Ex-Officio: F West (Chair); D Ali, T Allison, O Ardakanian, J Bartoszewski, W Bedard, S Blake, $J$ Boulter, M Boyce, I Cheng, T Choulli, J Davis, G de Vries, T Evans, M Ferguson, C Frei, Z Friggstad, R Funk, M Gedik, M Gingras, T Grant, Z Hall, L Hasham, N Hegde, C Heinke, B Jensen, T Johnson, N Karpenko, L LeBlanc, S Leys, A Litvak, L Mason, A Mikdame, M McDermott, T McGee, R McKay, B Peavey, B Powell, T Raivio, O Rueppell, J Sander, L Santana de Lelis, J Schaeffer, L Schulha, R Shields, A Singhal, M Spila, E Stroulia, R Summers, B Sutherland, M Taylor, R Tykwinski, G Uhrig, G Wagner, H Wan, H Wang, C Westbury, K Whitfield, S Wilson, M Wolansky, K Wong, X Yu, D Zaragoza

Additional Members: C Althoen, K Bimbo, G Chan, B Cockburn, I Cribben, M Cutumisu, I De Silva, M Glover, A Hughes, M Kennedy, M de Montigny, G Mix, J Olson, K Paulson, E Proctor, KA Reid, UT Sarwar, J Tarilyn Prouse, E Thomas, A Ullah, I Xin

Guests: D Feisst, C Freitas, L Madsen
\# of Attendees: 87

## 1. Approval of Agenda

Be it RESOLVED that the agenda of the $135^{\text {th }}$ Science Faculty Council be adopted as circulated. Moved/seconded by B Bedard/O Rueppell.

CARRIED
2. Notes for the $134^{\text {th }}$ Faculty Council Meeting, May 20, 2021

Be it RESOLVED that the notes of the $134^{\text {th }}$ Science Faculty Council be adopted as circulated. Moved/seconded by R Shields/K Whitfield. CARRIED

## 3. Frederick West, Interim Dean of Science

The Interim Dean made a presentation to Council about the current state of the Faculty of Science and answered questions from the floor.

## 4.1 a) Information Graduands lists

Information on the Spring 2022 graduand list was provided by the Associate Dean (Undergraduate). Total Graduands - approximately 1,243; BSc Honors - approximately 217; BSc Specialization - approximately 391; BSc General - approximately 635; Science Internship Program - approximately 79 students.

## 4.1 b) Motion to permit addition of names to the Graduand list

Be it RESOLVED that the Science Faculty Office be empowered to constitute the list of graduands for Spring 2022, as required. Moved/seconded by G de Vries/S Blake.

CARRIED

### 4.2 Faculty of Science Standards - Revisions

Be it RESOLVED that the Science Chairs' recommendations for revisions to the Faculty of Science Criteria for Merit increments, Tenure and Promotion be adopted as circulated. Moved/seconded by E Stroulia/T Allison.

CARRIED

Be it RESOLVED that the Science Chairs' recommendations for revisions to the Faculty of Science FEC Procedures for Annual Review of Performance, Merit Increments, Evaluation of Probationary Appointments, Tenure Decisions, and Application for Promotion to the Rank of Professor be adopted as circulated. Moved/seconded by E Stroulia/B Bedard.

CARRIED

Be it RESOLVED that the Science Chairs' recommendations for revisions to the Faculty of Science Standards of Performance and Procedures for Merit Increments, Continuing Appointment, and Promotion for Faculty Service Officers (FSOs) be adopted as circulated. Moved/seconded by E Stroulia/S Blake.

CARRIED

## 5. Items for Information

Update on Administrative Appointments
Fred West provided the following updates on administrative appointments with the faculty:
Declan Ali began his term as Chair in the Department of Biological Sciences on January 1, 2022.
Thank you to Tracy Raivio for serving as Acting Chair from January 1, 2021 to December 31, 2021.

The position of Chair of the Department of Chemistry has been filled with the appointee being announced shortly. The appointee will begin July 1, 2022. Thank you to Rik Tykwinski for serving as chair for the past five and a half years.

Christoph Frei has accepted the position of Interim Chair of the Department of Mathematical and Statistical Sciences starting July 1, 2022. Thank you to Terry Gannon for serving as Chair for the past two years.

Stephen Johnston will be returning from Administrative Leave to start his second term as Chair of the Department of Earth and Atmospheric Sciences on July 1, 2022. Thank you to Thomas Chacko for serving as Acting Chair this past year.

### 5.1 Gold and Silver Medalists

Science Chairs approved the following Gold Medal winners:
Jayesh Vig, BSc General with a Major in Psychology and a Minor in Biological Sciences, will receive the Dean's Gold Medal in Science.
Kara Terry, BSc with Specialization in Pharmacology, will receive the Gold Medal in Science. Shezel Muneer, BSc with Honors in Physiology, will receive the Lieutenant-Governor's Gold Medal.

## Dean's Silver Medals, Spring Convocation 2022

The Dean's Silver Medals are awarded annually to convocating students with superior academic achievement enrolled in an Honors program in the Faculty of Science. Recipients must have had a minimum grade point average of at least 3.7 on a full course load in three Fall/Winter academic sessions while enrolled in the Faculty of Science. This year there are 87 Silver Medalists.

### 5.2 Engagement \& EDI Plan 2020-2023 for the Faculty of Science

The Faculty of Science Engagement \& EDI Plan for 2020-2023 can be viewed on the Faculty of Science website and is included in the agenda. Thank you to Tara McGee our Associate Dean Engagement \& EDI for forging this plan and for those who provided input and feedback.

### 5.3 New Academic Staff Appointments

A list of new academic staff appointments has been circulated with the agenda. Welcome to those who are with us and to those yet to arrive.

### 5.4 Academic Staff Promotions and/or Tenure/Continuing Appointments

A list of academic staff promotions, tenure and continuing appointments has been circulated with the agenda.

### 5.5 Proposed changes to BSc Degree Framework and BSc Academic Standing

Gerda de Vries presented the two executive summaries around the BSc renewal. Thank you to Gerda and Michelle Spila for their tireless work on this endeavour.

### 6.0 Other Business

Discussion took place on hybrid and online teaching.

- It was very useful to have classes recorded, especially in a hybrid setting.
- From an instructor perspective, students who choose asynchronous delivery also tend to have worse course outcomes. There was little difference between in-person and livestream students.
- Consider noting online versus in-person classes on transcript.
- It may be useful to have the courses listed in Bear Tracks specify the delivery mode.
- Need clarification on expectations from students and instructors and levels of responsibility (e.g. department level).
- It would be beneficial to have comparative data internally and from peer institutions to assess the various teaching modalities.

It was suggested that a retreat or Community of Practice be implemented to continue this discussion.

### 7.0 Adjournment

There being no other business, the meeting was adjourned at 10:53 am.

