The following proposals, received on DAP between May 1-15, 2014, have been approved. For more information on the DAP process, see the Academic Handbook at <a href="https://www.uwo.ca/univse/handbook">www.uwo.ca/univse/handbook</a>.

## **FACULTY OF ARTS AND HUMANITIES**

#### **ENGLISH AND WRITING STUDIES**

Effective **September 1, 2014**, the prerequisites for the following courses be revised. The noted changes are the only revisions necessary and should be made to all courses listed.

Prerequisite(s): At least 65% in one of Writing 2101F/G, Writing 2121F/G, Writing 2111F/G, or Writing 2131F/G; or at least 70% in one of Writing 1000F/G or Writing 1030F; or permission of the Department (consult the Undergraduate Program Director, Writing).

Writing 2202F/G -Winning Your Argument: Rhetorical Strategy in a Visual Age

Writing 2203F/G - From Headline to Deadline: Writing for Publication

Writing 2204F/G - Short Flicks: An Introduction to Screenwriting

Writing 2205F/G - Hot Type: Technical Writing

Writing 2206F/G - Minding Your Ps and Qs: Technical Editing

Writing 2207F/G - My Name is url: Writing for the Web

Writing 2208F/G - Teaching Writing

Writing 2209F/G - Visual Information Packaging: Document Design

Writing 2210F/G - GrammarPhobia Demystified: Contemporary Grammar for Writers

Writing 2211F/G - The Naked Writer: Fundamentals of Creative Writing

Writing 2212F/G - Figures of Speech: Writing for Oral Presentation

Writing 2213F/G - LOL: Humour Writing

Writing 2214F/G - Memoir, Memories, and Disclosure: Writing Creative Non-Fiction

Writing 2215F/G - Encoding Persuasion: Rhetorical Theory

Writing 2216F/G - Rhetoric: Law Talk

Writing 2217F/G - Concept to Product: Publishing

Writing 2218F/G - To Make a Long Story Short: Introduction to Writing Short Fiction

Writing 2219F/G - Word Travels: Introduction to Travel Writing

Writing 2220F/G - Renewing Your Poetic License: Introduction to Writing Poetry

Writing 2221F/G - Self and the Rhetorical Triangle: an Introduction to Interpersonal Communication

Writing 2222F/G - Food Writing

Writing 2223F/G - Fashion Writing: Elements of Style

Writing 2224F/G - Writing for the Big Screen: Introduction to Feature Film Writing

Writing 2225F/G - The Inside Track: Sport Writing

Writing 2226F/G - Out of the Book: Creative Writing in the Digital Age

Writing 2227F/G - Crime Writing: Black Dahlias, Red Herrings and Tequila Sunrises

Writing 2291F/G - Special Topics in Writing

Writing 2292F/G - Special Topics in Writing

Writing 2293F/G - Special Topics in Writing

Writing 2294F/G - Special Topics in Writing

Writing 2295F/G - Special Topics in Writing

Writing 2296F/G - Special Topics in Writing

Writing 2297F/G - Special Topics in Writing

Writing 2298F/G - Special Topics in Writing

Effective **September 1, 2014**, the prerequisites for the following courses be revised. The noted changes are the only revisions necessary.

# Writing 2299F/G - Re-visioning Self: Creating Your Professional Portfolio

Prerequisite(s): At least 65% in one of Writing 2101F/G, Writing 2121F/G, Writing 2111F/G, or Writing 2131F/G;

or at least 70% in Writing 1000F/G; Two or more Writing courses numbered 2200 and above, or permission of the Department (consult the Undergraduate Program Director, Writing).

# Writing 3300F/G - Internship in Writing

Prerequisite(s): At least 65% in one of Writing 2101F/G, Writing 2121F/G, Writing 2111F/G, or Writing 2131F/G; or at least 70% in Writing 1000F/G; or Permission of the Department (consult the Undergraduate Program Director, Writing)

Effective September 1, 2014, the Certificate in Professional Communication be revised.

## CERTIFICATE IN PROFESSIONAL COMMUNICATION

Open to all students in the University, the Certificate in Professional Communication aims to develop students' writing abilities in workplace writing genres. All program courses may be credited toward other undergraduate programs. Any undergraduate student may apply for admission, subject to prerequisites and general University entrance requirements.

## **Admission Requirements**

A grade of at least 65% in Writing 2111F/G is required for entrance to the program.

# **Program Requirements**

To qualify for the Certificate in Professional Communication, students must achieve an overall average of 70% in these 3.5 courses:

0.5 required course: Writing 2299F/G.

3.0 Writing courses from: Writing <a href="2202F/G">2202F/G</a>, <a href="2202E/G">2202F/G</a>, <a href="2202E/G">2202E/G</a>, <a href="2202E/G">2202E/G</a

Effective September 1, 2014 the Diploma in Professional Communication be revised.

## **DIPLOMA IN PROFESSIONAL COMMUNICATION**

Open to all students in the University, the Diploma in Professional Communication aims to develop students' writing abilities in workplace writing genres. All program courses may be credited toward other undergraduate programs. Any undergraduate student may apply for admission, subject to prerequisites and general University entrance requirements. A student who does not yet possess a university degree may apply for admission to the Certificate in Professional Communication, which can be taken concurrently with an undergraduate degree.

# **Admission Requirements**

A grade of at least 65% in Writing 2111F/G is required for entrance to the program.

# **Program Requirements**

To qualify for the Diploma in Professional Communication, students must achieve an overall average of 70% in these 3.5 courses:

0.5 required course: Writing 2299F/G.

3.0 Writing courses from: Writing 2202F/G, 2203F/G, 2205F/G, 2206F/G, 2207F/G, 2209F/G, 2210F/G, 2212F/G, 2215F/G, 2216F/G, 2217F/G, 2221F/G, 3300F/G. Speech 2001 may be counted toward this requirement. In certain instances Special Topics courses in Writing, and a maximum 1.0 approved course from outside the Program in Writing, Rhetoric, and Professional Communication Department of English and Writing Studies may be counted toward this requirement. Students should contact the Program's Undergraduate Program Director/Writing Studies for further information and specific course approvals.

Effective **September 1, 2014,** the Certificate in Writing be revised.

# **CERTIFICATE IN WRITING**

Open to all students in the University, the Certificate Program in Writing aims to develop the general writing ability of students. All program courses may be credited toward other undergraduate programs. Any undergraduate student may apply for admission, subject to prerequisites and general University entrance

requirements.

# **Admission Requirements**

Either a grade of at least 65% in one of Writing 2101F/G, 2121F/G, 2111F/G or 2131F/G, or a grade of at least 70% in one of Writing 1000F/G or Writing 1030F is required for entrance to the program.

# **Program Requirements**

To qualify for the Certificate in Writing, students must achieve an overall average of 70% in 3.5 courses:

0.5 course: Writing 2299F/G.

3.0 Writing courses numbered 2200 and above.

Students may substitute a maximum 1.0 approved non-Writing course toward this requirement, and should contact the Undergraduate Program Director, Writing (Department of English and Writing Studies) for further information and specific course approvals.

Effective September 1, 2014, the Diploma in Writing be revised.

# **DIPLOMA IN WRITING**

Open to all students with a university degree, the Diploma in Writing aims to develop the general writing ability of students. All program courses may be credited toward other undergraduate programs. Anyone with a university degree may apply for admission, subject to prerequisites and general university entrance requirements. If you do not already possess a university degree, you may apply for admission to the Certificate in Writing, which can be taken concurrently with an undergraduate degree.

## **Admission Requirements**

Either a grade of at least 65% in one of Writing 2101F/G, 2121F/G, 2111F/G or 2131F/G, or a grade of at least 70% in one of Writing 1000F/G or Writing 1030F is required for entrance to the program.

# **Program Requirements**

To qualify for the Diploma in Writing, students must achieve an overall average of 70% in 3.5 courses:

0.5 course: Writing 2299F/G.

3.0 Writing courses numbered 2200 and above.

Students may substitute a maximum 1.0 approved non-Writing course toward this requirement, and should contact the Undergraduate Program Director, Writing (Department of English and Writing Studies) for further information and specific course approvals.

## **MODERN LANGUAGES AND LITERATURES**

Effective **September 1, 2014**, the following courses be withdrawn.

**CLC 2110F/G** – Utopias and Visions of the Future

CLC 2120F/G - The Grotesque

CLC 2130F/G - International Children's Literature

CLC 2191F/G-2194F/G - Special Topics in Comparative Literature and Culture

Effective **September 1, 2014**, the following Comparative Literature and Culture courses be introduced.

# CLC 1040 - Ideas and Apps that Changed the World

Explore the great ideas that have revolutionized our culture. Discover their origin and application in our public and private lives. Refine your understanding of words such as literature, academia, encyclopedia, unconscious, reconciliation, platonic love, beautiful, parchment, paradox, utopia, progress, alienation, social networks, redemption through textual and visual material.

3 hours, 1.0 course.

# CLC 2102A/B - Utopias and Visions of the Future

Journey across cultures in search of various attempts to imagine ideal societies and perfect places. Exploring the political, social and cultural basis of the utopian impulse from antiquity to the 21st century, we will consider how utopia morphs into its polar opposite: the nightmare of dystopia.

Antirequisite(s): the former CLC 2110F/G

3 hours, 0.5 course.

# CLC 2103A/B - The Grotesque

The course focuses on the grotesque imagination in literature and the arts from antiquity up to the twenty-first century. The grotesque – whose limits are humor and horror, as well as the fantastic and the realistic – will be illustrated with works by Apuleius, Rabelais, da Vinci, Baudelaire, Tanizaki, Kafka, Borges, etc.

Antirequisite(s): the former CLC 2120F/G

3 hours, 0.5 course.

## CLC 2104A/B - International Children's Literature

This comparative survey of works from different countries will consider novels, as well as films, for children of different ages in an international cultural context, dealing with such questions as adult-child relationships, growing up, the role of the imagination, gender identity and adventure.

Antirequisite(s): the former CLC 2130F/G

3 hours, 0.5 course.

# CLC 2105A/B - 2109A/B - Special Topics in Comparative Literature and Culture

Please consult the Department for current offerings.

Antirequisite(s): CLC 2191F/G - 2194F/G

3 hours, 0.5 course.

# CLC 2111A/B - Storytelling - East and West

Explore the ancient art of storytelling, focusing on three classics of world literature: the Asian Pańcatantra, Thousand and One Nights and the European Decameron. Study how literary devices, themes, and styles travel across time and space boundaries bringing different cultures into contact.

3 hours, 0.5 course.

# CLC 2112A/B – The Graphic Novel in Print and Online around the World

As a rebel genre on the border between word and image, the graphic novel has recently increased its international popularity through digital media. Tracing its history from illuminated manuscripts to webcomics, this course will study the clash between visual and verbal cultures in works by Botticelli, Buzzelli, Hergé, Hernández, Tegame.

3 hours, 0.5 course.

# CLC 2117A/B – Funny Money: Commerce and Comedy

Comic authors have long been intrigued by the "marriage market" or the "war racket," and other satiric signs of how money makes the world go round. This course will unfold the ironies of commercial life as represented in a series of comic masterpieces from antiquity to modernity.

3 hours, 0.5 course.

## CLC 2125A/B - Battle of the Sexes

If "Love is a Battlefield," as pop music declares, who are the victors and what are the spoils? Older than Troy, the Erotomachia ("Sex War") is an enduring meme by which gender troubles are confronted and sexual hierarchies overturned. Its history will be traced through literature, painting, opera, drama, film.

Antirequisite(s): CLC 2294F/G

3 hours, 0.5 course.

# CLC 2131A/B – Rome: The Eternal City

Discover Rome and its unique contribution to Western arts and culture. Understand its prominent role in the global political and religious environments. Identify and map traces of the past in the city's contemporary urban landscape and daily life.

Antirequisite(s): Italian 2242F/G, Italian 3340F/G, CLC 2100

3 hours, 0.5 course.

## CLC 2132A/B - Italian Journeys

Discover Florence, Naples, Venice, Milan and more. Join illustrious travelers like Goethe, Dickens and Stendhal to explore fundamentals of Italian culture from the Middle-Ages to modernity with reference to architecture,

literature, politics, film, and visual arts.
Antirequisite(s): Italian 2240F/G, CLC 2100

3 hours, 0.5 course.

# CLC 2134A/B - Bombay to Mumbai: Hinduism and Literature

Under the British Raj, Bombay was imagined as a gateway city connecting the industrial West to the mystical East. This course examines its tumultuous transformation into modern Mumbai: a paradoxical mega-city where orientalist fantasies of a "pure" Hindu past are both vigorously sustained and vehemently countered in literature and film.

3 hours, 0.5 course.

# CLC 2200F/G - Exploring Comparative Literature and Cultures

What happens when written texts and cultural products cross chronological, cultural, linguistic, or geographic boundaries? Consider the consequences of translation between genres, media and periods. Hone your writing, research and critical thinking skills through studying how texts move between different cultural contexts.

Antirequisite(s): CLC 2204F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department.

3 hours, 0.5 course.

# CLC 2206F/G - Exploring Hispanic Cultures I

Introduction to reading, writing and researching in the visual, performing and literary arts and in socio-lingustics. Students develop foundations in these fields through a series of case studies across generic, historical, geographical areas of the Hispanic world. Taught in Spanish by one core professor in conjunction with different specialists.

Antirequisite(s): SPA 2215F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department.

Pre-or Corequisite(s): Spanish 2200 or Spanish 2200W/X or Spanish 2223 or permission of the Department.

3 hours, 0.5 course.

# CLC 2207F/G - Exploring Hispanic Cultures II

Introduction to reading, writing and researching in literature, film, popular culture and digital Spanish. Students develop foundations in these fields through a series of case studies across generic, historical, geographical areas of the Hispanic world. Taught in Spanish by one core professor in conjunction with different specialists. Antirequisite(s): SPA 2216F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department.

Pre-or Corequisite(s): Spanish 2200 or Spanish 2200W/X or Spanish 2223 or permission of the Department. 3 hours, 0.5 course.

