DATE: Tuesday 12 January 2021
TIME: 12:00 noon – 2:00 p.m.
PLACE: Teams – See meeting invitation or contact the secretary

---

**Open Session**

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Declarations of Conflict of Interest - [Excerpt from Senate Bylaw 1*]</td>
<td>Information</td>
</tr>
<tr>
<td>2. Approval of the [15 December 2020 Minutes*] and Business Arising</td>
<td>UGC</td>
</tr>
</tbody>
</table>
| 3. Curricular Items for Approval & Information  
   a. [Science*] | 1, 2 UGC; 3 Information |
| 4. [University Communication Outcomes – Approval Process*] | SEN-regular |
| 5. Blended Learning Project | Information |
| 6. Other Business | Information |

7. Next Meeting: Tuesday 9 February 2021, 12:00 to 2:00 p.m. via Teams

*material attached/to be distributed**  
“SEN-consent” to be recommended to Senate for approval (consent agenda)  
“SEN-regular” to be recommended to Senate for approval (regular agenda)  
“UGC” to be approved on behalf of Senate & sent to Senate for information

---

Rebecca Wickens  
6 January 2021  
Associate University Secretary
### 8. Declarations of conflict of interest

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.01</td>
<td>At the beginning of each meeting of Senate or any of Senate’s committees or councils, the chair will call for members to declare any conflicts of interest with regard to any agenda item. For agenda items to be discussed in closed session, the chair will call for declarations of conflict of interest at the beginning of the closed portion of the meeting. Members may nonetheless declare conflicts at any time during a meeting.</td>
</tr>
<tr>
<td>8.02</td>
<td>A member shall be considered to have an actual, perceived or potential conflict of interest, when the opportunity exists for the member to use confidential information gained as a member of Senate, or any of Senate’s committees or councils, for the personal profit or advantage of any person, or use the authority, knowledge or influence of the Senate, or a committee or council thereof, to further her/his personal, familial or corporate interests or the interests of an employee of the university with whom the member has a marital, familial or sexual relationship.</td>
</tr>
<tr>
<td>8.03</td>
<td>Members who declare conflicts of interest shall not enter into debate nor vote upon the specified item upon which they have declared a conflict of interest. The chair will determine whether it is appropriate for said member to remove themselves from the meeting for the duration of debate on the specified item(s).</td>
</tr>
<tr>
<td>8.04</td>
<td>Where Senate or a committee or council of Senate is of the opinion that a conflict of interest exists that has not been declared, the body may declare by a resolution carried by two-thirds of its members present at the meeting that a conflict of interest exists and a member thus found to be in conflict shall not enter into debate on the specified item upon which they have declared a conflict of interest. The chair will determine whether it is appropriate for said member to remove themselves from the meeting for the duration of debate on the specified item(s).</td>
</tr>
</tbody>
</table>
Present: Katherine Acheson, Veronica Austen, Monica Barra, Harleen Bhandal, Kofi Campbell, Benoit Charbonneau, Victoria Chu, Martin Cooke, Daniel Davison, Vivian Dayeh, David DeVidi (chair), Leeann Ferries, Brendon Larson, Cathy Newell Kelly, Francis Poulin, Reginald Somera, Megan Town, Cristina Vanin, Chris Vigna, Rebecca Wickens (secretary), Richard Wikkerink

Resources: Jennifer Coghlin, Danielle Jeanneault, Amanda McKenzie, Alyssa Voigt

Guests: Anne Fannon (3b)

Regrets: Rachel Bruce, Abigayl De Souza, Amanda Morin, Jeremy Pittman

Organization of Meeting: David DeVidi took the chair, and Rebecca Wickens acted as secretary. The secretary advised that a quorum was present. The agenda was approved without formal motion.

1. DECLARATIONS OF CONFLICTS OF INTEREST
No conflicts of interest were declared.

2. APPROVAL OF THE 10 NOVEMBER 2020 MINUTES AND BUSINESS ARISING
The minutes were approved without formal motion. There was no business arising from the minutes.

3. CURRICULAR ITEMS FOR APPROVAL & INFORMATION
Arts. Acheson presented the new, revised and inactivated courses, noting an amendment to the submission to add department consent as a prerequisite for CI 267. Discussion included enrollment expectations for new CI courses. There was a motion to approve the new, revised and inactivated courses on behalf of Senate. Acheson and Barra. Carried.