## AGENDA ITEM \#1

## 2021/2022 Faculty of Science Council - Additional Members

| Keri Ann Reid | Alumni Affairs |
| :--- | :--- |
| Gavin Chan | APEGA |
| Mark Glover | Department of Biochemistry |
| Bruce Cockburn | Division of Computer Engineering |
| James Hammond | Department of Pharmacology |
| Simon Gosgnach | Department of Physiology |
| Marc de Montigny | Campus Saint-Jean |
| Aman Ullah | Faculty of Agricultural, Life and EnvironmentalSciences |
| Katalin Bimbo | Faculty of Arts |
| Ivor Cribben | Alberta School of Business |
| Maria Cutumisu | Faculty of Education |
| Samer Adeeb | Faculty of Engineering |
| Mark Glover | Faculty of Medicine and Dentistry |
| Joanne Olson | Faculty of Nursing |
| Paul Juraz | Faculty of Pharmacy and Pharmaceutical Sciences |
| Michael Kennedy | Faculty of Kinesiology, Sport, and Recreation |
| Ethan Proctor | Graduate Students' Association |
| Claudia Althoen | Graduate Students' Association |
| Anna Hughes | Registrar's Office |
| Aakankshya Kharel | Undergraduate Student |
| Umair Tahir Sarwar | Undergraduate Student |
| Nishi Patel | Undergraduate Student |
| Kelsie Paulson | Undergraduate Student |
| Isabel Xin | Undergraduate Student |
| Nomitha Putta | Undergraduate Student |
| Jaclyn Tarilyn Prouse | Undergraduate Student |
| Evangeline Thomas | Undergraduate Student |
| Brittney Phung | Undergraduate Student |
| Isumi De Silva | Undergraduate Student |
| Grant Mix | Undergraduate Student |
| Ahmad Kamal | Undergraduate Student |

AGENDA ITEM \#2<br>$134^{\text {th }}$ COUNCIL OF THE FACULTY OF SCIENCE<br>20 May 2021<br>9:00 AM<br>Virtual Meeting

Ex-Officio: M Kalcounis-Rueppell (Chair); D Ali, T Allison, O Ardakanian, J Bagwe, J Bartoszewski, A Basu, W Bedard, S Blake, I Boettcher, V Bouchard, , M Boyce, S Chan, ICheng, T Choulli, D Coltman, G de Vries, C Demmans Epp, S Desaulniers, A Dey Nuttall, T Evans, M Ferguson, R Fernandez, C Frei, R Funk, S Gannon, T Gannon, S Guenette, L Hasham, N Hegde, B Jensen, S Johnston, A Kashlak, A Litvak, R Luth, R Marchand, M McDermott, T McGee, R McKay, S Morsink, L Mou, M Nascimento, J Naylor, J Newby, E Nicoladis, I Nikolaidis, B Peavey, A Penny, G Peschke, L Pham, A Prus-Czarnecki, T Raivio, T Rogers, O Rueppell, J Sander, J Schaeffer, A Singhal, M Spila, E Stroulia, R Summers, B Sutherland, R Tykwinski, H Wan, F West, C Westbury, K Whitfield, R Whittal, K Willis, L Willis, K Wong, V Yaskin, X Yu, V Zanetic, S Zhang<br>Additional Members: T Akinrinmade, L Belisle, K Bimbo, G Chan, B Cockburn, I Cribben, M de Montigny, M Glover, J Hammond, B Kanagala, M Kennedy, A Kharel, J Olson, K-A Reid, P Thota, A Ullah<br>\# of Attendees: 90

## 1. Approval of Agenda

Be it RESOLVED that the agenda of the $134^{\text {th }}$ Science Faculty Council be adopted as circulated. Moved/seconded by J Naylor/J Hammond.

CARRIED
2. Notes for the $133^{\text {rd }}$ Faculty Council Meeting, May 21, 2020

Be it RESOLVED that the notes of the $133^{\text {rd }}$ Science Faculty Council be adopted as circulated. Moved/seconded by S Johnston/J Bagwe.

CARRIED

## 3. Matina Kalcounis-Rueppell, Dean of Science

The Dean made a presentation to Council about the current state of the Faculty of Science and answered questions from the floor.

## 4.1 a) Information Graduands lists

Information on the Spring 2021 graduand list was provided by the Associate Dean (Undergraduate). Due to the delayed start of Winter term students are still in the process of being cleared for graduation.

Total Graduands - approximately 1220; BSc Honors - approximately 230; BSc Specialization approximately 370; BSc General - approximately 620; Science Internship Program approximately 120 students.

## 4.1 b) Motion to permit addition of names to the Graduand list

Be it RESOLVED that the Science Faculty Office be empowered to constitute the list of graduands for Spring 2021, as required. Moved/seconded by G de Vries/J Naylor. CARRIED

### 4.2 Faculty of Science Standards - Revisions

Be it RESOLVED that the Science Chairs' recommendations for revisions to the Faculty of Science Criteria for Merit Increments, Tenure and Promotion be adopted as circulated. Moved/seconded by L Willis/S Johnston.

CARRIED

Be it RESOLVED that the Science Chairs' recommendations for revisions to the Faculty of Science FEC Procedures for Annual Review of Performance, Merit Increments, Evaluation of Probationary Appointments, Tenure Decisions, and Application for Promotion to the Rank of Professor be approved with the friendly amendment to remove the words "at a minimum" from Appendix 1 and add the words "teaching and research statements" to sections A h), B h), and i) at the end of Appendix 1 . Moved/seconded by S Morsink/T Allison.

CARRIED

### 4.3 The Faculty of Science Research Award - Revisions

Be it RESOLVED that the Science Chairs' recommendations for revisions to the Faculty of Science Research Award be adopted as circulated. Moved/seconded by L Willis/D Coltman.

CARRIED

### 5.1 Gold and Silver Medalists

Science Chairs approved the following Gold Medal winners:
YiYin Gao (BSc General, Major in Biological Science and Minor in Psychology) receive the Dean's Gold Medal in Science.
Bryton Wong (BSc with Specialization, Psychology) receive the Gold Medal in Science,
Faith Trinh (BSc Honors, Neuroscience) receive the Lieutenant Governor's Gold Medal.

## Dean's Silver Medals, Spring Convocation 2021

The Dean's Silver Medals are awarded annually to convocating students with superior academic achievement enrolled in an Honors program in the Faculty of Science. Recipients must have had a minimum grade point average of at least 3.7 on a full course load in three Fall/Winter academic sessions while enrolled in the Faculty of Science. This year there are 83 Silver Medalists.

### 5.2 Changes to Science Faculty Council's Delegated Authority

Council was reminded that on Friday, March 12, 2021, Science Faculty Council approved by a majority vote the following motions about delegated authority:

Motion \#1:
The Science Faculty Council hereby creates a standing Executive Committee constituted with the following Terms of Reference:
i) Purpose: to advise the Dean on all Faculty related matters that may occur between the times of regular meetings of Council; and
ii) Membership: all Chairs, Associate Deans, and the Vice-Dean of the Faculty of Science; and
iii) Quorum: shall consist of no less than four members including at least 2 chairs; and
iv) Voting: all members are voting members. The Dean of Science is ex officio and will voteonly to break a tie.

Motion \#2:
The Dean of Science, in consultation with the Executive Committee, shall act for Science Faculty Council in matters that may occur between the times of regular meetings of Council and for which decisions require immediate resolution.

### 5.3 Faculty of Science Strategic Plan, 2020-2025

The Strategic Plan can be viewed on the Faculty of Science website and was circulated with the agenda. The Dean stated that together, as a community of leaders, this multi-layered plan was developed with achievable short-term accountabilities and long-term goals within a five-year timeframe. The plan has helped and will continue to help to guide our priorities and planning over the next few years, as we continue to focus on our mission of conducting world-leading research and the authentic teaching and training of the next generation of scientists.

### 5.4 New Academic Staff Appointments

The Faculty of Science is in the process of conducting three academic staff searches. There have been no additional new hires in the past year.

### 5.5 Academic Staff Promotions and/or Tenure/Continuing Appointments

A list of academic staff promotions and/or tenure/continuing appointments was circulated with the agenda for information.

## Adjournment

There being no other business, the meeting was adjourned.

Faculty of Science Standards - Revisions

# FoS Standards Review 2021-2022 Overview of Changes Between The Published Standards and This Version 

The current version of the Standards documents include references to relevant articles of the University's Schedule A and Schedule B.

All documents are formatted similarly.
All documents were edited for grammar, elimination of gendered pronouns, and semantic clarity.

As well a number of comments by Faculty Relations staff on the original documents have been addressed.

All documents include the following statement at the end of the introduction section:
This document was approved by the Faculty of Science Faculty Council on the 19th of May 2022 and a decision was also taken by Council to make the effective date of this document the 1st of July 2022, and will be used by FEC to evaluate work done during the July 2021 to June 2022 period.