## CLC 2208F/G - Exploring Italian Cultures

Introduction to reading, writing and researching about Italian culture and its contribution to the global context. Students will acquire foundations through case studies concerning arts, literature, language, history and identity. Taught in Italian by one core professor in conjunction with different specialists.

Antirequisite(s): Italian 2215F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department.

Pre-or Corequisite(s): Italian 2200 or 2200W/X, the former Italian 2250 or permission of the Department.

3 hours, 0.5 course.

# CLC 2209F/G - Exploring German Cultures

In this first encounter with German literary, visual and performing arts, students investigate key persons, places, times and issues, such as Goethe, Berlin, WWII, and Turkish-German relations. This course offers a practical introduction to research in German studies. Taught in German by one core professor in conjunction with different specialists.

Antirequisite(s): German 2215F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department.

Pre-or Corequisite(s): German 2200, 2200W/X or permission of the Department. 3 hours, 0.5 course.

# CLC 3300F/G – Literary and Cultural Theory

Explore a broad range of theories from Plato to contemporary trends, in a global perspective. Discover how the vocabulary and concepts of literary interpretation travel across time and cultures, and learn how to use them to think with/through a variety of literary texts worldwide.

Antirequisite(s): CLC 2205F/G, French 3700-3702F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department.

Pre-or Corequisite(s): CLC 2200F/G or CLC 2204F/G or permission of the Department.

3 hours, 0.5 course

## CLC 3340F/G - Medieval Literature and Culture

Study the renaissance of the 12th century which revitalized intellectual life in Europe, and the first great works of chivalry and romantic love in their cultural context. Gain knowledge of medieval castle architecture, fashion, food, travel, medicine, sexuality, courtly love, and the hunt in text and image.

Antirequisite(s): German 4451F/G, CLC 2236F/G

Prerequisite(s): CLC 1020 or 1040, or Medieval Studies 1022, 1025A/B or 1026A/B or permission of the Department.

Pre- or Corequisite(s): CLC 2200F/G, CLC 3300F/G or CLC 2204F/G, 2205F/G or permission of the Department.

3 hours, 0.5 course.

## CLC 3341F/G - Renaissance Literature and Culture

The Renaissance has had enormous repercussions for Western and world culture. What began as a program of educational reform ended as a reflection on the nature of humanity – and the production of some of the world's finest artistic creations. This course investigates Renaissance art, architecture, literature, philosophy, and music.

Antirequisite(s): CLC 2240F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department

Pre-or Corequisite(s): CLC 2200F/G, CLC 3300F/G or CLC 2204F/G, 2205F/G or permission of the

Department.

3 hours, 0.5 course.

## CLC 3342F/G - Baroque Literature and Culture

Devastating political crises and religious conflicts characterize the Baroque, as do startling scientific discoveries, new philosophical concepts, and geographical expansion in the New World. Consider the dynamics of this period of crisis as revealed in its literature, art and philosophy. Among the figures studied are Calderón, Velázquez, Descartes and Galileo.

Antirequisite(s): CLC 2250F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department

Pre-or Corequisite(s): CLC 2200F/G, CLC 3300F/G or CLC 2204F/G, 2205F/G or permission of the

Department.

3 hours, 0.5 course.

# CLC 3343F/G - Eighteenth-Century Literature and Culture

Explore the global perspectives of ideas and cultural practices in eighteenth-century Europe. Studying art, music and written texts, learn about the lively debate striving for Enlightenment progress, discover the range of material and popular culture, and consider topics such as universalism, cosmopolitanism, revolution, race, gender, media, and consumer culture.

Antirequisite(s): CLC 2260F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department

 $\label{eq:clc_sol} \textit{Pre-or Corequisite(s): CLC 2200F/G, CLC 3300F/G or CLC 2204F/G, 2205F/G or permission of the algorithms and the solution of the corequisite (s) and the solution of the solution of the core of the cor$ 

Department.

3 hours, 0.5 course.

# CLC 3344F/G - Nineteenth-Century Literature and Culture

Explore the ideas, cultural forms, and disciplinary discourses that characterize nineteenth-century literature, art, and music in Europe between the poles of romanticism and realism. Major themes can include individualism, nationalism, revolution, colonialism, orientalism, gothic, nature, urbanism, and the relationship between the arts and sciences.

Antirequisite(s): CLC 2270F/G and 2271F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department

Pre-or Corequisite(s): CLC 2204F/G, 2205F/G or permission of the Department.

3 hours, 0.5 course.

# CLC 3345F/G - Twentieth and Twenty-First-Century Literature and Culture

The course explores modernist, avant-garde and postmodernist literatures, arts and theories, and discusses topics such as high-brow culture, political aesthetics, kitsch, and pop, from Rilke, Woolf and García Lorca to Nabokov, Pynchon and Pelevin; Chaplin to Tarantino; Braque to de Kooning; and Tzara and Breton to Kristeva and Jameson.

Antirequisite(s): CLC 2272F/G and 2273F/G

Prerequisite(s): CLC 1020 or 1040 or permission of the Department

Pre-or Corequisite(s): CLC 2200F/G, CLC 3300F/G or the CLC 2204F/G, 2205F/G or permission of the

Department.

3 hours, 0.5 course.

## CLC 3351F/G - Intermediality: Where Literature and Other Media Meet

What do graphic novels, digital story telling, opera, ekphrasis, and movie adaptations have in common? All are examples of intermediality, in that they reference, transpose, employ several modes, or are present in different media simultaneously. The course exemplifies the theory and practice of intermediality with two or more media. Prerequisite(s): CLC 1020 or 1040 or permission of the Department

Pre-or Corequisite(s): CLC 2200F/G, 3300F/G or CLC 2204F/G, 2205F/G or permission of the Department. 3 hours, 0.5 course.

# CLC 3353F/G - Spectatorship up to the Digital Age

The course explores the evolving role of audiences when partaking in a variety of performing arts. Case studies of current and past practices of spectatorship will span from live on-line avant-garde experimentations to classical stage theatre, and will highlight the substantial role of spectatorship in shaping artistic and social trends.

Prerequisite(s): CLC 1020 or 1040 or permission of the Department.

Pre-or Corequisite(s): CLC 2200F/G, 3300F/G or CLC 2204F/G, 2205F/G or permission of the Department. 3 hours, 0.5 course.

## CLC 3398F/G - 3399F/G - Special Topic in Comparative Literature and Culture

Special credit for Comparative Literature and Culture studies at authorized universities or institutions in approved programs. Not taught on campus.

Prerequisite(s): CLC 1020 or 1040, 2200F/G, or CLC 2204F/G or permission of the Department. 0.5 course.

# CLC 4400F/G - 4409F/G Research Seminar

This seminar offers the opportunity for focused, advanced study. Topics may include canonical creative figures and their masterpieces, intersections of the visual, cinematographic, performing, musical and literary arts, and interdisciplinary, intermedial and period specific questions.

Prerequisite(s): CLC 2200F/G and CLC 3300F/G or CLC 2204F/G and CLC 2205F/G or permission of the Department.

3 hours, 0.5 course.

## CLC 1020 - From Homer to Picasso: Western Culture Across the Ages

A multi-media overview of the major writers, artists, thinkers, and composers that have shaped Western culture from ancient times to the twenty-first century. Figures studied include Homer, Dante, Michelangelo, Cervantes, Goethe, Dostoevsky, Picasso, Kafka, Borges.

2 lecture hours, 1 tutorial hour, 3 hours, 1.0 course.

# CLC 2291F/G - 2294F/G - Special Topic in Comparative Literature and Culture

Please consult Department for current offering.

Prerequisite(s): CLC 1020 or 1040 or permission of the Department.

3 hours, 0.5 course.

# CLC 3391F/G- 3394F/G - Special Topics in Comparative Literature and Culture

Please consult the Department for current offerings.

Prerequisite(s): CLC 1020 or 1040, CLC 2200F/G, CLC 2204F/G or permission of the Department.

3 hours, 0.5 course.

# CLC 4410E - Undergraduate Honors Thesis in Comparative Literatures and Culture

The thesis will be written in the fourth year and will be directed by a member of the Modern Languages and Literatures faculty. It will be based on an agreement between the student and faculty member on the topic, approach, and scope of the study.

Prerequisite(s): 80% minimum average in the CLC module courses taken the preceding year and permission of the Department.

1.0 course.

# CLC 4491F/G – 4492F/G – Advanced Topic in Comparative Literature and Culture

Special credit for Comparative Literature and Culture studies at authorized universities or institutions in approved programs. Not taught on campus. Seminar course; please consult Department for current offering. Prerequisite(s): CLC 1020 and one other CLC course or 1040, 2200F/G, 3300F/G, or CLC 2204F/G or 2205F/G or permission of the Department.

3 seminar hours, 0.5 course.

Limited Enrolment.

# CLC 4493F/G – Directed Studies in Comparative Literature and Culture

The subject will be selected in consultation with the an instructor.

Prerequisite(s): CLC 1020 and at least one honors level CLC course 80% minimum average in the CLC module courses taken the preceding year and permission of the Department.

0.5 course.

## CLC 4500F/G - Senior Research Project

In this capstone course advanced seminar, students develop their own research project with a specific historical or geographical perspective centred on a designated general theme. Students work in conjunction with peers and professors and choose their own medium of presentation ranging from the traditional to the experimental. Antirequisite(s): German 4500F/G, Italian 4500F/G, Spanish 4500F/G

Prerequisite(s): 80% minimum average in the CLC module courses taken the preceding year and permission of the Department.

0.5 course.

Effective **September 1, 2014**, CLC 2297F/G be introduced and included in a range with the pre-existing CLC 2296F/G. Revisions are noted on the existing course description for CLC 2296F/G.

# CLC 2296F/G-2297F/G - Special Topic in Comparative Literature and Culture

Special credit for Comparative Literature and Culture studies at authorized universities or institutions in approved programs. Not taught on campus.

Please consult Department for current offering.

Prerequisite(s): CLC 1020 or 1040 or permission of the Department.

Pre-or Corequisite(s): CLC 2200F/G, CLC 2204F/G or permission of the Department. 0.5 course.

Effective **September 1, 2014** the following courses be revised.

# Italian 2240F/G - Italian Journeys

Course description: No change.

Antirequisite(s): CLC 2132A/B, the former CLC 2100, WLC 2139A/B

3 hours, 0.5 course. Note: Taught in English

# Italian 2242F/G - Rome: The Eternal City

Course description: No change.

Antirequisite(s): CLC 2131A/B, former Italian 3340F/G, former CLC 2100, WLC 2130A/B

3 hours, 0.5 course. Note: Taught in English

## **FACULTY OF ENGINEERING**

Effective September 1, 2014, revise the list of approved technical electives for Mechatronic Systems Engineering.

## **MECHATRONIC SYSTEMS ENGINEERING**

. . .

Technical electives not chosen from this list require special permission:

ECE 3380A/B, ECE 4429A/B, ECE 4438A/B, ECE 4445A/B, ECE 4455A/B, ECE 4468A/B, ECE 4470A/B, MME 4424A/B, MME 4425A/B, MME 4459A/B, MME 4469A/B, MME 4470A/B, MME 4473A/B, MME 4480A/B, MME 4482A/B, MME 4492A/B

Students may elect to substitute technical electives from other engineering disciplines or from the Faculty of Science, provided they have the required prerequisites, and provided at least half three of their technical electives are chosen from the above list. A maximum of two 0.5 courses may be taken from the Faculty of Science and used towards the BESc degree. Technical electives from the Faculty of Science must be at the Honors level. All courses outside of the MME list must be approved by the Department of Mechanical and Materials Engineering

\*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

## CIVIL AND ENVIRONMENTAL

Effective **September 1, 2014**, the following courses be revised.

# Civil and Environmental Engineering 3327A/B - International Development for Engineers

Course description: No change.

Prerequisite(s): Completion of the second year of the Civil and International Development Option Admission to the Environmental Engineering with International Development Option or Structural Engineering with International Development Option.

3 lecture hours, 0.5 course.

# Civil and Environmental Engineering 3328A/B - Appropriate Technologies for International Development Course description: No change.

Prerequisite(s): Completion of the second year of the Civil and International Development Option Admission to the Environmental Engineering with International Development Option or Structural Engineering with

<sup>\*\*</sup> Mechatronic Systems Engineering technical electives

## International Development Option.

3 lecture hours, 2 tutorial hours, 0.5 course.

#### **MECHANICAL AND MATERIALS**

Effective **September 1, 2014**, the following course be introduced.

# Mechanical and Materials Engineering 4435A/B - Pressure Vessel Design

This course examines the theory and practice of pressure vessel design based on the ASME Boiler and Pressure Vessel Code. Students will learn to design a safe and economical pressure vessel to meet specified requirements, ensuring that allowable stresses are not exceeded under any expected combination of loadings.

Antirequisite(s): MME 4474A/B if taken in 2012-13 or 2013-14

Prerequisite(s): MME 2259A/B, MME 3360A/B, MME 3380A/B.

3 lecture hours, 2 laboratory hours per week 0.5 course.

Effective September 1, 2014, the following course be revised.

# Mechanical and Materials Engineering 4470A/B - Medical and Assistive Devices

Course description: No change.

Prerequisite(s): Completion of the third year of either the Mechanical Engineering or Integrated Engineering or Mechatronic Systems Engineering programs.

2 lecture hours, 2 laboratory hours per week, 0.5 course.

Effective **September 1, 2014**, revise the Mechanical Engineering fourth year program.

## A. MECHANICAL ENGINEERING OPTION

## **Fourth Year Program**

Business Administration 2299E, ES 4498F/G, MME 4499. 0.5 non-technical elective\*

Five of the following technical electives: MME 4401Y, MME 4414A/B, MME 4422A/B, MME 4423A/B, MME 4424A/B, MME 4425A/B, MME 4427A/B, MME 4428A/B, MME 4429A/B, MME 4435A/B, MME 4435A/B, MME 4435A/B, MME 4445A/B, MME 4446A/B, MME 4450A/B, MME 4452A/B, MME 4453A/B, MME 4459A/B, MME 4460A/B, MME 4460A/B, MME 4470A/B, MME 4473A/B, MME 4474A/B, MME 4475A/B, MME 4479A/B, MME 4480A/B, MME 4481A/B, MME 4481A/B, MME 4482A/B, MME 4483A/B, MME 4485A/B, MME 4486A/B, MME 4487A/B, MME 4491A/B, MME 4492A/B.