Acheson spoke to the major modification to the honours Global Business and Digital Arts (GBDA) plan to change it to a co-op program, including the rationale for the proposed change, the co-op feasibility assessment, and some minor corrections to the submission. With those corrections, there was a motion to recommend that Senate approve the major modification to the GBDA plan. Acheson and Wikkerink. Carried.

Acheson presented the minor modifications, including the addition of two electives to the list of plan requirements for the Indigenous Entrepreneurship Minor and Diploma in Indigenous Entrepreneurship. There was a motion to approve the minor modifications as presented. Acheson and Campbell. Carried.

Acheson provided an overview of: the current academic standing regulations; methods of calculating liberal studies averages versus averages for other plans; proposed changes for liberal studies. There was a motion to recommend that Senate approve the changes to the academic standing regulations as presented. Acheson and Larson. Carried.

WatPD. Anne Fannon spoke to the revisions to PD19 and related inactivation of PD21. There was a motion to approve the proposed revision and inactivation on behalf of Senate as presented. Davison and Ferries. Carried.

4. REGISTRAR’S OFFICE
Grade Submission Period. Members heard that, as a result of the decision to delay the start of the winter term, a change was required to the grading period for that term. There were no concerns expressed.

5. OTHER BUSINESS.
Voigt spoke to the launching of a website to serve as a resource for those seeking approval of curricular changes, including the history behind the initiative, team involved, highlights of information available, and pages still to be
developed. Discussion included: the communication plan; the feasibility and benefit of extending resources and information to cover Faculty and departmental level processes; technological solutions used elsewhere for curriculum processes.

6. NEXT MEETING
The next meeting is 12 January 2021, 12:00 noon – 2:00 p.m. via Teams.

5 January 2021

Rebecca Wickens
Associate University Secretary
1 COURSE CHANGES
   1.1 Biology (BIOL)
   1.2 Earth (EARTH)
   1.3 Optometry (OPTOM)
   1.4 Science and Business (SCBUS)
2 ACADEMIC PLAN CHANGES (MINOR MODIFICATIONS)
   2.1 Advanced Standing Status for Doctor of Optometry Program
3 Faculty of Science Changes in Spring 2020 due to COVID – For Information
1 COURSE CHANGES

1.1 Biology (BIOL)
   BIOL 373L, 462/EARTH 444

1.2 Earth (EARTH)
   EARTH 444/BIOL 462

1.3 Optometry (OPTOM)
   OPTOM 342A, 346, 347, 367, 375, 377, 385, 387

1.4 Science and Business (SCBUS)
   SCBUS 225
COURSE CHANGES  (for approval)

Biology

Current Catalog Information
BIOL  373L  ( 0.25 )  LAB, TST Human Physiology Laboratory
Laboratory exercises to study the principles of human physiology. [Offered: W]
No Special Consent Required
Requisites :
Coreq: BIOL 373

Effective  02-SEP-2021
Requisite Change : Coreq: BIOL 373. Antireq: BIOL 273L
Rationale :
BIOL 373L which becomes effective Sept. 1, 2021, replaces the Human Physiology 1 and Human Physiology 2 labs (BIOL 273L and BIOL 373L) combining labs from both. Students who have taken BIOL 273L will not be eligible for BIOL 373L offered after September 1, 2021 as there would be some overlap. Therefore, BIOL 273L is added as an antirequisite course, primarily intended for students who have by choice selected BIOL 273L in the past. Students who required both physiology labs as requirements for their program, have been advised to complete both labs prior to September 1, 2021.

Current Catalog Information
BIOL  462  ( 0.50 )  LEC, TUT Applied Wetland Science
Advanced concepts on wetland ecosystems in the context of regional and global earth systems processes such as carbon and nitrogen cycling and climate change, applications of wetland paleoecology, use of isotopes and other geochemical tools in wetland science, and wetland engineering in landscape rehabilitation and ecotechnology. Current issues in Canada and abroad will be examined. [Offered: F]
No Special Consent Required
Cross-listed as: EARTH  444
Requisites :
Prereq: (One of BIOL 150, CIVE 153, EARTH 121, 153, ENVE 153, ENVS 200, GEOE 153) and (one of CHEM 120, 121, 123, 125 or CHE 102) and (one of CIVE 224, ENVE 224, STAT 202). Antireq: BIOL 453, GEOG 405