This document was approved by the Faculty of Science Faculty Council on the 19th of May 2022 and a decision was also taken by Council to make the effective date of this document the 1st of July 2022.

More specifically the following substantive edits have been made to the three documents.

## The "Procedures" document:

It is quite similar to the previous version. The key difference is that the new procedures document separates the section on the second probationary period in two sections detailing the procedures relevant to (a) the end of the second probationary period and (b) tenure.

## The new "Criteria" document:

- Includes an EDI statement:

The FoS affirms its commitment to EDI and any evidence that the faculty member has pursued activities towards advancing EDI in their research and/or teaching and/or service is appreciated and recognized as meritorious.

- Includes a statement on a broad understanding of "impact":

Beyond the above criteria, additional activities such as commercialization activities, contributions to professional and policy reports, public dissemination and knowledge translation activities may also be considered meritorious.

- Does not include the "Service to Developing Countries" section 1.D. 4
- Does not include the "SPA" section 1.E - there is a separate SPA document detailing the FoS rules and procedures on SPA.
- Rephrases the reference to "performance over multiple years..."
- Does not include the "Policy on Evaluation of Teaching" and "Questionnaire forTeaching Evaluations" Appendices, because they are fundamentally under the purview of other central University units.

The new "FSO" document:

- Does not include the "SPA" section 6 - there is a separate SPA document detailing the FoS rules and procedures on SPA.
- Does not include the timelines description - this information is provided in theexample FoS timeline document

The SPA document
(https://drive.google.com/file/d/1mzBNSDA392kBMf2LyniBiZpWuNuAalbW/view)
It will be amended to indicate that the Dean has to sign off on major SPA.

FACULTY OF SCIENCE

## PROCEDURES FOR

 ANNUAL REVIEW OF PERFORMANCE, MERIT INCREMENTS, EVALUATION OF PROBATIONARY APPOINTMENTS, TENURE DECISIONS, AND APPLICATION FOR PROMOTION TO THE RANK OF PROFESSOR
## FOR <br> ACADEMIC FACULTY MEMBERS

Effective:
August 12, 2022

Approved by Provost \& Vice President (Academic) - August 12, 2022

Approved by the Faculty Council - May 19, 2022

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Procedures for Annual Review of Performance, Merit Increments, Evaluation of Probationary Appointments, Tenure Decisions, and Application for Promotion to the Rank of Professor Aug 12, 2022

## 1. Introduction

This document is to be used in conjunction with Schedule A to the Common Agreement between the Governors of the University of Alberta and the Association of the Academic Staff of the University of Alberta, July 12018 - June 30, 2020, hereafter referred to as 'schedule.A'.

In accordance with Articles A6.01 (d), A6.12.06, this document contains the Faculty of Science procedures to be followed for

- a faculty member's annual review of performance and awarding of merit increments;
- for evaluating the first and second probationary periods; and
- for making tenure and promotion decisions.

This document should be used in conjunction with Schedule A and the Faculty of Science Criteria for Merit Increments, Tenure and Promotion document.

This document was approved by the Faculty of Science Faculty Council on the 19th of May 2022 and a decision was also taken by Council to make the effective date of this document the 1st of July 2022, and will be used by FEC to evaluate work done during the July 2021 to June 2022 period.

## 2. Annual Review of Performance

The reporting period in the Faculty of Science is July 1 to June 30.
As per the Article A2.05, a faculty member shall submit each year an Annual Report on their responsibilities during the previous academic year. This report will serve as the basis of a performance review by FEC, which will decide on merit increments, actions to be taken at the end of probationary periods, tenure decisions, and applications for promotion to the rank of Professor.

In preparing a recommendation to FEC, each year the Department Chair shall review the annual report prepared by the faculty member. Each review shall include a meeting between the faculty member and the Department Chair, unless the faculty member is not available or refuses to meet (Article A6.13). After this review, the Chair shall complete a Chair's Recommendation Form for submission to FEC. If the faculty member is serving a probationary period, the Chair's Recommendation Form shall include both the Chair's review of the current year and the Chair's review of the entire probationary period (Article A6.14.2). A copy of the completed Chair's

[^0]Recommendation Form must be given to the faculty member at the same time as it is submitted to the Dean. ${ }^{2}$

For faculty members serving a probationary period, the Department Chair shall also annually advise the faculty member in writing on progress towards tenure (Article A6.14.3).

The Faculty of Science FEC Schedule of Events document sets forth annually the specific deadlines associated with the submission of materials for each of the decisions described in the sections that follow.

The Dean shall update and distribute this document annually to Department Chairs no later than April 1st each year.

## 3. Merit Increments

A merit increment means the basic unit by which a faculty member's salary is increased, where there is a recommendation to do so. In accordance with Article A6.09.1, each year the Department Chair shall recommend to the FEC whether the faculty member should receive merit increments based on their performance in the past year.

## A. Responsibilities of the faculty member

As specified by departmental deadline, the faculty member must provide the following minimum documentation to the Department Chair:
a) an annual report for the previous academic year, using the Faculty of Science Annual Report system and report template; and
b) proofs of their accepted publications for the period under review.

## B. Responsibilities of the Department Chair

Each year the Department Chair shall provide in writing to FEC, with a copy to the faculty member, an increment recommendation as per Article A6.14.1, based on the faculty member's responsibilities under Article A2 and to the standards of performance under Article A6.03. These standards are further detailed in the Faculty of Science Criteria for Merit, Tenure, and Promotion. The recommendation is made using the Chair's Recommendation Form. Guidelines for pro-rated increments based on the faculty member's effective date of appointment are specified in Articles A6.11.1 and A6.11.2.

[^1]
## 4. End of First Probationary Period

## A. Responsibilities of the Department Chair

The Department Chair will determine the last year of a first probationary period, using the effective date of appointment and the definitions given in Article A5.02.2.

According to Article A5.03.1, in the last year of a first probationary appointment, and by the deadline specified in the Science FEC Schedule of Events, the Department Chair shall recommend in writing to the Dean, with a copy to the faculty member, one of the following:
a) that a second probationary period be offered to the faculty member;
b) that an appointment with tenure be offered to the faculty member; or
c) that no further appointment be offered to the faculty member.

## B. Responsibilities of the Dean

According to Article A5.03.2, on receipt of the Department Chair's recommendation, the Dean shall take one of the following steps:
a) approve a recommendation that the faculty member be offered a second probationary period, which decision shall be final and binding;
b) if the recommendation is for a second probationary period and if the Dean disagrees with such a recommendation, refer the recommendation to FEC for consideration;
c) refer to FEC a recommendation that an appointment with tenure be offered to the faculty member; or
d) refer to FEC a recommendation that no further appointment be offered to the faculty member.

## 5. End of Second Probationary Period

## A. Responsibilities of the Department Chair

By the deadline specified in the Science FEC Schedule of Events, in the last year of a second probationary appointment, the Department Chair shall recommend in writing to FEC (Article A5.04.1), with a copy to the faculty member, one of the following:
a) that an appointment with tenure be offered to the faculty member, in which case procedures under the Tenure section of this document shall apply;
b) that no further appointment be offered to the faculty member; or
c) that the second probationary period be extended by one year (but only if such an extension had not been approved for an earlier year by FEC or the General Appeals Committee).

## B. Responsibilities of FEC

On receipt of the Department Chair's recommendation, the FEC shall recommend one of the following:
a) that an appointment with tenure be offered to the faculty member (in which case the procedures under the Tenure section of this document shall apply);
b) that no further appointment be offered to the faculty member; or
c) that the second probationary period be extended by one year (but only if such an extension had not been approved for an earlier year by FEC or the General Appeals Committee).

## 6. Tenure

When a faculty member at the rank of Assistant Professor is granted tenure, the individual will receive the designation of Associate Professor in accordance with Article A6.12.2.