Students may elect to substitute technical electives from other engineering disciplines or from the Faculty of Science, provided they have the required prerequisites, and provided at least half-three of their technical electives are chosen from the above list. A maximum of two 0.5 courses may be taken from the Faculty of Science and used towards the BESc degree. Technical electives from the Faculty of Science must be at the Honors level. All courses outside of the MME list must be approved by the Department of Mechanical and Materials Engineering

\*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Effective March 1, 2014, revise the Engineering Externship Program description.

## ENGINEERING EXTERNSHIP PROGRAM (EEP) FOR MECHANICAL ENGINEERING

Any time after completing the first year of the Engineering program, the optional Engineering Externship Program (EEP) allows Mechanical and Materials Engineering students the opportunity to pursue up to an either a four-month Local Certificate program or an eight-month Graduate certificate program after second or third year at an educational institution which will offer courses related to a practical Certificate Program. The EEP program is currently linked to the "Practical Elements of in Mechanical Engineering (PEME)" program offered at Fanshawe College of Applied Arts and Technology.

Mechanical Engineering students who wish to exercise this option must apply for the EEP course ES 2275
2274A/B – Mechanical and Materials Engineering Externship Program following their second or third year of Mechanical Engineering. Western Engineering controls entry into the program. Prerequisites are: 60% YWA

with no failed courses. If accepted into the program, students will take the courses specified by the PEME certificate program linked to ES 2274A/B (Local Certificate) and ES 2275A/B (Graduate Certificate).

Effective **September 1, 2014**, the following courses will be withdrawn.

MME 4414A/B Microstructural Analysis

MME 4422A/B Physical Metallurgy

MME 4443A/B Energy Conversion

MME 4445A/B Aerodynamics for Engineers

MME 4464A/B Biomechanics of the Human Joint Motion

MME 4479A/B Fracture Mechanics

MME 4481 A/B Applied Computational Fluid Mechanics and Heat Transfer

MME 4486A/B Industrial Control Systems

MME 4491 A/B Wind Engineering

## **FACULTY OF HEALTH SCIENCES**

SCHOOL OF KINESIOLOGY

Effective September 1, 2014, Kinesiology 2000A/B (Physical Activity and Health) be introduced.

# Kinesiology 2000A/B - Physical Activity and Health

The course focuses on the significant impact that physical activity has on optimal health and well-being. Students will be introduced to, and their knowledge enhanced in, concepts in the area of physical activity and health by exploring the scientific evidence base for the relationships among physical activity, well-being and disease.

2 lecture hours, 0.5 course.

Note: This course may not be taken for credit by students registered in the School of Kinesiology.

Effective September 1, 2014, the following modules be revised.

# HONORS SPECIALIZATION IN KINESIOLOGY - BSc

...

#### Module

...

Note: Students in this module must select three full or equivalent science options offered by the Faculty of Science. These science options must be at the 2200 level or above and successfully completed prior to graduation.

Note: Kinesiology students graduating with the Honors Bachelor of Science Degree Honors Specialization in Kinesiology are recognized as having met the University graduation policies pertaining to Science course requirements.

Note: All students must complete a Statistics course as a pre or co requisite to Kinesiology 2032A/B.

Note: All Honors Specialization modules in Kinesiology require the successful completion of a least 1.0 4000-level Kinesiology credits prior to graduation.

Note: A maximum of 12.5 Kinesiology Credits may be taken in any Honors Specialization degree or module

## HONORS SPECIALIZATION IN KINESIOLOGY - BA

...

## Module

...

Note: All students must complete a Statistics course as a pre or co requisite to Kinesiology 2032A/B.

Note: All Honors Specialization modules in Kinesiology require the successful completion of a least 1.0 4000-level Kinesiology credits prior to graduation.

Note: A maximum of 12.5 Kinesiology Credits may be taken in any Honors Specialization degree or module

# HONORS SPECIALIZATION IN KINESIOLOGY - SPORT MANAGEMENT

...

## **Additional Information:**

- 1. All students must complete a Statistics course as a pre or co requisite to Kinesiology 2032A/B.
- 2. 1.0 Sociology at the 1000-level is recommended.
- 3. All Honors Specialization modules in Kinesiology require the successful completion of a least 1.0 4000-level Kinesiology credits prior to graduation.
- 4. A maximum of 12.5 Kinesiology Credits may be taken in any Honors Specialization degree or module.
- 5. Business 2257 is recommended.

# HONORS SPECIALIZATION IN KINESIOLOGY - FITNESS AND EXERCISE PRESCRIPTION

...

# Module

...

Note: All Honors Specialization modules in Kinesiology require the successful completion of a least 1.0 4000-level Kinesiology credits prior to graduation.

Note: A maximum of 12.5 Kinesiology Credits may be taken in any Honors Specialization degree or module

## **FACULTY OF SCIENCE**

## **APPLIED MATHEMATICS**

Effective September 1, 2014, the following courses be revised.

# Applied Mathematics 3911F/G - Modelling and Simulation

Course description: No change. Antirequisite(s): Physics 3926F/G.

Corequisite(s): Calculus 2303A/B or 2503A/B, or equivalent, and Applied Mathematics 2814F/G or the former

2813B or Statistical Sciences 2864A/B.

3 lecture hours, 1 laboratory hour, 0.5 course.

# Applied Mathematics 4611F/G - Introduction to Object Oriented Scientific Programming

Course description: No change.

Prerequisite(s): Calculus 1301A/B, 1501A/B, or Applied Mathematics 1413; and Applied Mathematics 2413, 2415 or 2814F/G or the former 2813B.

3 lecture hours, 0.5 course.

Offered in alternate years with Applied Mathematics 4615F/G.

# Applied Mathematics 4613A/B - Finite Element Methods

Course description: No change.

Prerequisite(s): Applied Mathematics 2814F/G or the former 2813B.

Corequisite(s): Applied Mathematics 3815A/B or equivalent.

3 lecture hours, 0.5 course.

Offered in alternate years with Applied Mathematics 4617A/B.

# Applied Mathematics 4615F/G - Introduction to Applied Computer Algebra

Course description: No change.

Prerequisite(s): Applied Mathematics 2413, 2415 or 2814F/G or the former 2813B.

3 lecture hours, 0.5 course.

Offered in alternate years with Applied Mathematics 4611F/G.

## Applied Mathematics 4617A/B – Numerical Solutions of Partial Differential Equations

Course description: No change.

Prerequisite(s): Applied Mathematics 2413 or 2814F/G or the former 2813B.

Pre-or Corequisite(s): Applied Mathematics 3413A/B, 3415A/B or 3815A/B.

3 lecture hours, 0.5 course.

Offered in alternate years with Applied Mathematics 4613A/B.

Effective September 1, 2014, the following modules be revised.

## HONORS SPECIALIZATION IN APPLIED MATHEMATICS

...

## Module

9.0 courses:

4.5 courses: Applied Mathematics 2811B, 2814F/G or the former 2813B, Applied Mathematics 3811A/B, 3813A/B, 3815A/B, 3817A/B\*, Applied Mathematics 4815A/B\*\*, Applied Mathematics 4817A/B\*, Applied Mathematics 4999Z.

...

## HONORS SPECIALIZATION IN MATHEMATICAL SCIENCES

...

## Module

9.0 courses:

0.5 course from: Applied Mathematics 2811B, Mathematics 2120A/B.

0.5 course: Applied Mathematics 2814F/G or the former 2813B.

...

## **MAJOR IN APPLIED MATHEMATICS**

. . .

#### Module

6.0 courses:

2.5 courses: Applied Mathematics 2811B, 2814F/G or the former 2813B, Applied Mathematics 3811A/B, 3813A/B, 3815A/B.

- - -

## **MAJOR IN APPLIED MATHEMATICAL METHODS**

. . .

# Module

6.0 courses:

2.5 courses: Applied Mathematics 2811B, 2814F/G or the former 2813B, Applied Mathematics 3813A/B, 3817A/B\*, Applied Mathematics 3911F/G.

• • •

# MAJOR IN SCIENTIFIC COMPUTING AND NUMERICAL METHODS

...

# Module

6.0 courses:

0.5 course: Applied Mathematics 2814F/G or the former 2813B.

...

## SPECIALIZATION IN APPLIED MATHEMATICS

...

# Module

9.0 courses:

0.5 course from: Calculus 2302A/B or 2502A/B. 0.5 course from: Calculus 2303A/B or 2503A/B.

0.5 course: Applied Mathematics 2402A or the former Differential Equations 2402A.

1.0 course: Applied Mathematics 2811B and either 2814F/G or the former 2813B.

...

## MINOR IN APPLIED MATHEMATICS

...

# Module

4.0 courses:

2.5 courses from: Applied Mathematics 2811B, 2814F/G or the former 2813B, Applied Mathematics 3151A/B, 3615A/B, 3811A/B, 3813A/B, 3815A/B, 3817A/B, 3911F/G.

...

## MINOR IN MATHEMATICAL AND NUMERICAL METHODS

...

# Module

4.0 courses:

1.0 course: Applied Mathematics 2814F/G or the former 2813B, Applied Mathematics 3911F/G.

...

#### **BIOLOGY**

Effective September 1, 2014, the following modules be revised.

# HONORS SPECIALIZATION IN GENETICS AND BIOCHEMISTRY

...

## Module

...

1.5 courses: Biochemistry 3380G, 3381A, 3382AB.

1.0 course from: Biology 3594A, 3595A, 3597A/B, 3598A/B.

0.5 course from: Biology 3466B, 3592A, 3593B.

1.5 courses from: Biology 4289A/B, 4510F/G, 4540G, 4560B, 4561F, 4562B, 4970F/G, the former Microbiology and Immunology 4700B.

1.0 course: Biochemistry 4410A and 4420A.

0.5 course from: Biochemistry 4415B, 4450A, 4463G, the former 4435B, 4445F, 4450A, 4463G.

...

## **EARTH SCIENCES**

Effective September 1, 2014, the following courses be revised.

# Earth Sciences 4424A/B - Advanced Mineral Physics

Introduction to elementary solid state theory, high pressure geophysics, phase transformations, elasticity, physical properties and mineral physics of the eEarth's mantle and core.

Prerequisite(s): Earth Sciences 3321A/B or permission of the Department.

3 lecture hours, 3 laboratory hours, 2 tutorial hours, 0.5 course.

# Earth Sciences 4440A/B - Fundamentals of Ground Water Flow and Contaminant Transport

Course description: No change.

Prerequisite(s): Earth Sciences 3340A/B, or Civil and Environmental Engineering 3321A/B and 3322A/B, or the former Civil and Environmental Engineering 3326, or 80% in Geography 3342A/B, or permission of the Department.

2 lecture hours, 2 laboratory hours, 0.5 course.

## Earth Sciences 4451Z - Geophysical Field Techniques

Course description: No change.

Antirequisite(s): The former Earth Sciences 4451Y.

Prerequisite(s): Earth Sciences 2220A/B or permission of the Department.

A ten day field course in early September, 0.5 course.

Note: Students must inform the Department of their intention to register in the course prior to May 1st, and register prior to August 15th. Partial cost of the field course must be borne by the student, and is payable to the

Department by May 1st. The cost per student is subsidized by the Department, and is \$650 for full-time students in 2011. The field course is subsidized by the department. Students will pay \$650 in 2014, payable by May 1st. The cost may increase by \$25 every year thereafter.

Effective September 1, 2014, the following modules be revised.

# HONORS SPECIALIZATION IN ENVIRONMENTAL GEOSCIENCE

## **Admission Requirements**

Completion of first-year requirements with no failures. Students must have a minimum average of at least 70% in 3.0 principal courses, with a minimum of 60% in each of the principal courses taken, including:

Biology 1001A or 1201A and 1002B or 1202B or the former Biology 1222, 1223;

Chemistry 1301A/B and 1302A/B or 1100A/B and 1200B or the former Chemistry 1100A/B and 1200B or 1050; Plus 1.0 additional course from: Calculus 1000A/B or 1500A/B, or the former Calculus 1100A/B, and one of Applied Mathematics 1201A/B or the former Calculus 1201A/B, Calculus 1301A/B or 1501A/B, Mathematics 1600A/B or the former Linear Algebra 1600A/B, Statistical Sciences 1024A/B; or Mathematics 1225A/B and 1229A/B. This requirement must be completed by the end of second year.

0.5 course from: Calculus 1000A/B, 1500A/B, the former Calculus 1100A/B or Mathematics 1225A/B; 0.5 course from: Applied Mathematics 1201A/B or the former Calculus 1201A/B, Calculus 1301A/B, 1501A/B, Mathematics 1228A/B, 1229A/B, 1600A/B or the former Linear Algebra 1600A/B, Statistical Sciences 1024A/B.

# SPECIALIZATION IN ENVIRONMENTAL GEOSCIENCE

# **Admission Requirements**

Completion of first-year requirements. Students must have a minimum of 60% in each of 3.0 principal courses taken, including:

Biology 1001A or 1201A and 1002B or 1202B or the former Biology 1222, 1223;

Chemistry 1301A/B and 1302A/B or 1100A/B and 1200B or the former Chemistry 1100A/B and 1200B or 1050; Plus 1.0 additional course from: Calculus 1000A/B, 1500A/B or the former Calculus 1100A/B, and one of Applied Mathematics 1201A/B or the former Calculus 1201A/B, Calculus 1301A/B or 1501A/B, Mathematics 1600A/B or the former Linear Algebra 1600A/B, Statistical Sciences 1024A/B; or Mathematics 1225A/B and 1229A/B. This requirement must be completed by the end of second year.

0.5 course from: Calculus 1000A/B, 1500A/B, the former Calculus 1100A/B or Mathematics 1225A/B; 0.5 course from: Applied Mathematics 1201A/B or the former Calculus 1201A/B, Calculus 1301A/B, 1501A/B, Mathematics 1228A/B, 1229A/B, 1600A/B or the former Linear Algebra 1600A/B, Statistical Sciences 1024A/B.