Effective  01-SEP-2022
Requisite Change : Prereq: One of EARTH 221, 322, 358, BIOL 350, 351, ENVE 375, or 376. Antireq: GEOG 405
Rationale :
Prerequisites for EARTH 444, cross-listed with BIOL 462, are updated to reduce the total number of course options, to remove some first year courses as prerequisites, to remove the need for a statistics prerequisite, and to add upper year course prerequisites. This course does not teach any statistics within the math that is taught, so a statistic background is not required. The first year prerequisites did not properly prepare students
for a fourth year course. The course is best suited for students in Biology, Earth Sciences and Environmental Engineering, thus appropriate upper year courses for these students were chosen as the prerequisites for the course. In addition, BIOL 453 has not been offered in 10 years and is removed as an antirequisite. Requisite changes have been approved by both the Departments of Biology and Earth and Environmental Sciences.

Earth and Environmental Sciences

Current Catalog Information

EARTH  444  ( 0.50 )  LEC, TUT  Applied Wetland Science
Advanced concepts on wetland ecosystems in the context of regional and global earth systems processes such as carbon and nitrogen cycling and climate change, applications of wetland paleoecology, use of isotopes and other geochemical tools in wetland science, and wetland engineering in landscape rehabilitation and ecotechnology. Current issues in Canada and abroad will be examined. [Offered: F]
No Special Consent Required
Requisites :
Prereq: (One of BIOL 150, CIVE 153, EARTH 121, 153, ENVE 153, ENV 200, GEOE 153) and (one of CHEM 120, 121, 123, 125 or CHE 102) and (one of CIVE 224, ENVE 224, STAT 202). Antireq: BIOL 453, GEOG 405
Cross-listed as: BIOL 462

Effective  01-SEP-2022
Requisite Change :
Prereq: One of EARTH 221, 358, BIOL 350, 351, ENVE 375, 376. Antireq: GEOG 405
Rationale :
Prerequisites for EARTH 444, cross-listed with BIOL 462, are updated to reduce the total number of course options, to remove some first year courses as prerequisites, to remove the need for a statistics prerequisite, and to add upper year course prerequisites. This course does not teach any statistics within the math that is taught, so a statistic background is not required. The first year prerequisites did not properly prepare students for a fourth year course. The course is best suited for students in Biology, Earth Sciences and Environmental Engineering, thus appropriate upper year courses for these students were chosen as the prerequisites for the course. In addition, BIOL 453 has not been offered in 10 years and is removed as an antirequisite. Requisite changes have been approved by both the Departments of Biology and Earth and Environmental Sciences.

Optometry & Vision Science - School of

Current Catalog Information

OPTOM  342A  ( 0.50 )  LEC, TUT  Case Analysis and Optometric Therapies 1
The clinical application of the visual sciences. Emphasis is placed on the differential diagnostic method of analyzing clinical data with consideration given to appropriate clinical techniques, effective record keeping, recommended optometric therapies, and prognoses.
No Special Consent Required
Requisites:
Prereq: OPTOM 245, 255, 272; Optometry students only

Effective 01-SEP-2022
Requisite Change:
Prereq: (OPTOM 245, 255, 272) or advanced standing status; Optometry students only

Rationale:
Advanced standing entry to the third and fourth year of the Doctor of Optometry program will be allowed for qualified internationally graduated Optometrists and Ophthalmologists starting fall 2022. As such, prerequisites need updating.

Current Catalog Information
OPTOM 346 (0.25) LAB Ophthalmic Optics 3
No Special Consent Required
Requisites:
Prereq: OPTOM 216, 246; Optometry students only

Effective 01-SEP-2022
Requisite Change:
Prereq: (OPTOM 216, 246) or advanced standing status; Optometry students only

Rationale:
Advanced standing entry to the third and fourth year of the Doctor of Optometry program will be allowed for qualified internationally graduated Optometrists and Ophthalmologists starting fall 2022. As such, prerequisites need updating.

