought in the 18th and 19th centuries, including Rousseau, Burke, Hume, Kant, Hegel, the English Utilitarians (Bentham and J.S. Mill), Marx and Nietzsche. [48L] [23T] **New**: This course covers the history of political thought in the 18th and 19th centuries .

#### **Rationale:**

This new course title and description better reflect the themes and scope of the course as it is currently taught.

# **Consultation:**

Our department met for a curriculum workshop in December 2021 and agreed to modify POL 320's course description and title.

# 6 Retired Courses:

# POL316Y5: Contemporary Canadian Federalism

#### **Rationale:**

Our department met in Dec 2021 for a curriculum workshop and agreed to retire this course because we offer other courses that cover some of the same topic areas. (POL 318H5, e.g.)

#### **Consultation:**

Our department met in Dec 2021 for a curriculum workshop

# POL317Y5: Comparative Public Policy and Administration

#### **Rationale:**

Course has not been offered in 3+ years and will not be offered again in the future.

#### **Consultation:**

Our department met in Dec 2021 for a curriculum workshop and agreed to retire this course.

# POL322Y5: Enlightenment and Theocracy

#### **Rationale:**

The faculty member who has taught this course has retired.

#### **Consultation:**

Our department met in Dec 2021 for a curriculum workshop and we agreed to retire this course.

# POL353Y5: Canadian Public Policy: From the Golden Age to the Era of Globalization

#### Rationale:

Course has not been offered in 3+ years and will not be offered again in the future.

#### **Consultation:**

Our department met in Dec 2021 for a curriculum workshop and agreed to retire this course.

# POL404Y5: 20th Century Political Thought

#### Rationale:

We plan to replace this course with an .5 term course that covers similar ground.

#### **Consultation:**

Our department met in Dec 2021 for a curriculum workshop and agreed to retire this course and propose a related .5 term course in its place.

# POL455Y5: The Craft of Political Research

# **Rationale:**

Course has not been offered in 3+ years and will not be offered again in the future as the faculty member retired.

# **Consultation:**

Our department met in Dec 2021 for a curriculum workshop and agreed to retire this course.

# Study of University Pedagogy (UTM), Institute for the

4 New Courses:

ISP200H5: Advanced Writing for University and Beyond

Contact Hours: Seminar: 36

# Description:

This course advances the writing- and reading-related skills that are necessary for success within the academic setting. The course builds on the 'Writing About Writing' approach to help students develop their understanding of the writing process and writing related theory, especially within the university context. The class will involve writing in and out of class, as well as exercises in effective and constructive critique of one another's work.

#### Prerequisites:

ISP100H5

**Corequisites:** 

**Exclusions:** 

**Recommended Preparation:** 

# **Rationale:**

As ISUP continues to expand, we aim to offer a wider selection of courses for students. We will be hiring additional faculty members this year with diverse interests and specialties to contribute to a more rounded and inclusive approach to the area of writing studies. We aim to emphasize that writing is not a 'one and done' skill. Writing requires continuous development, especially in the academic context. Students in ISP100H5 have also indicated an interest in progressing their writing skills beyond the constraints of a first-year introductory course.

#### **Consultation:**

Consultation with ISUP curriculum committee confirmed on February 11, 2022.

**Resources:** 

# ISP250H5: Special Topics in Writing Studies

Contact Hours: Lecture: 24

#### Description:

This course covers a special topic in Writing Studies. Content relates to instructor's area of interest, thus the course varies in focus from year to year. This course may satisfy either the Humanities or Social

Sciences distribution requirement, depending on the topic offered. The contact hours for this course may vary in terms of contact type (L,S,T,P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

# **Prerequisites:**

ISP100H5

**Corequisites:** 

Exclusions:

#### **Recommended Preparation:**

#### **Rationale:**

As ISUP continues to expand, we aim to offer a wider selection of courses for students. We will be hiring additional faculty members this year with diverse interests and specialties to contribute to a more rounded and inclusive approach to the area of writing studies. We aim to emphasize that writing is not a 'one and done' skill. Writing requires continuous development, especially in the academic context. Students in ISP100H5 have also indicated an interest in progressing their writing skills beyond the constraints of a first-year introductory course.

#### **Consultation:**

Consultation with ISUP curriculum committee confirmed on February 11, 2022.

**Resources:** 

# ISP350H5: Special Topics in Writing Studies

Contact Hours: Lecture: 24

#### **Description:**

This course covers an in-depth special topic in Writing Studies. Content relates to instructor's area of interest, thus the course varies in focus from year to year. This course may satisfy either the Humanities or Social Sciences distribution requirement, depending on the topic offered. The contact hours for this course may vary in terms of contact type (L,S,T,P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

#### Prerequisites:

ISP100H5

**Corequisites:** 

**Exclusions:** 

**Recommended Preparation:** 

#### **Rationale:**

As ISUP continues to expand, we aim to offer a wider selection of courses for students. We will be hiring additional faculty members this year with diverse interests and specialties to contribute to a more rounded and inclusive approach to the area of writing studies. We aim to emphasize that writing is not a 'one and done' skill. Writing requires continuous development, especially in the academic context. Students in ISP100H5 have also indicated an interest in progressing their writing skills beyond the constraints of a first-year introductory course.

# **Consultation:**

Consultation with ISUP curriculum committee confirmed on February 11, 2022.

**Resources:** 

# ISP450H5: Advanced Special Topics in Writing Studies

Contact Hours:

Lecture: 24

#### **Description:**

This course covers an advanced special topic in Writing Studies. Content relates to instructor's area of interest, thus the course varies in focus from year to year. This course may satisfy either the Humanities or Social Sciences distribution requirement, depending on the topic offered. The contact hours for this course may vary in terms of contact type (L,S,T,P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

#### Prerequisites:

ISP100H5

**Corequisites:** 

**Exclusions:** 

#### **Recommended Preparation:**

#### **Rationale:**

As ISUP continues to expand, we aim to offer a wider selection of courses for students. We will be hiring additional faculty members this year with diverse interests and specialties to contribute to a more rounded and inclusive approach to the area of writing studies. We aim to emphasize that writing is not a 'one and done' skill. Writing requires continuous development, especially in the academic context. Students in ISP100H5 have also indicated an interest in progressing their writing skills beyond the constraints of a first-year introductory course.

#### **Consultation:**

Consultation with ISUP curriculum committee confirmed on February 11, 2022.