...

# **MATHEMATICS**

Effective September 1, 2014, Mathematics 2155A/B be revised.

# Mathematics 2155A/BF/G - Discrete Structures I

This course provides an introduction to logical reasoning and proofs. Topics include sets, counting (permutations and combinations), mathematical induction, relations and functions, partial order relations, equivalence relations, groups and applications to error-correcting codes.

Antirequisite(s): Mathematics 2151A/B, the former Software Engineering 2251A/B, the former Mathematics 2155A/B.

Prerequisite(s): 1.0 course from: Mathematics 1120A/B, Applied Mathematics 1413, Calculus 1000A/B, 1500A/B or the former 1100A/B, Calculus 1301A/B or 1501A/B, Mathematics 1600A/B or the former Linear Algebra 1600A/B (in each case with a minimum mark of 60%); or permission of the department.

4-3 lecture hours, 0.5 course.

Effective **September 1, 2014**, the following courses be revised.

## Mathematics 1120A/B - Fundamental Concepts in Mathematics

Course description: No change.

Antirequisite(s): Mathematics 2155F/G, the former Mathematics 2155A/B.

Prerequisite(s): One or more of Ontario Secondary School MCV4U, Mathematics 1600A/B, or the former Linear Algebra 1600A/B.

4 lecture hours, 0.5 course.

# Mathematics 2120A/B - Intermediate Linear Algebra I

Course description: No change.

Antirequisite(s): Mathematics 2211A/B.

Prerequisite(s): Mathematics 1600A/B or the former Linear Algebra 1600A/B with a minimum mark of 60%-er

Mathematics 1120A/B with a minimum mark of 70% or permission of the Mathematics Department.

3 lecture hours, 0.5 course,

# Mathematics 3154A/B - Introduction to Algebraic Curves

Course description: No change.

Antirequisite(s): The former Mathematics 2292.

Prerequisite(s): Mathematics 1600A/B, 2120A/B, or the former Linear Algebra 1600A/B; Mathematics 2121A/B,

2122A/B, 2124A/B, or the former Mathematics 2121A/B, or the former Mathematics

2155A/B; an additional 0.5 course in Mathematics, Applied Mathematics, Calculus at the 2100 level or above, or the former Differential Equations 2402A.

3 lecture hours, 0.5 course.

# Mathematics 4123A/B - Rings and Modules

Course description: No change.

Prerequisite(s): Mathematics 3120A/B.

3 lecture hours, 0.5 course.

Note: It is recommended that Mathematics 3121A/B (or the former Math 2121A/B) be taken before or

concurrently with Mathematics 4123A/B.

# Mathematics 2122A/B - Real Analysis I

A rigorous introduction to analysis on the real line, primarily for honors students. Sets, functions, natural numbers, Aaxioms for the real numbers, Completeness and its consequences, Sequences and limits, Continuous and differentiable functions, The Mean Value Theorem.

Prerequisite(s): Calculus 1501A/B or Applied Mathematics 1413, with a minimum mark of 60%, or Calculus 1301A/B with a minimum mark of 85%.

4 3 lecture hours, 0.5 course.

# Mathematics 2151A/B - Discrete Structures for Engineering

Course description: No change.

Antirequisite(s): Mathematics 2155F/G, the former Mathematics 2155A/B, the former Software Engineering 2251A/B.

Prerequisite(s): Computer Science 1026A/B or ES 1036A/B.

Corequisite(s): Computer Science 1027A/B or 1037A/B.

3 lecture hours, 0.5 course.

Note: this course is offered only to software engineering students enrolled in the Faculty of Engineering.

## Mathematics 2156A/B - Discrete Structures II

Course description: No change.

Prerequisite(s): Mathematics 2155F/G or the former Mathematics 2155A/B.

4 3 lecture hours, 0.5 course.

# Mathematics 3157A/B - Introduction to Game Theory

Course description: No change.

Prerequisite(s): Mathematics 1600A/B, Calculus 1301A/B or 1501A/B, and one of Mathematics 1120A/B,

2120A/B, 2122A/B, 2124A/B, 2155F/G or the former Mathematics 2155A/B.

3 lecture hours, 0.5 course.

# Mathematics 4120A/B - Field Theory

Course description: No change.

Prerequisite(s): Mathematics 3120A/B 4123A/B.

3 lecture hours, 0.5 course.

# Mathematics 4152A/B - Algebraic Topology

Course description: No change.

Prerequisite(s): Mathematics 3120A/B and either Mathematics 4121A/B or the former Mathematics 3132B or the

former Mathematics 4121A. 3 lecture hours, 0.5 course.

# Mathematics 4154A/B - Introduction to Functional Analysis

Course description: No change.

Prerequisite(s): Mathematics 2120A/B, Mathematics 3122A/B, 3124A/B.

Pre-or Corequisite(s): Mathematics 3124A/B.

3 lecture hours, 0.5 course.

Effective **September 1, 2014**, the following courses be withdrawn.

Mathematics 2121A/B - Intermediate Linear Algebra II

Mathematics 3132B - General Topology

Effective **September 1, 2014**, the following courses be introduced.

# Mathematics 3121A/B - Advanced Linear Algebra

A continuation of the material of Mathematics 2120A/B including properties of complex numbers and the principal axis theorem; singular value decomposition; linear groups; similarity; Jordan canonical form; Cayley-Hamilton theorem; bilinear forms; Sylvester's theorem.

Antirequisite(s): The former Mathematics 2121A/B

Prerequisite(s): Mathematics 2120A/B.

3 lecture hours, 0.5 course.

## Mathematics 4121A/B - General Topology

Topological spaces, operations on subsets (e.g. closure), neighbourhoods, bases, subspaces, quotient spaces, product spaces, connectedness, compactness, countability and separation axioms, function spaces.

Antirequisite(s): The former Mathematics 3132B.

Prerequisite(s): Mathematics 3122A/B.

3 lecture hours, 0.5 course.

Effective September 1, 2014, the following modules be revised.

# HONORS SPECIALIZATION IN MATHEMATICS Admission Requirements

...

Note: Mathematics 1600A/B or the former Linear Algebra 1600A/B, with a minimum mark of 60%-or Mathematics 1120A/B with a minimum mark of 70%-must be completed prior to Mathematics 2120A/B.

## Module

9.0 courses:

1.0 course: Calculus 2502A/B, 2503A/B.

5.0 4.5 courses: Calculus 2502A/B, 2503A/B, Mathematics 2120A/B, Mathematics 2121A/B or 2155A/B, 2122A/B, 2123A/B, 2124A/B, 2155F/G or the former 2155A/B, Mathematics 3020A/B, 3120A/B, 3122A/B, 3123A/B.

2.0 additional courses from Mathematics 2121A/B, 2155A/B, 2156A/B, or any Mathematics course at the 3000 level or above.

2.0 additional courses in Mathematics, Applied Mathematics, or Statistical Sciences at the 2100 level or above.

1.5 additional courses in Mathematics at the 3000 level or above.

1.0 additional course in Mathematics at the 4000 level.

It is strongly recommended that Mathematics 2122A/B be completed in the year of entry into the module. Note: Those students who plan to apply for graduate studies in Mathematics should take Mathematics 3132B, 4120A/B, 4122A/B, 4123A/B, and at least one of Mathematics 4151A/B, 4152A/B, 4153A/B or 4156A/B.

# HONORS SPECIALIZATION IN MATHEMATICS IN SOCIETY Admission Requirements

...

Note: Mathematics 1600A/B or the former Linear Algebra 1600A/B, with a minimum mark of 60% or Mathematics 1120A/B with a minimum mark of 70% must be completed prior to Mathematics 2120A/B.

# Module

9.0 courses:

4.0 3.5 courses: Calculus 2502A/B, 2503A/B, Mathematics 2120A/B, 2122A/B, 2155F/G or the former 2155A/B, 3020A/B, 3150A/B, either Applied Mathematics 3811A/B or the former Mathematics 2212A/B.

2.5 courses from: Actuarial Science 2553A/B, Applied Mathematics 2402A or the former Differential Equations 2402A, Applied Mathematics 2813B-2814F/G, 3811A/B, 3815A/B, Computer Science 2209A/B, 2210A/B, 3331A/B, 3340A/B, Earth Sciences 2222A/B, Economics 2210A/B, Mathematics 2124A/B, 2156A/B, 2251F/G, 3124A/B, 3152A/B, 4158A/B/Y, Philosophy 2250, 2251F/G, 2252W/X, 2254A/B, 3201A/B, 3202B, 4201A/B, 4202A/B, Statistical Sciences 2857A/B, 2858A/B, the former Statistical Sciences 2657A. Note that some of these courses have prerequisites that are not part of the module.

2.5 3.0 courses from: Actuarial Sciences, Applied Mathematics, Computer Science, Mathematics, or Statistics Sciences courses, at the 2100 level or above.

It is strongly recommended that Mathematics 2122A/B be completed in the year of entry into the module. Note: Students intending to pursue graduate studies in Pure Mathematics should take the Honors Specialization in Mathematics module.

# MAJOR IN MATHEMATICS Admission Requirements

...

Note: Mathematics 1600A/B or the former Linear Algebra 1600A/B with a minimum mark of 60% or Mathematics 1120A/B with a minimum mark of 70% must be completed prior to Mathematics 2120A/B.

Module

6.0 courses:

1.0 course: Calculus 2502A/B, 2503A/B.

2.0 2.5 courses: Calculus 2502A/B, 2503A/B, Mathematics 2120A/B, 2122A/B, 2123A/B, 2124A/B, 3020A/B. 0.5 course from: Mathematics 2121A/B or 2155A/B.

1.5 additional courses in Mathematics, Applied Mathematics, or Statistical Sciences at the 2100 level or above. 2.5 2.0 additional courses from: Mathematics 2156A/B and in Mathematics courses at the 3000 level or above.

# **SPECIALIZATION IN MATHEMATICS**

## **Admission Requirements**

. . .

Note: Students who plan to take Mathematics 2120A/B must first complete either Mathematics 1600A/B or the former Linear Algebra 1600A/B, with a minimum mark of 60% or Mathematics 1120A/B with a minimum mark of 70%. Students who plan to take Mathematics 2211A/B must first complete either Mathematics 1600A/B or the former Linear Algebra 1600A/B (with a minimum mark of 50%) or Mathematics 1120A/B with a minimum mark of 70%.

Note: Mathematics 1600A/B or the former Linear Algebra 1600A/B, with a minimum mark of 60% must be completed prior to Mathematics 2120A/B. Mathematics 1600A/B or the former Linear Algebra 1600A/B must be completed prior to Mathematics 2211A/B.

## Module

9.0 courses:

0.5 course from: Calculus 2502A/B recommended or Calculus 2302A/B.

- 0.5 course from: Calculus 2503A/B recommended or Calculus 2303A/B.
- 0.5 course from: Mathematics 2120A/B or 2211A/B.
- 1.5 1.0 courses: Mathematics 2122A/B, 2123A/B, 2124A/B, 3020A/B.
- 0.5 course from: Mathematics 2121A/B or 2155A/B.
- 1.0 course from: Mathematics 3020A/B and 3120A/B or the former Mathematics 2290.
- 0.5 course from: Mathematics 3123A/B; or Applied Mathematics 2402A or the former Differential Equations 2402A.
- 0.5 course from: Mathematics 3124A/B, Applied Mathematics 3811A/B or the former Mathematics 2212A/B.
- 3.5 additional Mathematics courses at the 2000 level or above. (Up to 2.0 courses may be substituted with courses offered by the Departments of Applied Mathematics or Statistical and Actuarial Sciences with the approval of the Department of Mathematics).
- 2.0 additional courses in Mathematics, Applied Mathematics, or Statistical Sciences at the 2100 level or above.
- 2.5 additional Mathematics courses at the 2000 level or above.
- 2.0 additional courses in Mathematics at the 3000 level or above.

It is strongly recommended that Mathematics 2122A/B be completed in the year of entry into the module.

# SPECIALIZATION IN MATHEMATICS IN SOCIETY Admission Requirements

...

Note: Mathematics 1600A/B or the former Linear Algebra 1600A/B, with a minimum mark of 60% or Mathematics 1120A/B with a minimum mark of 70% must be completed prior to Mathematics 2120A/B.

#### Module

9.0 courses:

2.0 courses: Calculus 2302A/B or 2502A/B, Calculus 2303A/B or 2503A/B, Mathematics 2120A/B, 2122A/B. 3.0 courses from: Actuarial Science 2553A/B, Applied Mathematics 2402A or the former Differential Equations 2402A, Applied Mathematics 2813B 2814F/G, 3815A/B, Computer Science 2209A/B, 2210A/B, 3331A/B, 3340A/B, Earth Sciences 2222A/B, Economics 2210A/B, Mathematics 2124A/B, 2155F/G or the former 2155A/B, 2156A/B, 2251F/G, 3020A/B, 3150A/B, 3152A/B, 4158A/B/Y, either Applied Mathematics 3811A/B or the former Mathematics 2212A/B, Philosophy 2250, 2251F/G, 2252W/X, 2254A/B, 3201A/B, 3202B, 4201A/B, 4202A/B, Statistical Sciences 2857A/B, 2858A/B, the former Statistical Sciences 2657A. Note that some of these courses have prerequisites that are not part of the module.

4.0 courses from: Actuarial Sciences, Applied Mathematics, Computer Science, Mathematics, or Statistics courses, at the 2100 level or above.

It is strongly recommended that Mathematics 2122A/B be completed in the year of entry into the module.

## **MINOR IN MATHEMATICS**

...