Current Catalog Information
OPTOM 347 (0.50) LEC Contact Lenses 1
Indications and contra-indications for contact lens wear. Lens selection and design. Fitting and evaluating rigid and hydrogel soft contact lenses. Physico-chemical and mechanical properties of contact lens materials. Optical and mathematical concepts. The ocular physiological response to contact lens wear. Care and maintenance of contact lenses.
No Special Consent Required
Requisites:
Prereq: OPTOM 143, 246, 252; Optometry students only

Effective 01-SEP-2022
Requisite Change:
Prereq: (OPTOM 143, 246, 252) or advanced standing status; Optometry students only

Rationale:
Advanced standing entry to the third and fourth year of the Doctor of Optometry program will be allowed for qualified internationally graduated Optometrists and Ophthalmologists starting fall 2022. As such, prerequisites need updating.

Current Catalog Information
OPTOM 367 (0.50) LAB, LEC Contact Lenses 2
Detection and management of chronic and acute complications induced by contact
Contact lens management options for special conditions such as dry eye, aphakia and keratoconus (and other corneal irregularities). Disposable lenses and replacement regimens. Extended wear options. Alternative management of refractive errors such as orthokeratology and refractive surgery. Contact lenses and presbyopia.

No Special Consent Required

Requisites:
Prereq: OPTOM 155/245, 347; Optometry students only

Effective 01-SEP-2022
Requisite Change:
Prereq: (OPTOM 155/245, 347) or advanced standing status; Optometry students only

Rationale:
Advanced standing entry to the third and fourth year of the Doctor of Optometry program will be allowed for qualified internationally graduated Optometrists and Ophthalmologists starting fall 2022. As such, prerequisites need updating.

Current Catalog Information
OPTOM 375 (0.50) LEC Diseases of the Eye
Advanced considerations of the etiology, signs, symptoms, diagnosis, treatment, and management of ocular disease. Emphasis will be placed on the clinical case management with therapeutic pharmaceutical agents.

No Special Consent Required
Requisites:
Prereq: OPTOM 245, 255; Optometry students only

Effective 01-SEP-2022
Requisite Change:
Prereq: (OPTOM 245, 255) or advanced standing status; Optometry students only

Rationale:
Advanced standing entry to the third and fourth year of the Doctor of Optometry program will be allowed for qualified internationally graduated Optometrists and Ophthalmologists starting fall 2022. As such, prerequisites need updating.

Current Catalog Information
OPTOM 377 (0.50) LAB, LEC Pediatric Optometry and Learning Disabilities
Optometric examination and management of infants, children, and patients with learning disabilities or multiple challenges. General child development and the development of the optical and sensory-motor functions of the visual system. Learning disabilities and related vision problems. The role of the optometrist in conjunction with parents, teachers, and psychologists.

No Special Consent Required
Requisites:
Prereq: OPTOM 152, 252; Optometry students only

Effective 01-SEP-2022
Requisite Change:
Prereq: (OPTOM 152, 252) or advanced standing status; Optometry students only

Rationale:
Advanced standing entry to the third and fourth year of the Doctor of Optometry program will be allowed for qualified internationally graduated Optometrists and Ophthalmologists starting fall 2022. As such, prerequisites need updating.
Current Catalog Information

OPTOM  385  ( 0.50 )  LAB, LEC  
Clinical Medicine for Optometric Practice

Overview of current medical diagnoses and management of systemic diseases with ocular involvement. History and physical examination (including neurological examination), clinical laboratory testing, and diagnostic imaging. Diseases of high prevalence including cardiovascular, cancer, endocrine, and neurological disorders.

No Special Consent Required

Requisites :

Prereq: OPTOM 215, 231; Optometry students only

Effective  01-SEP-2022

Requisite Change :

Prereq: (OPTOM 215, 231) or advanced standing status; Optometry students only

Rationale : Advanced standing entry to the third and fourth year of the Doctor of Optometry program will be allowed for qualified internationally graduated Optometrists and Ophthalmologists starting fall 2022. As such, prerequisites need updating.

Current Catalog Information

OPTOM  387  ( 0.50 )  LAB, LEC  
Low Vision and Geriatrics

Aging and its effects on the visual system in both health and disease, care, and management of the aging patient. Assessment and management of visual impairment and disability, including both optical and non-optical therapies. Epidemiology and psychology of vision impairment, and associated rehabilitative services.

No Special Consent Required

Requisites :

Prereq: OPTOM 152, 252, 346; Optometry students only

Effective  01-SEP-2022

Requisite Change :

Prereq: (OPTOM 152, 252, 346) or advanced standing status; Optometry students only

Rationale : Advanced standing entry to the third and fourth year of the Doctor of Optometry program will be allowed for qualified internationally graduated Optometrists and Ophthalmologists starting fall 2022. As such, prerequisites need updating.