## A. Responsibilities of the faculty member

As specified by departmental deadline, the faculty member who is being considered for tenure must provide the following minimum documentation to the Department Chair:
a) an up-to-date cúrriculum vitae including a complete publication list, current and expired funding, undergraduate and graduate student mentorship and supervision; internal and external service to the community and profession;
b) a teaching statement;
c) the names of at least six internationally recognized scholars who can serve as referees capable of judging their research activity; and
d) the names of individuals, if any, who would not be acceptable to the applicant to act as a referee, including the reasons for non-acceptability.

## B. Responsibilities of the Department Chair

In preparation for a faculty member's tenure consideration, either in the last year of a probationary period or in an earlier year for special tenure considerations (Article A5.05.1), the Department Chair shall
a) develop a confidential list of referees capable of judging the faculty member's research activity; this list will be derived from the faculty member's recommendations and those
of tenured academic faculty members in the Department, and will not normally include individuals identified by the faculty member as not acceptable;
b) write to a sufficient number of referees in order to obtain between four and six responses; faculty members are not advised as to which of the referees are being contacted for comments; if greater than six responses are received, all responses will be used;
c) invite tenured academic faculty members in the Department to review the documentation submitted by the faculty member, and to provide confidential written opinions as to the merits of the case;
d) meet with the faculty member to discuss the case;
e) assess the case for tenure, based upon the criteria provided in the Faculty of Science Criteria for Merit Increments, Tenure and Promotion document;
f) Inform the faculty member in writing, by the deadline specified in the Science FEC Schedule of Events, as to whether they intend to recommend tenure; and
g) arrange for the election of one tenured faculty member of the department to serve as an additional member of FEC to hear the case from the department; the elected representative(s) for tenure will not normally be direct collaborators of the faculty member.

If the Department Chair decides to recommend an appointment with tenure, they shall provide the tenure documentation (see Appendix I-Tenure) to the Dean by the deadline specified in the Science FEC Schedule of Events document.

If the Department Chair decides to recommend no further appointment, they shall provide all confidential academic evaluations of the work of the faculty member to the Dean by the deadline specified in the Science FEC Schedule of Events.

## B. Responsibilities of the Dean

If the Department Chair decides to recommend no further appointment or if FEC's preliminary decision is for no further appointment, the FEC Chair shall prepare a summary of the confidential material received and provide the faculty member and the Department Chair with a copy thereof by the date specified in the Faculty of Science FEC Schedule of Events document.

The summary prepared shall be in sufficient detail to enable the faculty member to know the specific ways in which the application failed to meet the criteria specified in the Faculty of Science Criteria for Merit Increments, Tenure, and Promotion.

## 7. Application for Promotion to the Rank of Professor

## A. Notification to Potential Applicants

The Dean shall notify faculty members of their eligibility to make an application for promotion to the rank of Professor, on or before May 15th in the year in which they first become eligible to do so (see Article A6.12.3 (b). There will be no subsequent notification.

On or before the relevant date specified in the Science FEC Schedule of Events document, the faculty member shall notify the Dean in writing of the intention to apply for promotion to the rank of Professor, with a cc to the Department Chair.

In accordance with Article A6.12.5, the Department Chair may inform a faculty member in writing that they
(a) intend to recommend a multiple increment sufficient to bring the salary of the faculty member to the minimum of Professor or higher, thus making the faculty member eligible for promotion in a particular year, and
(b) will support promotion at FEC.

Such notice shall be made to the faculty member by the deadline as per the Science FEC Schedule of Events the year in which the recommendation is to be made to FEC. At the same time, the Department Chair will send a copy of the written notice to the Dean.

## B. Basis for Achieving Promotion

For promotion to the rank of Professor, the Academic Faculty member must demonstrate a strong record of achievement in teaching, research, and service, including excellence in teaching and/or research, or exceptional service.

As described in Article A6.03.3 and detailed in the Faculty of Science Criteria for Increments, Tenure, and Promotion document, promotion to Professor can be justified in two distinct ways. In the first way, promotion is justified on the basis of excellence in research and/or teaching. This is the normal basis for promotion; it gives greater weight to research and teaching, in general, than to service. Alternatively, promotion is justified on the basis of exceptional service in the context of an Academic Leadership role. This basis for justifying promotion is to be used only in rare circumstances.

In both cases, the faculty member must demonstrate a strong record of achievement in research, teaching and service.

The procedure for applying for promotion is the same in both cases, except in the details of the number and qualifications of the referees.

## C. Responsibilities of the faculty member

The faculty member shall submit a letter of application for promotion to the rank of Professor to the Dean by the date specified in the Science FEC Schedule of Events. This letter must clearly state whether the basis of the application is excellence in research and teaching, or exceptional service in the context of an Academic Leadership role.

The following minimum documentation must be given to the Department Chair, along with a copy of the letter of application:
a) an up-to-date curriculum vitae including a complete publication list, current and expired funding, undergraduate and graduate student mentorship and supervision; internal and external service to the community and profession;
b) a teaching statement;
c) the names of at least six internationally recognized scholars who can serve as referees capable of judging their research activity; and
d) the names of individuals, if any, who would not be acceptable to the applicant to act as a referee, including the reasons for non-acceptability.

When promotion is justified on the basis of exceptional service, in addition to the above, the faculty member must also provide the names of at least six persons (not necessarily different from the above six names) who are best qualified to judge one or more of the following:
a) the demanding nature of the service that is the basis for promotion;
b) the exceptional quality of the service performed by the individual;
c) the leadership demonstrated by the individual.

For each of (a)-(c), the list of names must include at least two people who are qualified to comment on that aspect of the application.

## D. Responsibilities of the Department Chair

The Department Chair shall:
a) develop a confidential list of referees capable of judging the faculty member's research activity; this list will be derived from the applicant's recommendations and those of other departmental faculty members at the rank of Professor, and will not normally include individuals identified by the applicant as not acceptable;
b) write to a sufficient number of referees in order to obtain between four and six responses; faculty members are not advised as to which of the referees are being contacted for comments; if greater than six responses are received, all responses will be used;
c) when promotion is justified on the basis of exceptional service, in addition to the above, the Department Chair shall develop a confidential list of persons who are best qualified to judge one or more of the following:
a. the demanding nature of the service that is the basis for promotion,
b. the exceptional quality of the service performed by the individual, and
c. the leadership demonstrated by the individual;
d) write to a sufficient number of these persons to ensure that for each of (a)-(c) at least two of the references received comment on that aspect of the application;
e) invite faculty members in the Department, who are at the rank of Professor, to review the documentation submitted by the applicant (but excluding letters submitted by external referees?), and provide confidential opinions in writing as to the merits of the application;
f) meet with the faculty member to discuss the application;
g) assess the case for promotion, based upon the criteria provided in the Faculty of Science Criteria for Merit Increments, Tenure and Promotion document;
h) inform the faculty member, in writing, by the deadline specified in the Science FEC Schedule of Events, as to whether they intend to support or oppose the application:

The Department Chair shall forward all material for the promotion application to FEC as part of material provided for the faculty member's annual review. The Department Chair shall inform the faculty member in writing of the decision to support or oppose the application at the FEC hearing, and include a copy of this decision as part of the materials submitted to FEC.

## E. Responsibilities of the Dean

If the Department Chair decides to oppose the application or if FEC's preliminary decision is to deny promotion, the Dean shall prepare a summary of the confidential material received and provide the faculty member and Department Chair with a copy thereof as per the deadline specified in the Science FEC Schedule of Events. The summary statement so prepared shall be in sufficient detail to enable the faculty member to know the specific ways in which the application failed to meet the criteria specified in the Faculty of Science Criteria for Merit Increments, Tenure, and Promotion.