## Module

- 4.0 courses
- 0.5 course from: Mathematics 2120A/B or 2211A/B.
- 0.5 course from: Calculus 2302A/B, 2402A/B, or 2502A/B.
- 0.5 course from: Calculus 2303A/B, 2503A/B, Mathematics <del>2121A/B,</del> 2122A/B, <del>2123A/B,</del> 2124A/B, <mark>2155F/G or the former</mark> 2155A/B, Mathematics <del>2156A/B,</del> 3020A/B, <mark>3121A/B or the former 2121A/B</mark>, Mathematics 3150A/B or 3157A/B.
- 2.5 additional courses from: Computer Science 3331A/B, 3340A/B, Earth Sciences 2222A/B, Economics 2122A/B, 2123A/B, 2141A/B, 2142A/B, 2210A/B, 2222A/B, 2223A/B, 3310A/B, Philosophy 2250, 2251F/G, 2252W/X, 2254A/B, 3201A/B, 3202B, 4201A/B, 4202A/B, any Actuarial Science, Applied Mathematics, Computer Science, Mathematics, or Statistical Sciences course at the 2000 level or above. Note that some of these courses have prerequisites that are not part of the module.

## **FACULTY OF SCIENCE and AFFILIATED UNIVERSITY COLLEGES**

## Mathematics 1228A/B - Methods of Finite Mathematics

Course description: No change.

Antirequisite(s): Mathematics 2124A/B, 2155F/G, the former Mathematics 2155A/B, Statistical Sciences 2035,

2141A/B, 2857A/B, the former Statistical Sciences 2657A.

Prerequisite(s): One or more of Ontario Secondary School MCV4U, MHF4U, MDM4U, Mathematics 0110A/B,

1225A/B, 1229A/B.

3 lecture hours, 0.5 course.

# Mathematics 1229A/B - Methods of Matrix Algebra

Course description: No change.

Antirequisite(s): Applied Mathematics 1411A/B, 2811B, Mathematics 1600A/B, 2120A/B, 2155F/G, 2211A/B,

the former Mathematics 2155A/B, the former Linear Algebra 1600A/B.

Prerequisite(s): One or more of Ontario Secondary School MCF3M, MCR3U, or equivalent.

3 lecture hours, 0.5 course.

# Mathematics 2211A/B - Linear Algebra

Course description: No change.

Antirequisite(s): Applied Mathematics 2811B, Mathematics 2120A/B.

Prerequisite(s): Mathematics 1600A/B-or Mathematics 1120A/B with a minimum mark of 70%, or the former

Linear Algebra 1600A/B. 3 lecture hours, 0.5 course.

# **FACULTY OF SCIENCE and SCHULICH SCHOOL OF MEDICINE & DENTISTRY**

Effective September 1, 2014, sections of the Weighted Average Chart for the BMSc Program be revised.

Honors Specialization Module	Modular courses responsible for 1/3 of the Weighted Average	Modular courses responsible for 2/3 of the Weighted Average
Biochemistry		2.0 courses: Biochemistry 3380G, 3381A, 3382AB and 3390AB.
Biochemistry and Cell Biology		3.5 courses: Biochemistry 3380G, 3381A and 3382AB; Biology 3316A/B or Physiology 3140A; Biology 3326F/G; Anatomy and Cell Biology 3309.
Biochemistry of Infection and Immunity – for students registering in Year 4 in 2015/16 and onward		3.0 courses: One of Biochemistry 3380G, Microbiology and Immunology 3610F or 3620G; Biochemistry 3381A and 3382AB; Microbiology and Immunology 2500A/B, 3100A, 3300B
Chemical Biology		2.5 3.0 courses: Biochemistry 3380G, 3381A, 3382AB and 3390B; 1.0 course from Chemistry 3371F, 3372F/G, 3373F or 3374A/B.
Clinical Biochemistry		2.5 courses: Biochemistry 3381A, 3382AB, 3385A, 3386B and 3380G or the former 3387G
Computational Biochemistry		2.5 3.0 courses: Biochemistry 3380G, 3381A, 3382AB, 3383F/G, 3390B; Computer Science 2210A/B and

	2211A/B.
IMS (Interdisciplinary Medical	 3.0 courses:
Sciences)	3.0 courses from Groups A and C
	in the IMS Honors Specialization
	module, with at least 2.5 of the
	courses being from Group A
	Groups 1, 2 and 3 (see HONORS
	SPECIALIZATION IN IMS)
	including a minimum of 2.0 courses
	from Group 1 and 0.5 from Group 3
Medical Cell Biology	 3.0 courses:
	Anatomy and Cell Biology 3309;
	Biochemistry 3381A and 3382AB;
	Biology 3316A/B or Physiology
	3140A; Biochemistry 3380G or
	Biology 3326F/G.

## ANATOMY AND CELL BIOLOGY

Effective September 1, 2014, the Honors Specialization in Medical Cell Biology be revised.

# HONORS SPECIALIZATION IN MEDICAL CELL BIOLOGY

...

# Module

...

1.0 course: Biochemistry 3381A and 3382AB.

. . .

## **BIOCHEMISTRY**

Effective **September 1, 2014**, the following courses will be withdrawn.

**Biochemistry 3387G** - Clinical Biochemistry Laboratory

Biochemistry 4400G - Membrane Biochemistry

Biochemistry 4430B - Molecular Biology of Signal Transduction

**Biochemistry 4435B** - Field Guide to the Human Genome

Biochemistry 4445F - Macromolecular Informatics

Biochemistry 4465A - Instrumentation for Proteomics and Related Analyses

Effective **September 1, 2014**, the following courses will be introduced.

# Biochemistry 4415B - Applications of Synthetic Biology and Chemical Genetics in Medicine

This course will explore how metabolic pathways are currently being re-engineered in microorganisms to produce drugs that are otherwise difficult to manufacture. We will also investigate how drug targets are being identified using newly developed chemical genetic screening methods. The impact of both approaches on medicine will be evaluated.

Prerequisite(s): Biochemistry 4410A

2 lecture hours per week, 1 hour bi-weekly tutorial session, 0.5 course.

# Biochemistry 4425B - Proteomics and Protein Biotechnology

The course will cover applied aspects of protein chemistry in biotechnology and protein design. Topics covered will include applications of modern analytical and biophysical techniques used in proteomics and related biochemical analyses, protein structure design, and antibody engineering.

Prerequisite(s): Biochemistry 4420A

2 lecture hours per week, 0.5 course.

# Biochemistry 3380G - Biochemistry Laboratory

Course description: No change.

Prerequisite(s): Biochemistry 3381A and 3382A. Pre-or Corequisite(s): Biochemistry 3382B. 3 laboratory hours, 1 tutorial hour, 0.5 course.

Enrolment limited: priority will be given to students who have achieved a mark of at least 70% in Biochemistry 2280A and are registered in modules offered by the Department of Biochemistry, other Basic Medical Science departments, or the Department of Biology.

# Biochemistry 3382AB – Biochemical Regulation

Course description: No change.

Prerequisite(s): Biochemistry 3381A Either Biochemistry 2280A or 2288A with a mark of at least 65%; either Chemistry 2213A/B with a minimum mark of 65% or Chemistry 2273A with a minimum mark of 60%; either Chemistry 2223B with a minimum mark of 65% or Chemistry 2283G with a minimum mark of 60%. 3 lecture hours, 1 tutorial hour, 0.5 course.

# Biochemistry 3390AB – Advanced Methods for Biochemistry

Course description: No change.

Prerequisite(s): Biochemistry 3381A and 3382A Either Biochemistry 2280A or 2288A with a mark of at least 65%; either Chemistry 2213A/B with a minimum mark of 65% or Chemistry 2273A with a minimum mark of 60%; either Chemistry 2223B with a minimum mark of 65% or Chemistry 2283G with a minimum mark of 60%.

Pre-or Corequisite(s): Biochemistry 3381A. 2 lecture hours, 1 tutorial hour, 0.5 course.

Effective September 1, 2015, the following courses will be revised.

# Biochemistry 4410A - Molecular Biology of DNA and RNA

Course description: No change.

Prerequisite(s): Biochemistry 3381A and 3382 AB.

2 lecture hours, 0.5 course.

## Biochemistry 4483E - Research Project and Seminar

Course description: No change.

Antirequisite(s): Biochemistry 4485E, Chemical Biology 4500E, Microbiology and Immunology 4970E, Medical Sciences 4900F/G, the former Biochemistry 4800E, and 4491E, the former Medical Sciences 4400E. Prerequisite(s): Biochemistry 3380G, 3381A and 3382AB, with marks in each of at least 70%. Enrolment is limited, and is available only to students in Year 4 of Honors Specialization modules in Biochemistry, Biochemistry and Cell Biology, Biochemistry and Chemistry, Biochemistry of Infection and Immunity, and Computational Biochemistry. Students in the Honors Specialization in Biochemistry of Infection and Immunity may substitute one of Microbiology and Immunology 3610F, 3620G or the former 3600G with a minimum mark of 70% for in lieu of Biochemistry 3380G as a prerequisite. Students in the Honors Specialization in Computational Biochemistry may substitute Biochemistry 3383F/G with a minimum mark of 70% in lieu of Biochemistry 3380G as a prerequisite.

15 hours per week, 1.5 course.

Enrolment in this course is limited.

# Biochemistry 4485E - Clinical Biochemistry Research Project Seminar

Course description: No change.

Antirequisite(s): Biochemistry 4483E, Chemical Biology 4500E, Microbiology and Immunology 4970E, the former Biochemistry 4491E.

Prerequisite(s): Biochemistry 3381A, 3382 AB and 3380G or the former 3387G, with marks in each of at least 70%. Priority will be given to students in the Honors Specialization in Clinical Biochemistry.

15 hours per week, 1.5 course.

Enrolment limited.

Effective September 1, 2015, Chemical Biology 4500E be revised.

# Chemical Biology 4500E - Research Project in Chemical Biology

Course description: No change.

Antirequisite(s): Biochemistry 4483E, 4485E, Chemistry 4491E, the former Biochemistry 4491E and Chemistry 4490E.

Prerequisite(s): Biochemistry 3380G, 3381A, 3382AB; Chemistry 2271A, 2272F, 2273A, 2374A, 2281G, 2283G, 2384B; 1.0 course from: Chemistry 3371F, 3372F/G, 3373F, 3374A/B; and registration in Year 4 of the Honors Specialization in Chemical Biology.

15 laboratory hours/week, 1.5 course.

Effective September 1, 2014, the following modules be revised.

## HONORS SPECIALIZATION IN BIOCHEMISTRY

...

## Module

9.5 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2581B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B, or the former Statistical Sciences 2122A/B.

0.5 course from: Chemistry 2213A/B or 2273A.0.5 course from: Chemistry 2223B or 2283G.

1.0 course from: Biology 2290F/G, 2382B, Chemistry 2211A/B, 2214A/B, 2374A or the former 2274A,

Chemistry 2384B or the former 2284B.

1.5 courses: Biochemistry 3380G, 3381A and 3382AB with marks of at least 70% in each.

0.5 course: Biochemistry 3390AB.

4.0 2.0 courses: Biochemistry 4410A, 4415B, 4420A or the former 4420B, and 4425B.

4.5 0.5 courses from: Biochemistry 4450A, 4463G, the former 4400G, 4430B, 4435B, 4445F, 4450A, 4463G, 4465A, the former Biochemistry 4400F, 4440A.

1.5 courses: Biochemistry 4483E (Research Project = 1.5 courses).

## **Notes for Module:**

1. Students registered in Year 3 or 4 of the Honors Specialization module in 2011 or earlier will require only 9.0 courses for the module (Biochemistry 3390A will not be required).

2. It is recommended that students include at least one of Biology 2290F/G, Chemistry 2214A/B or Chemistry 2374A (or the former Chemistry 2284B) in the module.

# HONORS SPECIALIZATION IN CLINICAL BIOCHEMISTRY

...

## Module

. . .

1.5 courses: Biochemistry 3381A, 3382AB and, 3380G or the former 3387G, with marks of at least 70% in each.

•••

# HONORS SPECIALIZATION IN BIOCHEMISTRY AND CELL BIOLOGY

•••

## Module

. . .

1.0 course: Biochemistry 3381A and 3382AB with marks of at least 70% in each

0.5 course from: Biology 3316A/B, Physiology 3140A

0.5 course: Biology 3326F/G.

1.0 course: Anatomy and Cell Biology 3309.

1.5 1.0 courses: Biochemistry 4410A, 4420A, 4430B

0.5 course from: Biochemistry 4415B or 4425B, or the former 4430B.

0.5 course: Anatomy and Cell Biology 4429A.

1.5 courses from: Biochemistry 4483E (or the former Biochemistry 4480E) or Anatomy and Cell Biology 4480E

(Research project = 1.5 courses) or the former Biochemistry 4480E.

Note: Some modular courses include a mark requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.

# HONORS SPECIALIZATION IN BIOCHEMISTRY OF INFECTION AND IMMUNITY

...

# Module

...

1.0 course: Biochemistry 3381A and 3382AB with marks of at least 70% in each.

• • •

## HONORS SPECIALIZATION IN CHEMICAL BIOLOGY

...

#### Module

11.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2581B.

3.5 courses: Chemistry 2271A, 2272F, 2273A, 2374A, 2281G, 2283G, 2384B.

4.5 2.0 courses: Biochemistry 3380G, 3381A, 3382AB, 3390B.

1.0 course from: Chemistry 3371F, 3372F/G, 3373F, 3374A/B.

1.0 course: Biochemistry 4410A, 4420A.

4.5 1.0 courses from: Biochemistry 4415B, 4425B, the former 4400G, 4430B, 4435B, 4445F, 4450A, 4463G,

4465A, the former Biochemistry 4400F, 4440A, the former Pharmacology 3550A/B, 3560A/B.

1.5 courses: Chemical Biology 4500E (Research Project = 1.5 courses).

# HONORS SPECIALIZATION IN COMPUTATIONAL BIOCHEMISTRY

. . .

## Module

...

4.5 1.0 courses: Biochemistry 3380G, 3381A and 3382AB with marks of at least 70% in each.

1.0 course: Biochemistry 3383F/G, 3390B

2.0 1.0 courses: Biochemistry 4410A, 4420A, Biochemistry 4435B, 4445F.

0.5 1.0 course from: Biochemistry 4415B, 4425B, the former 4400G, 4430B, 4435B, 4445F, 4450A, 4463G,

4465A, the former Biochemistry 4440A.