Dean of Science Office

Current Catalog Information

SCBUS  225  ( 0.50 )  DIS, LEC  
Organizational Behaviour in Scientific and Technical Workplaces

This workshop uses case studies, lectures, and discussions to explore a basic understanding of how organizations work, and how people interact within organizations in order to achieve ethical human, organizational, and social objectives. This course considers organizational structure and models, ethics, organizational theory, organizational culture, motivation, diversity, negotiation, communication, leadership, and management, and how these principles are applied in start ups or scientific and technical environments. There is a major project that focuses on an aspect of organizational behavior in a scientific or technical firm or application,
and is presented in writing and orally. [Offered: W]

No Special Consent Required

Requisites:

Prereq: Honours Science and Business, Biotechnology/Chartered Accountancy and Biotechnology/Economics students only. Antireq: MSCI 211, PSYCH 238/338, BUS 288W

Effective 01-SEP-2022
Course Attribute Change:
Rationale:

Also offered Online
An online version of this course will be developed though the Centre for Extended Learning therefore, an "also offered online" attribute is being added to the course, as virtual work environments are common now, and having one SCBUS workshop that provides online group and presentation learnings would give students a clear differentiation in employment situations. Some technology businesses have declared they are "digital only" or "digital into the near term future" and group work and presentations are not going away therefore, science and business students need exposure this new work environment to continue to be well rounded and adaptable. Having one SCBUS Workshop (and its intendant group work and presentations) offered on-line will allow our students to gain demonstrated expertise in the remote technologies and norms needed to be successful in this new normal. This is strong experience that they can put on their resumes to demonstrate both resilience and the ability to manage the distractions of work-from-home. This proven experience would help mitigate any hesitation employers might have when hiring science and business students to work in remote environments. It is another type of experiential learning to add to their resumes. In addition, having an online option for SCBUS 225 allows students who transfer into the program, the ability to gain SCBUS 225 learnings scaffolded into later SCBUS courses, earlier in
2 ACADEMIC PLAN CHANGES (MINOR MODIFICATIONS)

2.1 Advanced Standing Status for Doctor of Optometry Program

Effective Date: September 1, 2022

Background and Rationale: Since 2005, the International Optometric Bridging Program (IOBP) at the University of Waterloo School of Optometry & Vision Science (WOVS) has provided eye care professionals educated outside of North America with a structured orientation to Canadian standards of optometric practice. The IOBP has provided qualified applicants with opportunities to gain the critical language, academic and clinical skills necessary to proceed with registration in Canada.

In 2012, a review of the IOBP was initiated by the University as a result of input from external stakeholders and resulted in the recommendation that the IOBP be re-branded and fully integrated into the normal operation of the school and subject to the usual oversight and quality assessment policies of the School, Faculty and University, as appropriate. (Nava Israel, Bruce Mitchell and Maurice Yap)

Since the review, additional factors have influenced the need for change and integration of the IOBP into the normal operations of the school, including:

- The end of government funding on March 31st, 2021
- The strong encouragement from the ministry for students to be OSAP eligible
- The decreasing number of candidates going through the qualifying process
- The decreasing number of Canadian candidates studying abroad
- The desire of stakeholders for Accreditation Council of Optometric Education (ACOE) accreditation of the IOBP, and for graduates to earn an OD degree

WOVS offered an Advanced Standing program for International Optometric Graduates (IOGs) from 1979 to 2001. Direct entry into third year was problematic for several reasons including the advanced and changing scope of optometry in Canada, and the need for cultural competency, communication skills training and background information to support learning in the upper years. At that point, and for these reasons, advance standing status was no longer offered.

The following University of Waterloo (UW) departments/personnel have been consulted during the research and development phase of reintroducing and incorporating an advanced standing status into the OD program: Dr. Marlee Spafford (Dean of Science Office), Jennifer Kieffer and Carrie MacKinnon (Institutional Analysis & Planning), Amanda McKenzie and David DeVidi (Quality Assurance) and Gwen Graper and Andre Jardin (Registrar’s/Admissions office).