## F. Continuation of the Application

Where the Department Chair has decided to oppose the application, the faculty member may continue the application in accordance with Article A6.17.1. The Dean will submit to the FEC, on behalf of the applicant, the material submitted by the Department Chair (Appendix IPromotion). The faculty member may submit additional information that is relevant to the application by the due date specified in the Science FEC Schedule of Events.

Where the faculty member requests reconsideration of a preliminary FEC decision (A6.19.1), they shall submit to the Dean, with a copy to the Department Chair, documentation as per Article A6.20.1.

## G. Withdrawal of the Application

The faculty member may withdraw their application for consideration of promotion at any time prior to the FEC meeting. The Department Chair will maintain a record of the names of external individuals who were asked to and who provided confidential assessments. Those confidential assessments will be destroyed.

## 8. Referees

The referees selected for evaluating research for tenure and promotion "should not be from the same university as the applicant, should not have been a research supervisor or graduate student of the applicant within the past six years, should not have directly collaborated with the applicant within the past six years or have plans to collaborate in the immediate future, should not be an employee of a non-academic organization with which the applicant has had collaboration within the past six years and should not be in a potential conflict of interest (e.g., personal, financial)" ${ }^{3}$

[^2]
## Appendix I : Documents from the Department Chair

## A. Tenure

The following must be submitted by the Chair to the Dean:

1. The faculty member's Annual Report
2. Chair's Recommendation Form
3. The Chair's Recommendation Summary Letter that includes an evaluation of the faculty member's research, teaching ability and service contributions
4. Sample of letter to external referees
5. List of external referees
6. Four to six confidential letters of reference from external referees relating to research evaluation
7. The faculty member's Curriculum vitae
8. The faculty member's teaching and research statements
9. Copies of the publications selected by applicant and sent to external reviewers

If appropriate, other documentation may be submitted.

## B. Promotion

When promotion is justified on the basis of excellence in research and/or teaching, the following must be submitted by the Chair to the Dean:

1. The faculty member's Annual Report
2. Chair's Recommendation Form
3. The Chair's Recommendation Summary Letter that includes an evaluation of the faculty member's research, teaching ability, and service contributions
4. Sample of letter to external referees
5. List of external referees
6. Four to six confidential letters of reference from external referees relating to research evaluation
7. The faculty member's Curriculum vitae
8. The faculty member's teaching and research statements
9. Publications selected by applicant and sent to external reviewers

If appropriate, other documentation may be submitted.
When promotion is justified on the basis of exceptional service, the following must be submitted to the Dean:

1. The faculty member's Annual Report
2. Chair's Recommendation Form
3. The Chair's Recommendation Summary Letter that includes an evaluation of the faculty member's historical record relating to research and teaching, and focus on "exceptional service"
4. Sample of letter to external referees
5. List of external referees
6. Four to six confidential letters received from external referees relating to research evaluation
7. Three to six confidential letters received from external referees relating to service contributions; at least two references received must comment on each of (a)-(c).
8. The faculty member's Curriculum vitae
9. The faculty member's teaching and research statements

If appropriate, other documentation may be submitted.

# University of Alberta <br> Faculty of Science 

# Standards of Performance and Procedures for Merit Increments, Continuing Appointment, and Promotion for Faculty Service Officers (FSOs) 

1. FSO staff member consultation: February 13, 2012
2. Science Faculty Evaluation Committee approval: February 22, 2012 (via email vote)
3. Provost \& Vice - President (Academic) approval: May 3, 2012

Revised September 26, 2019
FSO staff member consultation:
Science Faculty Evaluation Committee approval:
Provost \& Vice - President (Academic) approval:

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## 1. Introduction

The purpose of this document is to set out the standards of performance and evaluation procedures for Faculty Service Officers (FSOs) as required under Articles B6.01 and B6.03.2 of the Collective Agreement between the Governors of the Board of the University of Alberta and the Association of the Academic Staff of the University of Alberta, July 1, 2018 - June 30, 2020 (Schedule B for FSOs) (hereafter "Schedule B" ${ }^{1 \prime \prime}$ ).

The responsibilities of FSOs in the Faculty of Science are varied, but all support the Faculty's endeavors in teaching, research, and service. The terms of the appointment and job description shall outline the specific duties in teaching, research, and service (Article B2.01).

This document was approved by the Faculty of Science Faculty Council on the 19th of May 2022 and a decision was also taken by Council to make the effective date of this document the 1 st of July 2022, and will be used by FEC to evaluate work done during the July 2021 to June 2022 period.

## 2. Annual Review of Performance

The reporting period in the Faculty of Science is July 1 to June 30.
As per Article B2.03, an FSO shall submit each year an Annual Report on responsibilities during the previous academic year. This report will serve as the basis for recommendations by the Department Chair to FEC on merit increments, actions to be taken at the end of probationary periods, continuing appointment decisions, and applications for promotion. The format of the report is approved by the Science Faculty Council and shall be based on written job responsibilities of the position.

In preparing a recommendation to FEC, each year the Department Chair shall review the annual report prepared by the FSO. Each review shall include a meeting between the FSO and the Department Chair, unless the FSO is not available or refuses to meet (Article B6.13). A copy of the completed form must be given to the FSO at the same time as it is submitted to the Dean.
If the FSO is serving a probationary period, the Department Chair shall also annually advise the FSO in writing on their progress.

## 3. Standards of Performance for FSO Ranks

FSO performance will be evaluated with respect to the standards set out for each rank. For all ranks, professional, technical and leadership competencies and the ability to meet diverse demands in a timely and useful manner are of primary importance. If deemed necessary, persons outside the Faculty may be consulted with regard to assessing the competence of the FSO for merit increment, continuing appointment, and promotion decisions. Assessment of the

[^3]FSO's performance may be facilitated by formal requests for feedback from individuals with whom the FSO interacts as part of their job. If the FSO's responsibilities include supervision of staff, then the quality of supervision will be part of the performance evaluation.

## Faculty Service Officer I

1.1 The FSO shall become familiar with new techniques, methodologies and approaches in the areas designated in the job description and remain current in their knowledge of these areas.
1.2 The FSO shall be competent and effective in carrying out the duties in their job description.
1.3 The FSO shall work effectively with their supervisor(s) in teaching, research, and/or service.

## Faculty Service Officer II

In addition to the above,
2.1 The FSO shall effectively represent their Department ${ }^{2}$ interests at Faculty and University levels.
2.2 The FSO shall provide effective supervision as required by their job description.

## Faculty Service Officer III

In addition to the above,
3.1 The FSO shall provide effective enhancement of the learning/research/working environment.
3.2 The FSO shall contribute to effective liaison with University entities and external groups as required by their job description.
3.3 The FSO shall provide leadership in support of the Department's teaching, research and/or service activities and be capable of managing projects, including supervision of research assistants and other staff as required.

## Faculty Service Officer IV

In addition to the above,
4.1 The FSO shall exercise independence of action and judgment consistent with participation in senior management.
4.2 The FSO shall provide substantive and meaningful advice to senior administrators regarding teaching, research, and/or service

[^4]4.3 The FSO shall perform a major role in maintaining and improving liaison with University entities and external groups, as required by their job description.
4.4 The FSO shall consistently demonstrate a high level of initiative and leadership.

## 3. Increments

An increment means the basic unit by which the FSO 's salary is increased (Article 1.18), where there is a recommendation to do so.

In accordance with Articles B6.09.01 and B6.14.1, each year the Department Chair shall recommend in writing to FEC, with a copy to the FSO, an increment recommendation based on the FSO's annual report, the FSO's responsibilities under Article B2.02, the standards of performance under Article B6.03, and the standards set forth in this document. The recommendation is made using the Chair's Recommendation Form.