1.5 courses: Biochemistry 4483E (Research Project = 1.5 courses).

# **MAJOR IN BIOCHEMISTRY**

...

Students entering Years 3 and 4 in September 2013 2014 should see the Admission Requirements in the 2012/13 Academic Calendar and the Module requirements below.

•••

## Module

. .

2.5 courses: Biochemistry 3380G, 3381A, 3382AB, 4410A, 4420A.

1.0 course from: Biochemistry 3385A, 3386B<mark>, 3390B, 4415B, 4425B, 4450A, 4463G, or the former 4400G, 4430B, 4435B, 4445F, 4450A, 4463G, 4465A, the former Biochemistry 4440A.</mark>

# SPECIALIZATION IN BIOCHEMISTRY

• • •

## Module

...

1.0 course from: Biology 2290F/G, 2382B, Chemistry 2211A/B, 2214A/B, 2374A or the former 2274A, Chemistry 2384B or the former 2274A, 2284B.

1.5 courses: Biochemistry 3380G, 3381A and 3382AB.

0.5 course at the 2000- or 3000- level (with a lab component) from: the former Microbiology and Immunology

2100A, Medical Biophysics 3330F/G or from the Department of Biology or Chemistry.

1.0 course: Biochemistry 4410A, 4420A.

2.5 3.0 courses from: Biochemistry 3385A, 3386B, 3390B, 4415B, 4425B, 4450A, 4463G, or the former 4400G, 4430B, 4435B, 4445F, 4465A and courses in Biochemistry at the 4000-level (with the exception of Biochemistry 4483E, 4485E and 4999E).

## MINOR IN BIOCHEMISTRY

...

#### Module

4.0 courses:

0.5 course from: Chemistry 2213A/B or 2273A.0.5 course from: Chemistry 2223B or 2283G.

2.5 1.5 courses: Biochemistry 2280A, 3381A, and 3382AB, 4410A, 4420A.

0.5 1.5 courses from: Biochemistry 3380G, 3385A, 3386B, 3390B, 4410A, 4415B, 4420A, 4425B, 4450A, 4463G, the former Biochemistry 3387G, 4400G, 4430B, 4435B, 4445F, 4450A, 4463G, 4465A, the former Biochemistry 4440A.

Note:

Enrolment in Biochemistry 3381A requires a minimum mark of 65% in Biochemistry 2280A; either Chemistry 2213A/B with a minimum mark of 65% or Chemistry 2273A with a minimum mark of 60%; and either Chemistry 2223B with a minimum mark of 65% or Chemistry 2283G with a minimum mark of 60%.

## INTERDISCIPLINARY MEDICAL SCIENCES

Effective September 1, 2014, the following modules be revised.

# HONORS SPECIALIZATION IN INTERDISCIPLINARY MEDICAL SCIENCES (IMS)

\_\_\_

#### Module

...

3.5 3.0 courses from: Groups A,B and C 1 and 2 (see below), with at least a minimum of 2.5 courses selected from Group A 1 and at least 0.5 course selected from Group C, and no more than 2.0 courses from one subject area. A maximum of 2.0 courses from one subject area (e.g. a maximum of 2.0 courses in Biochemistry) can be used towards the Group requirement.

0.5 course from: Group 3

1.0 course: Medical Sciences 4900F/G, 4930F/G

2.0 courses at the 4000-level from at least two of the following subject areas: Anatomy and Cell Biology, Biochemistry, Biostatistics, Epidemiology, Medical Biophysics, Medical Sciences, Microbiology and Immunology, Pathology, Pharmacology, Physiology.

Group-A 1: Anatomy and Cell Biology 3309, Biochemistry 3381A, 3382AB, Biostatistics 3100A, 3110B, Epidemiology 2200A/B, 3200A, Medical Biophysics 3330F/G, 3336F/G, 3501F, 3503G, 3505F, 3507G, Microbiology and Immunology 2500A/B, 3100A, 3300B, Pathology 3240A, 3245B, Pharmacology 3620, Physiology 3120, 3140A, any of the former courses: Epidemiology and Biostatistics 2200A/B, Microbiology and Immunology 2100A, 3400B

Group ₿ 2: Anatomy and Cell Biology 3319\*\*, Biochemistry 3385A, 3386B, 3390AB, Epidemiology 3210B, 3315B, 3500A, Pharmacology 2060A/B

Group C 3: Anatomy and Cell Biology 3309, Biochemistry 3380G, 3387G, Medical Biophysics 3970Z, Microbiology and Immunology 3610F, 3620G, Pharmacology 3580YZ, Physiology 3130-YZ, the former Biochemistry 3387G, Microbiology and Immunology 3600G.

\*\*Including Anatomy and Cell Biology 3319 in the module will increase the total number of courses required to complete the module to 10.5 courses.

## Notes:

- 1. It is not mandatory to complete any Group 2 courses in the Honors Specialization in IMS. If Anatomy and Cell Biology 3319 is taken as a Group 2 course, the module will be increased to 10.5 courses
- 2. Anatomy and Cell Biology 3309, if taken, may be used to satisfy either 1.0 Group 1 course OR 0.5 Group 1 +

# 0.5 Group 3 course

3. See UNDERGRADUATE COURSE INFORMATION for course requisites and the BMSc website for information about constraints (priority and restricted access) for all basic medical science courses.

# MAJOR IN INTERDISCIPLINARY MEDICAL SCIENCES (IMS)

...

The courses below must be completed with a minimum mark of 60% in each prior to admission to the Major module in Year 3. These courses will also be used towards the Module requirements. See ADMISSION TO THE BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM and MODULES OFFERED IN THE BMSc PROGRAM for additional requirements (averages, course load, etc.).

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.0 course from: Biology 2290F/G, 2382B, 2581B.

0.5 course: Chemistry numbered 2100-3999 Chemistry 2213A/B

## Module

6.0 courses:

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B

1.0 course from: Biology 2290F/G, 2382B, 2581B

0.5 course: Chemistry numbered 2100-3999 Chemistry 2213A/B

3.0 courses from: Groups A and B 1 and 2 (see below) with at least a minimum of 2.0 courses selected from Group A 1 and no more than 2.0 courses in one subject area. A maximum of 2.0 courses from one subject area (e.g. a maximum of 2.0 courses in Biochemistry) can be used towards the Group requirement.

1.0 course at the 4000-level from any of the following subject areas: Anatomy and Cell Biology, Biochemistry, Biostatistics, Epidemiology, Medical Biophysics, Medical Sciences, Microbiology and Immunology, Pathology, Pharmacology, Physiology

Group-A 1: Anatomy and Cell Biology 3309, Biochemistry 3381A, 3382AB, Biostatistics 3100A, 3110B, Epidemiology 2200A/B, 3200A, Medical Biophysics 3330F/G, 3336F/G, 3501F, 3503G, 3505F, 3507G, Microbiology and Immunology 2500A/B, 3100A, 3300B, Pathology 3240A, 3245B, Pharmacology 3620, Physiology 3120, 3140A, or any of the former courses: Epidemiology and Biostatistics 2200A/B, Microbiology and Immunology 2100A, 3400B

Group ₿ 2: Anatomy and Cell Biology 3319, Biochemistry 3385A, 3386B, 3390A, Epidemiology 3210B, 3315B, 3500A, Pharmacology 2060A/B

## Notes:

- 1. It is not mandatory to complete any Group 2 courses in the Major in IMS
- 2. See UNDERGRADUATE COURSE INFORMATION for course requisites and the BMSc website for information about constraints (priority and restricted access) for all basic medical science courses.
- 3. 3000-level courses from the subject areas in Groups A and B 1 and 2 that do not appear in the lists above may be included in the Major only with permission of the IMS counsellor.
- 4. A maximum of 1.0 "common course" can be double-counted toward two modules in a BMSc degree. See the Common Course Policy on the BMSc website for more information.

# SPECIALIZATION IN INTERDISCIPLINARY MEDICAL SCIENCES (IMS)

• • •

## Module

...

3.5 3.0 courses from: Groups A,B and C 1 and 2 (see below), with at least a minimum of 2.5 courses selected from Group A1 and at least 0.5 course selected from Group C, and no more than 2.0 courses from one subject area. A maximum of 2.0 courses from one subject area (e.g. a maximum of 2.0 courses in Biochemistry) can be used towards the Group requirement.

## 0.5 course from: Group 3

2.5 courses at the 4000-level from at least two of the following subject areas: Anatomy and Cell Biology, Biochemistry, Biostatistics, Epidemiology, Medical Biophysics, Medical Sciences, Microbiology and Immunology, Pathology, Pharmacology, Physiology.

Group A 1: Anatomy and Cell Biology 3309, Biochemistry 3381A, 3382AB, Biostatistics 3100A, 3110B, Epidemiology 2200A/B, 3200A, Medical Biophysics 3330F/G, 3336F/G, 3501F, 3503G, 3505F, 3507G,

Microbiology and Immunology 2500A/B, 3100A, 3300B, Pathology 3240A, 3245B, Pharmacology 3620, Physiology 3120, 3140A, any of the former courses: Epidemiology and Biostatistics 2200A/B, Microbiology and Immunology 2100A, 3400B

Group ₿ 2: Anatomy and Cell Biology 3319\*\*, Biochemistry 3385A, 3386B, 3390AB, Epidemiology 3210B, 3315B, 3500A, Pharmacology 2060A/B

Group & 3: Anatomy and Cell Biology 3309, Biochemistry 3380G, <del>3387G,</del> Medical Biophysics 3970Z, Microbiology and Immunology 3610F, 3620G, Pharmacology 3580¥Z, Physiology 3130¥Z, the former Biochemistry 3387G, Microbiology and Immunology 3600G.

\*\*Including Anatomy and Cell Biology 3319 in the module will increase the total number of courses required to complete the module to 10.0 courses.

# Notes:

- 1. It is not mandatory to complete any Group 2 courses in the Specialization in IMS. If Anatomy and Cell Biology 3319 is taken as a Group 2 course, the module will be increased to 10.0 courses
- 2. Anatomy and Cell Biology 3309, if taken, may be used to satisfy either 1.0 Group 1 course OR 0.5 Group 1 + 0.5 Group 3 course
- 3. See UNDERGRADUATE COURSE INFORMATION for the requisites for 3000- and 4000-level courses requisites and the BMSc website for information about constraints (priority and restricted access) for all basic medical science courses.

## **MEDICAL SCIENCES**

Effective September 1, 2014, the Major in Medical Sciences will be revised.

#### **MAJOR IN MEDICAL SCIENCES**

As of September 1, 2013, admission to this module is available only to students in degrees other than Bachelor of Medical Sciences (BMSc) degrees. The Major in Medical Sciences cannot be completed in combination with any of the following Majors in a Bachelor of Science degree: Biochemistry, Medical Biophysics, Medical Cell Biology, Microbiology and Immunology, Pharmacology, Physiology.

Students registered in a Bachelor of Medical Sciences (BMSc) degree prior to September 1, 2013 may complete the Major in Medical Sciences. Students admitted to the BMSc Program after September 1, 2013 who are interested in an interdisciplinary Major should see the MAJOR IN INTERDISCIPLINARY MEDICAL SCIENCES (IMS).

## • • •

# Module

• • •

3.0 courses from: Groups A and B-1 and 2 (see below) with at least a minimum of 1.0 course selected from Group A 1 and no more than 2.0 courses from one subject area. A maximum of 2.0 courses from one subject area (e.g. a maximum of 2.0 courses in Biochemistry) can be used towards the Group requirement. Group A 1: Anatomy and Cell Biology 3309, Biochemistry 3381A, 3382AB, Biostatistics 3100A, 3110B, Epidemiology 2200A/B, 3200A, Medical Biophysics 3330F/G, 3336F/G, 3501F, 3503G, 3505F, 3507G, Microbiology and Immunology 2500A/B, 3100A, 3300B, Pathology 3240A, 3245B, Pharmacology 3620, Physiology 3120, 3140A, or any of the former courses: Epidemiology and Biostatistics 2200A/B, Microbiology and Immunology 2100A, 3400B.

Group ₿ 2: Anatomy and Cell Biology 3319, Biochemistry 3385A, 3386B, 3390AB, Epidemiology 3210B, 3315B, 3500A, Pharmacology 2060A/B

#### Notes:

- 1. It is not mandatory to complete any Group 2 courses in the Major in Medical Sciences
- 2. See UNDERGRADUATE COURSE INFORMATION for the course requisites and the BMSc website for information about constraints (priority and restricted access) for all basic medical science courses (www.schulich.uwo.ca/bmsc)
- 3. 3000-level courses from the subject areas in Groups A and B 1 and 2 that do not appear in the lists above may be included in the Major only with permission of the IMS counsellor.
- 4. 4000-level courses from the subject areas in Groups A and B 1 and 2 may be included in the Major only with permission of the Medical Sciences/IMS counselor (a maximum of 1.0 4000-level course will be permitted).

## **PATHOLOGY**

Effective September 1, 2014, Pathology 4200A/B will be revised.

# Pathology 4200A/B - Current Concepts in the Pathogenesis of Human Diseases

Course description: No change.

Prerequisite(s): Pathology 3240A and Pathology 3245B with a mark of at least 70% in each; Physiology 3120.

2 lecture hours, 0.5 course

#### PHYSIOLOGY AND PHARMACOLOGY

Effective September 1, 2014, the Major in Pharmacology will be revised.

# **MAJOR IN PHARMACOLOGY**

..

Admission Requirements for students pursuing this Major module in a Bachelor of Medical Sciences (BMSc) degree (for students admitted to Year 1 in September, 2013 and onward):

...

The courses below must be completed with a minimum mark of 60% in each prior to admission to the Major module in Year 3. These courses will also be used towards the Module requirements. See ADMISSION TO THE BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM and MODULES OFFERED IN THE BMSc PROGRAM for additional requirements (averages, course load, etc.).

0.5 course: Biochemistry 2280A.

0.5 1.0 course: Biology 2382B, 2581B.

0.5 course: Chemistry 2213A/B.

...

Module

...

1.5 courses: Pharmacology 3620 (or the former Pharmacology 3550A/B and 3560A/B) and Pharmacology 3580¥Z.