A two-phase approach was developed and approved by the Optometry Faculty council in September 2020, to include related Calendar and course requisite changes:
Phase One: Advanced Standing Optometry Preparatory Program (ASOPP)

<table>
<thead>
<tr>
<th>Enrollment Capacity:</th>
<th>Up to 6 students/year. Offers of admission will be extended to the 6 highest ranked candidates in the admissions pool that meet the WOVS non-academic criteria, e.g., CASPer etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses:</td>
<td>ASOPP will take place at WOVS and consist of both online and on-site (lectures and clinical skills labs) courses during the Spring term (i.e. April-July). Successful completion of all didactic and laboratory courses will be a requirement for placement into the beginning of the 3rd year of the OD program.</td>
</tr>
<tr>
<td>Student Fees:</td>
<td>Approximately $30 000 (cost recovery, budget to be determined and will depend on external funding resources (e.g. support from Ministry of Training Colleges and Universities).</td>
</tr>
</tbody>
</table>

Phase Two – Enrollment in Fall term of third year OD Program

<table>
<thead>
<tr>
<th>Enrollment Capacity:</th>
<th>Up to 6 students/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Requisites:</td>
<td>Successful completion of all ASOPP didactic and clinical courses</td>
</tr>
<tr>
<td>Courses:</td>
<td>Students will be admitted into the Fall term of 3rd year and complete all course requirements for third and fourth year (Level 300 and 400 courses). Third year courses requiring Year 2 course prerequisites will be updated to include advanced standing students as an alternative prerequisite. Advanced Standing student will be expected to meet the same academic requirements as the remainder of the cohort. Upon successful completion, the advanced standing students will graduate with an OD degree from UW.</td>
</tr>
<tr>
<td>Student Fees:</td>
<td>Same tuition fees as OD 3rd and 4th year students.</td>
</tr>
</tbody>
</table>

Changes to the Optometry Admissions page (http://ugradcalendar.uwaterloo.ca/page/SCI-OPTOM-Requirements-for-Admission) are needed to reflect that advanced offers of admission are available:

**Optometry- Requirements for Admission**

Advanced Standing Offers of Admission

We do not offer advanced standings.

Advanced standing entrance to the Doctor of Optometry program is available to qualified internationally graduated optometrists and ophthalmologists. Advanced Standing students who successfully complete third- and fourth-year optometry courses will obtain a Doctor of Optometry degree.
## Faculty of Science Changes in Spring 2020 due to COVID – For Information

<table>
<thead>
<tr>
<th>Changes</th>
<th>Impact/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOL courses</strong></td>
<td></td>
</tr>
<tr>
<td>The following labs could not be offered: BIOL 130L, 240L and 273L</td>
<td>• BIOL 130L/240L first year labs offered other terms and easily sequenced later</td>
</tr>
<tr>
<td></td>
<td>• BIOL 273L was set to expire Sept 1, 2020; expiry date extended to 2021 approved at Oct. 2020 SUC</td>
</tr>
<tr>
<td>Field Courses not offered: BIOL 490A/B/C; 492, 498A/B</td>
<td>• No travel; not core requirements</td>
</tr>
<tr>
<td><strong>EARTH courses</strong></td>
<td></td>
</tr>
<tr>
<td>EARTH 281 not offered, and EARTH 153 offered as cross-listed course only</td>
<td>• EARTH 281 is not a core required course for any program; 153 was still offered as the cross listed ENG course</td>
</tr>
<tr>
<td><strong>PHYS courses</strong></td>
<td></td>
</tr>
<tr>
<td>The following labs could not be offered: PHYS 260L, 270L, 360A/B, and 460A/B</td>
<td>• 260L is a core lab for Honours Physics but available W, S allowing time for resequencing</td>
</tr>
<tr>
<td></td>
<td>• 270L is core lab for Honours Physics and Astronomy available W, S allowing time for resequencing</td>
</tr>
<tr>
<td></td>
<td>• 360B, 460A and 460B are not core required labs and are offered all three terms</td>
</tr>
<tr>
<td></td>
<td>• 360A is core lab for Honours Physics and is available all three terms, allowing time for resequencing</td>
</tr>
<tr>
<td><strong>CHEM courses</strong></td>
<td></td>
</tr>
<tr>
<td>The following labs could not be offered: CHEM 120L, 123L, 224L, 233L, 237L and 265L</td>
<td>• Emails were sent to students in programs scheduled to take the lab and capacity was increased to accommodate them in w 2021 as there are not fall offerings and students who missed them in spring are on coop fall</td>
</tr>
<tr>
<td>Research project labs were not be offered: CHEM 392A, B, 494A and 497</td>
<td>• 392A/B are for incoming exchange students and there was no travel permitted in spring</td>
</tr>
<tr>
<td></td>
<td>• No students could start the 494A (part 1) of a two-term research project in spring and 497 not a core requirement</td>
</tr>
<tr>
<td><strong>SCI &amp; MNS courses</strong></td>
<td></td>
</tr>
<tr>
<td>No changes to offerings</td>
<td>N/A</td>
</tr>
<tr>
<td>AVIA courses</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| Only the lecture portion of flight courses AVIA 102, 204 and 408 was available remotely | • Significant impact on flight training – delays of 4 to 5 months with progress through these courses (all flights suspended from March 13 to September)  
• Emails were sent to Year 1 students outlining options for a staggered start for flight training in 2021, 2022 and 2023. Students should be able to complete flight program and degree by the summer of 2024, as expected. |