If the FSO is in the last year of a probationary period, the Department Chair's review shall cover the entire probationary period (B6.14.2), as well as covering the current year under review.
"Merit" will come under more detailed scrutiny as progress through the ranks occurs; and in the course of the progression, emphasis on the evaluation of performance will shift from a level of competent service to demonstrated initiative and leadership in establishing and executing their duties and serving Departmental needs. The standards of performance shall be higher in the higher ranks and as progress through the ranks occurs (86.03.6).

## 4. Continuing Appointment

In the last year of the FSO's probationary appointment, and by the deadline specified in the Science FEC Schedule of Events, the Dean shall recommend to FEC in writing, with a copy to the FSO, either
a) that a Continuing Appointment be offered to the FSO, or
b) that no further appointment be offered to the FSO.

The FEC shall consider a recommendation under Article B5.03.1 and shall decide either
a) that a Continuing Appointment be offered to the FSO, or
b) that no further appointment be offered to the FSO.

A decision to award a continuing appointment is prospective and is based on the FSO 's record of performance during the entire probationary period. The FSO shall have demonstrated capability in carrying out responsibilities and the potential for continued high performance in meeting Department requirements in teaching, research and/or service. The recommendation of the Department Chair under Article B12.07 shall cover the entire probationary period, including the year under review. As per Article B6.12.5 "Upon receipt of the application and documentation under Article B6.12.2, the Department Chair shall decide either to support the
application or to oppose the application at the FEC hearing and shall so advise the FSO Member through the Department Chair's submission to FEC under Article B6.14.1.

## 5. Promotion

An FSO shall be first eligible to apply for promotion when their current salary is within one increment of, or is higher than, the salary minimum of the next rank (B6.12.1). The Dean shall notify the FSO of their eligibility to make an application for promotion on or before May 15th (see Science FEC Schedule of Events) in the year in which they first become eligible to do so. There will be no subsequent notification.

When promotion to a higher rank is under consideration, the FSO 's entire career will be carefully reviewed and evaluated by FEC (Article B6.12.3). Promotion to the next higher rank requires strong performance in all dimensions of that rank and excellence in at least one dimension, and a demonstrated ability to sustain such performance after promotion. Promotion to FSO IV additionally requires demonstrated capacity to effectively contribute in senior management decision making on issues related to teaching, research and/or service in the Department. Appraisal of this capacity will include assessment of the FSO's judgment and leadership qualities, and of the future benefit to the Department from having the FSO participate at a more senior management level.

## Attachment 1 <br> PROCEDURES <br> for <br> PROMOTION and GRANTING CONTINUING APPOINTMENT <br> for <br> FACULTY SERVICE OFFICERS

The procedures set out below detail the respective roles and responsibilities of the FSO, their Department Chair, and the Chair of the Faculty Evaluation Committee, as well as the deadlines and timing for the submission of materials and notification of decisions. Specific dates for deadlines are updated each year and provided in the Science FEC Schedule of Events document.

## A. Documentation

The FSO will provide annually the following to the Department Chair:
a) Annual Report
b) Reports and other material prepared as part of their work
c) Publications, conference presentations, technical reports, creative works and, when being considered for Continuing Appointment and/or Promotion,
d) Up-to-date curriculum vitae
e) List of potential assessors (see Section B below)
f) Any other material deemed relevant

The Department Chair will provide annually the following to FEC:
a) Current Position Description
b) Annual Report of FSO
c) Chair's Recommendation Form, which contains an evaluation summary and merit recommendation
and, when being considered for Continuing Appointment and/or Promotion
d) Revised Position Description (if applicable)
e) Statement of support or opposition of application for continuing appointment or promotion, including a statement of the FSO's overall contribution to the Department
f) List of assessors (see Section B below)
g) Written assessments of performance from internal assessors
h) Written assessments of performance from external assessors

## B. Assessments for Continuing Appointment and Promotion

The FSO shall submit to the Department Chair a list of 3-4 individuals who can attest to the quality of their work, of which at least two must be from the same department as the FSO under review ("internal assessors") and at least one must be from outside the department ("external assessors"). The latter may be individuals within the University (but outside the department) or from the external community. The Department Chair shall add 3-4 other individuals to this list, with at least two being internal assessors and at least one being external.

Faculty members currently serving on FEC shall not be included on either list. Faculty members on either list must be tenured, and FSOs on either list must have a continuing appointment above the current rank of the FSO under review. From this pool of potential assessors, the Department Chair shall solicit written references from a sufficient number of individuals so that at least four references are received. References must be solicited from at least two of the individuals on the list submitted by the FSO and at least two of the individuals on the Chair's list, and at least one reference must be solicited from an external assessor.

## C. Confidential Material

In cases where the FSO has a right to contest or have their case reconsidered by FEC, the FEC Chair shall prepare a summary of the confidential material received and shall provide the FSO and the Department Chair with a copy at least ten days prior to the FEC hearing. For the specific deadline each year, refer to the Science FEC Schedule of Events.

## University of Alberta

Faculty of Science

# Criteria for Merit Increments, Tenure, and Promotion 

Approved by<br>THE FACULTY OF SCIENCE

Faculty Council

May 19, 2022

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## 1. Introduction

Under the terms of the Schedule A of the Collective Agreement between the Governors of the University of Alberta and the Association of the Academic Staff of the University of Alberta, July 1, 2020 to June 30, 2024 (hereafter the 'Schedule $A^{\prime 1}$ ), the Faculty Evaluation Committee (FEC) is required to periodically review guidelines used in determining the award of merit increments, tenure and promotion (Article A6.03.2). Such a review must take place at least every ten (10) years. Any guidelines developed by the FEC must first be reviewed by Faculty Relations and then approved by the Provost and Vice-President (Academic) and the Academic Faculty Members of Faculty Council prior to implementation (A6.03.7).

Schedule A provides for the procedures to be followed in determination of the award of merit increments, tenure and promotion. Particular attention should be drawn to the following article: A6.16.3 "All decisions of FEC are by majority vote of the members present and eligible to vote."

This document was approved by the Faculty of Science Faculty Council on the 19th of May 2022 and a decision was also taken by Council to make the effective date of this document the 1st of July 2022, and will be used by FEC to evaluate work done during the July 2021 to June 2022 period.

## 2. Criteria

The Faculty of Science has traditionally used performance in research, teaching, and service in arriving at recommendations regarding the award of merit increments ${ }^{2}$, tenure and promotion.

In the Faculty of Science, achievements in research and teaching are deemed, in general, of greater importance than service. However, competence in service is also considered in judging an individual's overall performance, especially as the faculty member progresses through the ranks.

The FoS affirms its commitment to EDI and any evidence that the faculty member has pursued activities towards advancing EDI in their research and/or teaching and/or service is appreciated and recognized as meritorious.

This document describes in detail the principles to be followed in evaluating performance in these three areas: (a) Research and Scholarly Activity, (b) Teaching, and (c) Service.

[^5]
## A. Research and Scholarly Activity

A key element of the University mission is to discover and disseminate new knowledge, which is the objective of the research of faculty members. There are many measures of the excellence of research.

Evaluation of the achievement of a faculty member in this area will use the following criteria:

- Refereed publications:
- quality and quantity of published work in refereed journals or other refereed venues;
- citations in the literature implying a new idea or an important work.
- Non-refereed publications:
- books and monographs;
- chapters in books and/or review articles;
- scholarly/technical reports.
- Technical contributions:
- computer software or hardware that advances the state of-the-art;
- patents where the invention is of a scientific or technical nature.
- Training of highly qualified people:
- supervision of graduate students;
- supervision of PDFs;
- supervision of undergraduate students;
- supervision of technical staff.
- Invited presentations:
- invitations to deliver addresses at national-international conferences, summer-winter schools, workshops and/or other institutions.
- Peer group recognition that may take the form of:
- election to office or committees in national or international scholarly professional organizations;
- editorship of books or journals;
- service on conference committees;
- invitations to consult;
- invitations to evaluate or review work of others;
- invitations to membership of grant selection committees or other national committees;
- awards in recognition of the excellence of scholarly work;
- election to well-known and respected scholarly societies;
- invitations to chair sessions at national-international conferences or symposia.
- Research grants and contracts:
- award of research grants and contracts.