...

Effective September 1, 2014, Pharmacology 3580Y be revised.

# Pharmacology 3580¥Z – Pharmacology Laboratory

Course description: No change.

Prerequisite(s): Biochemistry 2280A and either Chemistry 2213A/B or 2273A, or permission of the Department.

A minimum average of 75% in the previous year is required.

Pre-or Corequisite(s): Pharmacology 3620, or the former Pharmacology 3550A/B and 3560A/B.

3 laboratory hours (3 laboratory hours every other week and up to 3 tutorial hours, at the instructor's discretion, in alternate weeks). 0.5 course

Effective September 1, 2014, the following module be revised. The noted lines are the only lines impacted.

## HONORS SPECIALIZATION IN PHARMACOLOGY

1.5 courses: Pharmacology 3620 (or the former Pharmacology 3550A/B and 3560A/B) and Pharmacology 3580¥Z.

Effective September 1, 2015, the following courses be revised.

# Pharmacology 4320A/B – Cardiovascular Pharmacology

Course description: No change.

Prerequisite(s): Pharmacology 3620 (or the former Pharmacology 3550A/B) and Pharmacology 3580¥Z; or Physiology 3120; or Pharmacology 3620 (or the former Pharmacology 3550A/B) and registration in Year 4 of a module in Pathology and Toxicology; or permission of the Department.

2 lecture hours, 0.5 course.

# Pharmacology 4630A - Principles of Toxicology

Course description: No change.

Prerequisite(s): Pharmacology 3620 (or the former Pharmacology 3560A/B) and Pharmacology 3580¥Z; or Pharmacology 3620 (or the former Pharmacology 3560A/B) and registration in Year 4 of a module in Pathology and Toxicology; or permission of the Department.

2 lecture hours, 0.5 course.

# Pharmacology 4980E - Experimentation and Communication in Pharmacology

Course description: No change.

Prerequisite(s): Pharmacology 3620 (or the former Pharmacology 3550A/B and 3560A/B) and Pharmacology 3580¥Z; Physiology 3120; Physiology 3140A; and registration in either an Honors Specialization in

Pharmacology or an Honors Specialization in Physiology and Pharmacology.

Minimum 11 laboratory hours per week plus 2 seminar hours on alternate weeks, 1.5 course.

Effective September 1, 2014, Physiology 3130Y be revised.

# Physiology 3130¥Z – Physiology Laboratory

Course description: No change.

Prerequisite(s): One of Physics 1028A/B, 1301A/B or 1501A/B and one of Physics 1029A/B, 1302A/B or 1502A/B, or the former Physics 1020 or 1024; 1.0 course from: Calculus 1000A/B or 1400A/B or 1500A/B or the former 1100A/B, Calculus 1301A/B or 1501A/B, Mathematics 1600A/B or the former Linear Algebra 1600A/B, Mathematics 1225A/B, 1228A/B, 1229A/B, Statistical Sciences 1024A/B, Applied Mathematics 1201A/B or the former Calculus 1201A/B, Applied Mathematics 1413; one of Biology 1001A or 1201A and one of Biology 1002B or 1202B, or the former Biology 1222 or 1223; or permission of the department. It is strongly recommended that Biochemistry 2280A and Biology 2382B be taken prior to Physiology 3130¥Z. A minimum average of 75% in the previous year is required. Open only to students who are registered in Years 3 or 4.

Pre-or Corequisite(s): Physiology 3120.

3 laboratory hours, 0.5 course.

Effective September 1, 2015, the following courses be revised.

## Physiology 4420A/B - Physiology of Exercise

Course description: No change.

Antirequisite(s): Kinesiology 4432A/B; Physiology 3420A.

Prerequisite(s): Physiology 3120, 3130¥Z and Physiology 3140A.

2 lecture hours, 1 tutorial hour, 0.5 course.

Priority to students in Honors Specialization modules in Physiology, and Physiology and Pharmacology

## Physiology 4520A/B – Fundamental Concepts in Stem Cell Biology and Regenerative Medicine

Course description: No change.

Prerequisite(s): Physiology 3120, 3130¥Z and Physiology 3140A; or Physiology 3120 (with a mark of at least 75%) and Physiology 3140A.

2 lecture hours, 0.5 course.

# Physiology 4530A/B - Biological Bases of Skeletal Health and Disease

Course description: No change.

Prerequisite(s): Physiology 3120, 3130¥Z and Physiology 3140A; or Physiology 3120 (with a mark of at least

75%) and Physiology 3140A.

2 lecture hours, 1 tutorial hour, 0.5 course.

# Physiology 4610A/B - Cardiovascular Physiology

Course description: No change.

Prerequisite(s): Physiology 3120, 3130¥Z and Physiology 3140A.

2 lecture hours, 0.5 course.

# Physiology 4620A/B - Reproductive Endocrinology

Course description: No change.

Prerequisite(s): Physiology 3120, 3130\(\frac{4Z}{Z}\) and 3140A; or Physiology 3120 (with a mark of at least 75%) and

Physiology 3140A.

2 lecture hours, 0.5 course.

# Physiology 4630A/B - Motor Neurophysiology

Course description: No change.

Prerequisite(s): Physiology 3120, 3130¥Z and Physiology 3140A; or Neuroscience 2000, Physiology 3140A and

registration in Year 4 of an Honors Specialization in Neuroscience.

2 lecture hours, 0.5 course.

# Physiology 4650A/B - Regulatory Neurophysiology

Course description: No change.

Prerequisite(s): Physiology 3120, 3130¥Z and Physiology 3140A.

2 lecture hours, 0.5 course.

# Physiology 4660A/B - Body Water and Renal Physiology

Course description: No change.

Prerequisite(s): Physiology 3120, 3130¥Z and Physiology 3140A.

2 lecture hours, 0.5 course.

# Physiology 4670A/B - Selected Advanced Topics in Physiology

Course description: No change.

Prerequisite(s): Physiology 3120, 3130¥Z and Physiology 3140A.

2 lecture hours, 0.5 course.

# Physiology 4980E - Seminar and Research Project - Physiology

Course description: No change.

Prerequisite(s): Physiology 3120, 3130YZ and 3140A.

Minimum 10 laboratory hours per week plus 2 seminar hours alternate weeks, 1.5 course.

Enrolment limited to students in Honors Specialization modules in Physiology, Physiology and Pharmacology, and Physiology and Psychology.

Effective September 1, 2014, the following modules be revised. The noted lines are the only lines impacted.

## HONORS SPECIALIZATION IN PHYSIOLOGY

2.0 courses: Physiology 3120, 3130<del>YZ</del>, 3140A

## HONORS SPECIALIZATION IN PHYSIOLOGY AND PHARMACOLOGY

2.0 courses: Physiology 3120, 3130<del>YZ</del>, 3140A

1.5 courses: Pharmacology 3620 (or the former Pharmacology 3550A/B and 3560A/B) and Pharmacology

3580¥Z.

# **MAJOR IN PHYSIOLOGY**

2.0 courses: Physiology 3120, 3130¥Z, 3140A

# **SPECIALIZATION IN PHYSIOLOGY**

2.0 courses: Physiology 3120, 3130¥Z, 3140A

## SPECIALIZATION IN PHYSIOLOGY AND PHARMACOLOGY

2.0 courses: Physiology 3120, 3130¥Z, 3140A

1.5 courses: Pharmacology 3620 (or the former Pharmacology 3550A/B and 3560A/B) and Pharmacology

3580¥Z.

# **FACULTY OF SOCIAL SCIENCE**

## **ECONOMICS**

Effective **September 1, 2014**, the following modules will be revised.

## HONORS SPECIALIZATION IN ECONOMICS

...

\*\*Students may substitute up to 1.0 course from the following list toward this requirement: Calculus 2502A/B, 2503A/B; any Mathematics course numbered 2100 or higher; Applied Mathematics 2402A, or the former Differential Equations 2402A, Applied Mathematics 2811B, 2813B, 3811A/B, 3813A/B, 3815A/B, 3817A/B, 3911F/G, 4353B, 4613A/B, 4617A/B, 4815A/B, 4817A/B and Financial Modeling 3817A/B. Students who choose to make such a substitution cannot count Economics 3310A/B towards this requirement.

...

## **MAJOR IN ECONOMICS**

...

\*\*Students may count up to 0.5 course from the following list toward this requirement: Calculus 2502A/B, 2503A/B; any Mathematics course numbered 2100 or higher; Applied Mathematics 2402A or the former Differential Equations 2402A, Applied Mathematics 2811B, 2813B, 3811A/B, 3813A/B, 3815A/B, 3817A/B, 3911F/G, 4353B, 4613A/B, 4617A/B, 4815A/B, 4817A/B, Financial Modeling 3817A/B. Students who make such a substitution cannot count Economics 3310A/B towards this requirement.

...

## **MAJOR IN FINANCIAL ECONOMICS**

...

# Module

6.0 Courses:

3.0 courses: Economics 2220A/B, 2221A/B, 2222A/B, 2223A/B, 2260A/B, 2261A/B.\*

0.5 course from: Economics 3332A/B, 3353A/B, Actuarial Science 2555A/B, Applied Mathematics 3613B, the former Statistical Sciences 4520A/B Financial Modeling 2555A/B, 3520A/B, 3613A/B,.

2.5 additional courses: in Economics at the 2200 or 3000 level, of which 0.5 course must be at the 3000 level.\*\*
\*Students who have taken a full or half course in introductory statistics at the 2100 level or higher in the
Department of Statistical and Actuarial Sciences can substitute that course for Economics 2222A/B towards the
module requirements. Students who have completed any other introductory statistics course listed as an
antirequisite to Economics 2222A/B must replace Economics 2222A/B with 0.5 course in Economics at the 2200
or 3000 level.

\*\*Students may count up to 0.5 course from the following list toward this requirement. Students who make such a substitution cannot count Economics 3310A/B towards this requirement. The list is: Calculus 2502A/B, 2503A/B; any Mathematics course numbered 2100 or higher; Applied Mathematics 2402A or the former Differential Equations 2402A, Applied Mathematics 2811B, 2813B, 3811A/B, 3813A/B, 3815A/B, 3817A/B, 3911F/G, 4353B, 4613A/B, 4617A/B, 4815A/B, 4817A/B, Financial Modeling 3817A/B.

...

Effective September 1, 2014, Economics 4400E be revised.

# **Economics 4400E - Senior Research Seminar in Economics**

Course description: No change.

Prerequisite(s): Economics 2223A/B, Economics 2261A/B, and Economics 2221A/B (Economics 2220A/B for students in the Economics, Politics and Philosophy Honors Specialization). Student must be in their 4th year of an Honors Specialization module Economics Degree. Concurrent enrolment in Economics 3388A/B is strongly recommended.

Pre-or Corequisite(s): Economics 3388A/B 2 seminar hours, 1.0 course.

Effective September 1, 2014, the following modules be revised.

# HONORS SPECIALIZATION IN ECONOMICS, POLITICS AND PHILOSOPHY

•••

## Module

...

1.0 1.5 course, normally taken in the fourth year: Economics 4400E and Economics 3388A/B. (Note: Economics 3388A/B is highly recommended to be taken before or concurrently with Economics 4400E.)

2.0 1.5 additional courses in any of Economics, Political Science, or Philosophy at the 2200 level or above, of which 1.0 course must be at the 3000 level. (Students are responsible for making sure they have the prerequisites for the courses they wish to take.)

...

## HONORS SPECIALIZATION IN GLOBAL ECONOMICS

...

## Module

9.0 courses:

- 3.0 courses normally taken in second year: Economics 2220A/B, 2221A/B, 2222A/B, 2223A/B, 2260A/B, 2261A/B\*.
- 1.0 1.5 courses normally taken in fourth year: Economics 4400E and Economics 3388A/B. (Note: Economics 3388A/B is highly recommended to be taken before or concurrently with Economics 4400E.)
- 2.0 additional courses in Economics at the 2200 or 3000 level, of which 1.0 course must have an F/G designation and 1.0 course must have international or global content\*\*.
- 1.0 course in non-English modern language at the 2200 level or above or in French at the 1900 level or above. Students with demonstrated prior language proficiency may substitute additional Economics courses at the 2200 or 3000 level to meet this requirement.
- 2.0 1.5 additional courses at the 2200 level or above in Economics or non-English modern language, or from an approved list of courses with international/global content available on the Department of Economics website.

. . .

# **HISTORY**

Effective September 1, 2014, History 3816F/G will be introduced.

# History 3816F/G, Introduction to Digital History

In this course students will learn how to produce, present, and publish historical content on-line; how to find and evaluate digital primary and secondary sources; and how to use computational techniques to work with digital resources. No previous background in the subject area is required.

Prerequisite: 1.0 History course at the 2200 level or above.

2.0 hours, 0.5 course

# MANAGEMENT AND ORGANIZATIONAL STUDIES

Effective **September 1, 2014**, MOS 4485F/G: Human Resource Management for HR Students will be revised.

# Management and Organizational Studies 4485F/G - Human Resource Management for HR Students

Course description: No change. Antirequisite(s): MOS 3385A/B

Prerequisite(s): Enrolment in 4th year of a Consumer Behavior, or Human Resource Management, or Public

Administration module in BMOS.

3 lecture hours, 0.5 course.

# FACULTY OF SOCIAL SCIENCE, HURON UNIVERSITY COLLEGE, and KING'S UNIVERSITY COLLEGE

## JEWISH STUDIES

Effective September 1, 2014, the following course be introduced on Main Campus and at Huron and King's.

#### Jewish Studies 2801F/G - Introduction to Jewish Studies

This course introduces students to interpretive frameworks for understanding Jewish history, culture, and sacred and literary texts. It examines the roles played Jewish history by sacred Jewish texts; interpretive frameworks for understanding Jewish history; and the many forms taken by Jewish culture, including works of literature, music, art, and philosophy.

3.0 seminar hours, 0.5 course.

# **BRESCIA UNIVERSITY COLLEGE**

## **FAMILY STUDIES**

Effective **September 1, 2014**, the following modules be revised.