<table>
<thead>
<tr>
<th>OPTOM courses and/or program</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OPTOM 478- all students took it spring 2020</td>
<td>• Normally 4th year class is split into three for three clerkship terms; each third class would take OPTOM 478 in one of their three final terms; all 4th year students took the course in spring 2020 instead</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHARM courses and/or program</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The lab component of PHARM 125 was moved to fall vs spring</td>
<td>• Needed to do the lab portion in person and it was managed in fall</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co-op Requirements</th>
<th></th>
</tr>
</thead>
</table>
| Students scheduled out on a co-op work term for spring 2020 could take a full academic course load | • Transcript text was added to their record to allow graduation with one less work term in total  
• Students who met eligibility for TDHL for spring 2020 were awarded TDHL despite being scheduled out on a work term |
Undergraduate Communications Outcomes.

Motion: That Senate Undergraduate Council endorse the implementation of a process for reviewing and approving new or revised UCO curricular items, substantially as outlined below.

Rationale:

- Over several years and in various stages, the University of Waterloo, including Senate, have endorsed the Undergraduate Communications Outcomes (UCO) as an important learning outcome for undergraduate students in all programs. There are currently a variety of mechanisms on campus for achieving the UCO in each undergraduate program, tailored to the academic needs of the program/Faculty.
- The UCO are an institutional priority, and as such receive centralized support so that the courses involved can be taught in pedagogically appropriate ways. As such, there is an important role for central governance, both academically and in terms of resource allocation, in addition to approvals at the program, Faculty, and Senate/Senate Council level.
- To achieve this, approval of substantial changes to the way UCO are to be achieved in a program/Faculty will include a simplified and adapted version of the role of the Vice-President, Academic and Provost (VPAP) in approval of new academic programs. The new program process involves the VPAP receiving advice about proposed new programs, both with respect to their academic appropriateness (via expert assessors from outside the University) and with respect to their resource implications for the university (via a Financial Viability Assessment done by a unit with Institutional Analysis and Planning). With this advice from the assessors and IAP, the VPAP makes a decision about whether it is in the interests of the University to offer the new program.
- Some adaptations of this process are appropriate for UCO changes, where financial implications, while significant, tend to be smaller, and where there are more efficient sources of suitable advice about the academic merits of a proposed change:
  - For UCO changes, the VPAP decision will normally be delegated to the Associate Vice-President, Academic (AVPA).
  - Rather than using external assessors to ensure academic merit, the process will rely on a suitable body of internal experts, advisory to and chaired by the AVPA (or a delegate), which primarily consists of faculty members from outside the academic program or unit proposing the change.
  - We anticipate that the exact constitution of this body may change over time, for instance if the University adopts other pan-university undergraduate learning outcomes. Starting in Winter 2021, this process will rely on the internal expertise of an Undergraduate Communications Outcomes Group (UCO Group). This group will provide advice to programs and the AVPA, as indicated in the diagram below. It will also play other important roles in the delivery of UCO courses, such as determining how their success will be evaluated over time. The structure and remit of UCO Group is currently being finalized by the AVPA and the Faculties and involved AFIW.
Program/Faculty drafts proposed changes

Proposal to UCO Group

Advice for revisions from UCO Group

AVPA/Provost Approval

IAP, AP P&R, etc. consider resource implications

Program/Faculty finalizes proposal

Faculty Approval (UG committee, Faculty Council)

SUC/Senate