Beyond the above criteria, additional activities such as commercialization activities, contributions to professional and policy reports, public dissemination and knowledge translation activities may also be considered meritorious.

## B. Teaching

One of the major functions of the University is to transmit knowledge. This function cannot be considered in isolation from the function to create new knowledge (through research). An effective teacher has to be able to stimulate the intellectual inquisitiveness of the students by bringing to their attention the latest research findings and professional debates in their discipline. Thus, teaching effectiveness is linked with research. An effective teacher not only transmits knowledge but helps the students develop skills to critically examine and evaluate ideas and arguments and, eventually, to generate ideas of their own.

The concept of teaching is not confined to classroom instruction but includes such activities as participation in the supervision of laboratories, seminars, colloquia, tutorials, individual and group discussions, supervision of graduate and undergraduate students, and the development of innovative teaching methods.

In evaluating the effectiveness of a faculty member as a teacher, some of the attributes to be considered are their ability and willingness to:

- organize and present lectures at a level appropriate for the course;
- communicate effectively with students;
- stimulate intellectual inquiry and to foster learning in the students;
- present the latest research findings and debates in the discipline (where appropriate);
- make themselves available to students;
- participate in activities related to teaching such as advising students in selecting courses and assisting them in defining their long-term goals (see also 'Service');
- produce textbooks of high quality and have them published;
- develop and update course materials (lab materials, course notes, etc.); and,
- teach courses at various levels.


## C. Service

The functions of the University and professional bodies require that, at some time or other, the members of the faculty engage in activities outside the scope of research and teaching in service of their discipline. These activities may include the following.

## 1. Service to the Community at Large

Service to the community is intended to include general service related to scholarly activities and interests. In general, any science-based service with a demonstrable impact on society is regarded as service to the community at large.

Such service can be considered by FEC when it requires special academic or professional expertise. These activities include the transmission of scientific knowledge to the public. For example, interviews and articles in the news media, operation of facilities visited by the public, contribution to continuing education and special programs, and professional services to schools and colleges, may be considered.

Another important category of service to the community at large is providing advice to governments or other organizations acting for the public good, on science-based policy or other scientific matters.

## 2. Service to the Professional Community

Such activities include the participation on committees in professional organizations, e.g. grant selection committees, and organizing committees for conferences and workshops, editorship of journals, refereeing for journals and conferences, and reviewing research grant/contract applications.

## 3. Service to the University Community

These services involve participation on committees at various levels within the University community, such as GFC and its standing and ad-hoc committees, Faculty, and Department committees. Some of these activities are inseparable from teaching functions, particularly student advising. It is to be recognized that whereas all faculty members should be able to advise students in the choice of courses and their long-term goals, certain members of the faculty are appointed as student advisors and take on the majority of these duties.

Another form of University service is mentoring and coaching other staff, including mentoring Assistant Professors to tenure.

Faculty members can also serve the University community through leadership roles in preparing large-scale grant applications (e.g. CFI, NCE) or nomination packages for major national and international awards, through activities related to commercialization of research results and/or technology transfer, and through participation in activities related to fundraising, development, and/or alumni relations.

## 3. Evaluation of Criteria

## A. Research

Of all the criteria listed, the one used most extensively, in the Faculty of Science, is the quality and quantity of published work in refereed venues of international stature.

Impact factors and/or acceptance rates of refereed venues are useful measures of venue quality. However, it is the responsibility of the Chair of the Department to evaluate, through consultation with their colleagues and the use of expert opinion in the field, the quality of the research and scholarship of an individual.

It is also the responsibility of the Chair to make a judgment (and be able to defend it) as to what constitutes a fully-refereed paper. For example, a manuscript that is rigorously refereed in its entirety and appears in a prestigious refereed conference proceedings or edited volume may qualify as the equivalent of a full journal paper. However, a published conference abstract or a manuscript that is only informally referred, or refereed only in part, would not be considered the equivalent of a refereed journal publication.

A scholarly/technical report to a private or government agency, published or unpublished by that agency, may be considered as a publication where the evidence of rigorous peer review is provided. Care must be taken to avoid double counting of scholarly/technical reports or invited talks if either is subsequently published in refereed journals.

Extensive citation of a paper is usually a measure of the importance of the work although a lack of citations does not necessarily reflect on the quality of the work. The use of citations has to be made with care since the number of citations obviously depends on the size of the scientific community in the area of research. Some excellent published works wait to be 'discovered' and recognized as important by workers in a field. It is recognized that citations can also reflect negative opinions of a paper.

In the case of joint authorship of papers, every effort will be made with the assistance of the Chair of the Department concerned to assess the value of the individual's contribution to the team effort.

The authorship of a book, though a time-consuming activity, does not necessarily imply research activity as such. A senior level book, to be used at the graduate level or as a reference book, generally demands considerable research effort. The quality of the book, just as the quality of other published work, has to be determined and one measure is obtained from post-publication reviews by experts in the field.

The award of sustained and increasing research grants from a peer-reviewed body (for example, NSERC, CIHR, and SSHRC, etc.) may also be a measure of the quality of research carried out by an individual. However, care must be taken not to compare grant values across disciplines or sub-disciplines.

Invitations to deliver scholarly talks or major addresses to one's peers are a measure of leadership in the field.

Peer recognition, which takes various forms (see 'Criteria'), is also a measure of scholarly achievement.

## B. Teaching Activity

There are several ways for a Chair to judge effectiveness in teaching in broadly-based, multi-faceted ways (A6.03.4), such as:

- assessment by students through a questionnaire and/or commentaries (i.e., USRI scores and comments; see Appendix I for mandatory USRI questions);
- direct assessment by the Chair, or a designate, of teaching delivery;
- peer assessment of teaching delivery;
- assessment, by the Chair, or knowledgeable colleagues of lecture content, assignments, examinations and other course content;
- assessment of the success of mentoring and/or supervision of graduate students, undergraduate students, postdoctoral fellows, and technical staff;
- assessment of participation and communication effectiveness in seminars, colloquia, and meetings;
- assessment of instructional materials produced by the faculty member;
- reviews by administrative officials; and,
- assessment, by the Chair, of the extent to which the educational goals of the department are met.

It shall be the responsibility of the Chair to present evidence of a faculty member's teaching effectiveness using the above as a guide.

## C. Service Activity

The Chair shall make every effort to assess the effectiveness of the service provided by the individual to each of the different communities.

In assessing the value of service activities all reasonable efforts shall be made to secure information on the success of such operations from the relevant sources.

In assessing accomplishments in the area of International Development the difficulty of the circumstances under which an individual has to work must be considered.

## D. Supplementary Professional Activity (SPA)

SPA can be regarded as meritorious to the extent that it represents professional development of the staff member or otherwise directly contributes to the university's goals of having tangible positive impact on society. Refer to the Faculty of Science Guidelines for Supplementary Professional Activities and University Industry Relationship document for reporting and procedural details related to SPA.

## 4. Merit Increments

## A. General Statements

The merit increment has to be earned through meritorious achievements and is by no means an automatic right of the individual, or based on their years of service. The award of merit increments is based on an individual's performance during the twelve-month period defined by the Annual Report required in the Faculty of Science.

It shall be the responsibility of the Department Chair to provide information to FEC on the faculty members' activities using the guidelines from Section II, using the Chair's Recommendation Form.

At times, circumstances make it difficult to assess an individual's research activity in a twelve-month period. This may happen, for example, if an individual must develop intricate instrumentation, experimental apparatus, or a software package. Such activities may at times result in no refereed publications, even though such activities are imperative and indispensable for the future success of the research. In such cases it shall be the responsibility of the Chair to satisfy the committee that the individual is involved in 'development' work of considerable importance. In addition, other indicators of research activity would be expected to be documented.