# HONORS SPECIALIZATION IN FAMILY STUDIES – BSc (Human Ecology)

. . .

# Module

9.0 courses:

1.0 courses: Any of the Family Studies 2000- or 3000-level courses.

1.0 courses: Any of the Family Studies 4000-level courses.

4.5 1.0 courses: Family Studies 2235 2300A/B; Psychology 2850A/B or Sociology 2205A/B.

1.5 courses: Chemistry 2213A/B, Physiology 2130.

2.0 to 3.0 courses: Foods and Nutrition 2232, 2245A/B, 3344A/B, 3361A/B, 3364A/B, 3373A/B.

1.0 to 2.0 2.5 courses (depending on the courses selected above) from: any of Family Studies 2000-, 3000-, or 4000-level courses, Human Ecology 2222F/G, 2266F/G, 3343A/B, Psychology 2054A/B or 2410A/B, Sociology 2235, 4496E.

# SPECIALIZATION IN FAMILY STUDIES - BSc (Human Ecology)

...

# Module

9.0 courses:

2.0 courses: any of the Family Studies 2000-, 3000-, or 4000-level courses.

4.5 1.0 courses: Family Studies 2235 2300A/B, Psychology 2850A/B, or Sociology 2205A/B.

1.5 courses: Chemistry 2213A/B, Physiology 2130.

2.0 to 3.0 courses: Foods and Nutrition 2232, 2245A/B, 3344A/B, 3361A/B, 3364A/B, 3373A/B.

1.0 to 2.0 2.5 courses (depending on the courses selected above) from: any of the Family Studies 2000-, 3000-, or 4000-level courses, Human Ecology 2222F/G, 2266F/G, 3343A/B, Psychology 2054A/B or 2410A/B, Sociology 2235

## MAJOR IN FAMILY STUDIES - BA (HUMAN ECOLOGY)

\_\_\_

## Module

6.0 courses:

3.5 courses from: any Family Studies 2000-, 3000-, or 4000-level course, Human Ecology 2222F/G.

0.5 course from: Writing 1020F/G, 2101F/G, to be taken no later than the 3rd year, and preferably during 1st or 2nd year.

0.5-1.0 course: Psychology 2410A/B, 2041 or 3434E.

0.5 course: Family Studies 2300A/B.

0.5-1.0-1.5 courses (depending on the courses selected above) from: Anthropology 2254F/G, English 2033E,

3725F/G, any Family Studies 2000-, 3000-, or 4000-level course, History 2183A/B, Human Ecology 2222F/G, 3033A/B, 3338A/B, 3343A/B, Psychology 2050, 2075, Religious Studies 2150 or 2265E, Sociology 2235, 2267A/B, 3341F/G.

# SPECIALIZATION IN FAMILY STUDIES - BA (HUMAN ECOLOGY)

...

#### Module

9.0 courses:

4.0-6.0 courses from: any Family Studies 2000-, 3000-, or 4000-level course, Human Ecology 2222F/G.

0.5-1.0 course: Psychology 2410A/B, 2041 or 3434E.

0.5 course from: Writing 1020F/G, 2101F/G, to be taken no later than the 3rd year, and preferably during 1st or 2nd year.

0.5 course: Family Studies 2300A/B.

<del>0.5-1.0</del> - 3.0 courses (depending on the courses selected above) from: Anthropology 2270F/G, English 2033E, 3725F/G, any Family Studies 2000-, 3000-, or 4000-level course, History 2183A/B, Human Ecology 2222F/G, 3033A/B, 3338A/B, 3343A/B, Psychology 2050, 2075, 2850A/B and 2855F/G, Religious Studies 2150 or 2265E, Sociology 2205A/B and 2206A/B, 2235, 2267A/B, 3341F/G.

## **FOODS AND NUTRITION**

Effective March 1, 2014, the following course be revised.

# Foods and Nutrition 2232 – Principles of Food Science

Course description: No change.

Prerequisite(s): Registration in the Foods and Nutrition modules (Honors Specialization, Specialization, Major, Minor)-BSc (Foods and Nutrition) programs.

Pre-or Corequisite(s): Foods and Nutrition 1030E, Chemistry 2003A/B or 2213A/B.

3 lecture hours, 3 laboratory hours, 1.0 course.

(Brescia)

Effective **September 1, 2014**, the following courses be revised.

# Foods and Nutrition 2241A/B - Nutrition Throughout the Human Life Cycle

Course description: No change.

Prerequisite(s): Registration in the Foods and Nutrition modules (Honors Specialization, Specialization, Major, Minor) BSc (Foods and Nutrition) programs or BSc (Human Ecology) program or BA (Human Ecology) Nutrition and Families programs.

Pre-or Corequisite(s): Chemistry 2003A/B or 2213A/B and Foods and Nutrition 1030E or Foods and Nutrition 1021 or Foods and Nutrition 2121.

3 lecture hours, 0.5 course.

(Brescia)

## Foods and Nutrition 3342A/B - Advanced Food Science

Course description: No change.

Prerequisite(s): Chemistry 2003A/B or 2213A/B and Foods and Nutrition 2232. Registration in the Foods and Nutrition modules (Honors Specialization, Specialization, Major, Minor)—BSc (Foods and Nutrition) programs. 3 lecture hours, 3 laboratory hours, 0.5 course. (Brescia)

Effective **September 1, 2014**, the following modules be revised.

# HONORS SPECIALIZATION IN NUTRITION AND DIETETICS

...

## **Admission Requirements**

Completion of first-year requirements with no failures. Students must have an average of at least 70% in the following 4.0 courses with no mark below 60%:

Chemistry 1301A/B and 1302A/B or the former 1100A/B and 1200B, 1050, 1020 or 023

Biology 1290B

Foods and Nutrition 1030E-or the former 025a/b

**Business Administration 1220E** 

0.5 course numbered 1000-1999

## Module

10.5 courses

4.5 courses: Foods and Nutrition 2232, 2241A/B, 3342A/B, 3344A/B, 3348A/B, 3351A/B, 3361A/B, 4453A/B

2.0 courses: Human Ecology 2222F/G, 2266F/G, 3349A/B, 4411F/G

0.5 course from: Chemistry 2003A/B (recommended), Chemistry 2213A/B

1.0 course: Physiology 2130

0.5 course from: Biochemistry 2288A (recommended), Biochemistry 2280A (Biochemistry 2280A may be substituted for Biochemistry 2288A).

1.5 courses from: Foods and Nutrition or Human Ecology at the 3000 or 4000-level

0.5 course from: Statistical Sciences 2037A/B or Sociology 2205A/B or any other statistics course at the 2000 level or above

# HONORS SPECIALIZATION IN FOOD SCIENCE AND TECHONOLOGY

# **Admission Requirements**

Completion of first-year requirements with no failures. Students must have an average of at least 70% in the following 5.0 courses with no mark below 60%:

Chemistry 1301A/B and 1302A/B or the former 1100A/B and 1200B, 1050, 1020 or 023

Biology 1290B

Foods and Nutrition 1030E or the former 025a/b

**Business Administration 1220E** 

Computer Science 1032A/B

Mathematics 1225A/B, Calculus 1000A/B, 1500A/B, or the former Calculus 1100A/B

Physics 1028A/B

# Module

10.5 courses

2.5 courses: Foods and Nutrition 2232, 2241A/B, 3342A/B, 3344A/B

3.5 courses: Foods and Nutrition 2300A/B, 2350A/B, 3310A/B, 3320A/B, 4420A/B, 4430A/B, 4440A/B

2.0 courses: Human Ecology 2222F/G, 2266F/G, 3349A/B, 4411F/G

1.0 course: Chemistry 2003A/B (recommended) or Chemistry 2213A/B, 2272F

0.5 course from: Biochemistry 2288A (recommended) or Biochemistry 2280A (Biochemistry 2280A may be substituted for Biochemistry 2288A).

0.5 course: Writing 2101F/G

0.5 course: Statistical Sciences 2037A/B or Sociology 2205A/B or any other statistics course at the 2000 level or above

# HONORS SPECIALIZATION IN NUTRITION AND DIETETICS/HBA COMBINED DEGREE PROGRAM

---

## Year 1

5.0 courses including 3.5 required courses:

3.5 courses: Biology 1290B, Business Administration 1220E, Chemistry 1301A/B, 1302A/B (or the former

Chemistry 1100A/B, 1200B), Foods and Nutrition 1030E

1.5 courses from: Humanities and Social Sciences

Year 2

5.0 courses: Business Administration 2257, Chemistry 2003A/B (or Chemistry 2213A/B), Foods and Nutrition 2232, 2241A/B, Human Ecology 2222F/G, 2266F/G, Physiology 2130

...

# **SPECIALIZATION IN FOODS AND NUTRITION**

...

# **Admission Requirements**

Completion of first-year requirements with no failures. Students must have an average of at least 68% in the following 4.0 courses:

Chemistry 1301A/B and 1302A/B or the former 1100A/B and 1200B, 1050, 1020 or 023 Biology 1290B

Foods and Nutrition 1030E or the former 025a/b, 235a/b, 341a/b

Business Administration1220E

0.5 course numbered 1000-1999

# **Progression Requirements**

To remain in a Specialization in Foods and Nutrition, students must maintain a modular average of 68% or above.

## Module

9.0 courses

3.5 courses: Foods and Nutrition 2232, 2241A/B, 3342A/B, 3344A/B, 3348A/B, 3351A/B

1.5 courses: Human Ecology 2222F/G, 2266F/G, 3349A/B,

0.5 course from: Chemistry 2003A/B (recommended), Chemistry 2213A/B

1.0 course: Physiology 2130

2.0 courses from: Foods and Nutrition or Human Ecology at the 3000 or 4000-level

0.5 course from: Biology 2217B, 2485B, Biochemistry 2288A, 2280A (Biochemistry 2280A may be substituted for Biochemistry 2288A)

## MINOR IN FOODS AND NUTRITION

The Minor in Foods and Nutrition is offered by the Division of Food and Nutritional Sciences at Brescia University College. Students must be registered in an undergraduate program The Minor is designed specifically for students in undergraduate programs in Health Sciences, Kinesiology, Biology or Basic Medical Sciences and Biomedical Sciences who may pursue the Minor concurrently with their degree program. All Foods and Nutrition courses count toward the student's undergraduate program. Enrolment is limited and meeting the minimum requirements does not guarantee acceptance into the module.

# **Admission Requirements**

Completion of first-year requirements in the Health Sciences, Kinesiology, Biology or Basic Medical Sciences Biomedical Sciences program with an average of 70% and no failures. Students must have an average of at least 70% in 3.0 courses including Foods and Nutrition 1021 with a mark of at least 70%, and Chemistry 1301A/B and 1302A/B, or the former 1100A/B and 1200B, 1050, or 1020 or 023, with a mark of at least 60%. Enrolment is limited and meeting the minimum requirements does not guarantee acceptance into the module.

## Module

4.0 courses

2.0 courses: Chemistry 2003A/B (recommended) or Chemistry 2213A/B, Foods and Nutrition 2241A/B, 3344A/B, 3361A/B

2.0 courses from: Foods and Nutrition 2232, 3339A/B, 3342A/B, 3348A/B, 3351A/B, 3364A/B, 3373A/B, 4452A/B, 4458A/B, the former Foods and Nutrition 4439A/B.

Students should meet with the Academic Advisors at Brescia University College Academic Counsellors for appropriate selection of courses.

## KING'S UNIVERSITY COLLEGE

## **HISTORY**

Effective September 1, 2014, the following modules be revised at King's University College.

# HONORS SPECIALIZATION IN HISTORY

• • •

#### Module

9.0 courses:

1.0 course from: Canadian History 2201E, 2203E, 2205E.

1.0 course: United States History 2301E.

1.0 course: European History 2403E.

1.0 course from: World or Comparative – Thematic History 2501E, 2650E, 2800F/G, 2808F/G.

Note: 3.0 of the 4.0 core courses above must be taken before year 3. The fourth course must be taken before year 4. 3.0 of the 4.0 core course must be taken before year 4.

...

#### **MAJOR IN HISTORY**

...

## Module

7.0 courses:

1.0 course from: Canadian History 2201E, 2203E, 2205E.

1.0 course: United States History 2301E.

1.0 course: European History 2403E.

1.0 course from: World or Comparative – Thematic History 2501E, 2650E, 2800F/G, 2808F/G.

Note: 3.0 of the 4.0 core courses above must be taken before year 3. The fourth course must be taken before year 4. 3.0 of the 4.0 core course must be taken before year 4.

...

## **PSYCHOLOGY**

Effective September 1, 2014, Psychology 2050, 3371F/G will be revised at King's University College.

# Psychology 2050 - Human Adjustment

Course description: No change.

Antirequisite(s): Psychology 2030A/B, 2035A/B, 2550A/B, and the former Psychology 253E, 254G, 257E.

3 hours, 1.0 course. (Brescia, Huron, King's)

## Psychology 3371F/G - Therapeutic Counselling

Course description: No change.

Antirequisite(s): The former Psychology 3370E, Psychology 3991G Special Topics: Introduction to Counselling

(Brescia 2013-14).

Prerequisite(s): Psychology 2840F/G (or Psychology 2800E, 2820E, 2830A/B, 2855F/G or 2856F/G) and registration in 3rd or 4th year of Honors Specialization, Honors Double Major, Major or Specialization in Psychology, or permission of the Department.

3 lecture hours, 0.5 course.

(King's)

Effective September 1, 2014, Psychology 2060 will be withdrawn at King's University College.

Effective **September 1, 2014**, Psychology 2061A/B will be offered at King's University College. This course already exists in Main Campus course offerings.

# Psychology 2061A/B - Psychology at Work

This course introduces students to the field of industrial and organizational (I/O) psychology and its contributions to enhanced organizational effectiveness and quality of work life. I/O psychology offers an evidence-based approach to hiring, training, performance management, and leadership, and provides insight into the motivation and behaviour of individuals and teams.

Antirequisite(s): Psychology 2660A/B, Psychology 2060.

3 lecture hours, 0.5 course.

(King's)

# DAP UPDATE: MINOR CHANGES

No updates at this time.