Performance over multiple years, due to the long gestation of certain research results, may be recognized in a single reporting period.

The committee must judge the overall performance of an individual without assigning any numerical weights to each activity. Individuals who have reduced teaching loads due to research chairs, awards, or other assigned duties, will not be penalized for having a lighter teaching load. However, they are expected to demonstrate good teaching quality in the reduced number of courses they teach and are expected to achieve higher levels of appropriate research/service productivity than individuals with regular teaching loads.

## B. Research

The best, and most reliable, evidence of research activity is the publication of research papers in refereed journals, conference proceedings, books and book chapters during the reporting period. Works under preparation or papers submitted for publication must not be considered in the award of merit increments for the year in question. Refereed contributions that have been accepted for publication, but have not yet appeared, will be considered if the Chair has proof of acceptance.

Other evidence of continued research activity is provided by the individual's participation in national and international conferences and workshops and the presentation of papers at these venues.

Invitations to present seminars and colloquia at other universities and talks at national and international conferences may also be recognized as evidence of merit and leadership in the chosen area of research.

Award of a sustained research grant from a peer-adjudicated body is to be accepted as peer recognition of the value of research carried out by the individual.

## C. Teaching

Courses taught and the teaching load and effectiveness as a teacher must be considered in the award of the merit increment. Where the Department Chair makes the case for meritorious performance based on effectiveness as a teacher, documentation of multifaceted evaluation of teaching effectiveness must be provided, including USRIs, students' comments, peer evaluation, curriculum development, etc.

## D. Service

The service of the individual to the community at large, academic, university and international community will also be considered. Where this service has been of exceptional merit, proper documentation will be provided by the Chair.

Peer recognition through, for example, election to scholarly societies, national/international committees, grant selection committees of peer-reviewed agencies such as NSERC, CIHR or SSHRC, or award of Prizes, Fellowships or Scholarships, or any form of award in recognition of the quality of research or service will be given consideration in the award of the merit increment.

## E. Sabbaticals

In a faculty member's application for a sabbatical leave, they are required to describe the activities that will be undertaken during the leave and the scholarly outcomes that the activities are expected to generate. If the sabbatical is granted, the staff member shall submit a sabbatical report after the leave has finished, describing the actual activities undertaken and outcomes accomplished. The sabbatical leave application and the sabbatical report shall be submitted as part of the staff member's Annual Report to FEC for the reporting period under consideration (Article A4.03.9) These two documents are as important as the annual report itself in determining the merit of a reporting period containing a sabbatical leave. The staff member is expected to have executed the activities described in the sabbatical application, or the deviations from those activities that were explicitly approved in advance by the Dean, and to have accomplished outcomes commensurate in merit with those described in the application.

If the sabbatical leave occupies only part of the reporting period the normal expectations and criteria for research, teaching, and service are applicable to the portion of the period for which the staff member was not on leave.

## 5. Tenure

Tenure is not the right of a staff member on completion of the probationary period but must be earned through effectiveness and competence in the three areas outlined in the Criteria Section above. The individual must have produced sustained high-quality research and demonstrated
continued effectiveness as a teacher during their career. There must be a high probability of eventually reaching scholarly standards and maturity expected of a Professor of Science. The service component of the candidate's career will not be a major issue in granting tenure, but the candidate must have demonstrated that they are capable of contributing effectively to service activities. Willingness to participate in the committee structure within the Department will be considered an asset. The candidate is expected to contribute to the overall welfare of the department. It is not expected that an untenured staff member will participate in the Faculty or the University committee structure, beyond their participation to their Department Council and Faculty Council.

As the granting of tenure commits the University for the rest of the individual's academic career, the decision must be made on the basis of substantial evidence. The full duration of the probationary period to the date of consideration will be utilized to assess the past performance and the future promise of the individual. Tenure before the expiry of the probationary period (early tenure) must be limited to cases of outstanding performance during the individual's career at the University. Typically, early tenure is considered for candidates with prior academic, government or industrial service.

Faculty who have taken one or more leaves during their probationary appointment and who believe the length and nature of the leave(s) materially affected the performance for which they will be assessed may request an extension of one or more years, subject to approval by the Provost and recommendation by the Dean (A5.02.4-7). In the case of faculty who did not take any leave(s) during the probationary period, a one-year extension to the second probationary period will only be granted when there is significant evidence that the individual will meet the criteria for tenure by the end of the extension year.

## A. Evaluation

The individual is expected to take an active part in research, as evidenced by research publications in refereed venues of international repute, active participation in national/international conferences or the authorship of books or book chapters. The research productivity must be sustained and steady. An individual with a poor research record will not be granted tenure.

Teaching is to be evaluated as described in Section 3.B above (on "Evaluation Criteria" for "Teaching Activity") and, in addition, on the basis of a one-page statement by the staff member on their teaching philosophy and experience.

It is the responsibility of the Department Chair to provide a carefully documented case of the quality of the individual's teaching using these criteria as a guide. An individual with poor teaching/mentoring effectiveness will not be granted tenure.

It is expected that the service aspect of an Assistant Professor's duties will be kept to a minimum to enable them to establish an effective research and teaching program. Willingness to participate in the service functions of the Department would be considered an asset.

The Chair of the Department is responsible for providing complete documentation on the individual's whole academic career at the University, including the publication record, grants/contracts, teaching competence, research supervised and administrative service as detailed in Sections I and II of this document.

Confidential letters of reference from authorities in the field of research must be sought to ascertain the quality of research and future promise. The opinion of knowledgeable tenured colleagues within the Department may also be sought regarding the individual's competence and contributions. Evidence from both students and peers (testifying to the individual's teaching effectiveness) may also be provided. Finally, information about the individual's engagement in some of the necessary functions, both academic and administrative, within the Department may be provided.

## 6. Promotion

## A. Promotion from Associate Professor to Professor

Promotion to the rank of Professor is based on the individual's performance in the three areas outlined in Section 2 above (on "Criteria"). Promotion is neither automatic nor based on the number of years of service. In considering promotion, the individual's whole record of achievement, to the date of consideration, in each of the three areas is to be scrutinized.

No particular numerical weight or formula can be attached to any of the three areas. For promotion to professor, the staff member must demonstrate a strong record of achievement in research, teaching and service, including excellence in research and/or teaching and/or exceptional service.

## B. Promotion Based on Excellence in Research and/or Teaching

## 1. Criteria

The individual must demonstrate excellence or strength in research through high-quality and mature scholarship as evidenced by international recognition of research contributions.

The individual must demonstrate effectiveness in teaching at all levels, both in the classroom and through mentoring of trainees, as documented via multifaceted evaluation methods.

The individual must have contributed significant service to the Department, the University and/or professional organizations on the national and international level.

## 2. Evaluation

The evaluation of the quality of research and teaching will be done according to Sections 2.A and 3.A above. In promotion to the rank of Professor, confidential letters of reference must be obtained from international experts in the field testifying to the quality of the individual's research and their national/international stature. Opinions of knowledgeable colleagues (i.e. Professors) within the Department should also be sought and, where appropriate, from colleagues in other departments.

Evidence of teaching effectiveness must be based on information from both students and peers. For the evaluation of the faculty member's effectiveness in teaching see Sections 2.B and 3.B. The individual must include in the promotion submission a one-page statement describing their teaching achievements.

By this stage of the individual's career, significant service to the professional community at the national/international level should be demonstrated.

The individual should have participated in the committee structure within the Department, and/or the Faculty and/or the University.

## C. Promotion Based on Service

## 1. Criteria

Promotion to full professor based on exceptional service is reserved for those rare cases where an individual's service activity has required significant continuous time commitment resulting in a substantial reduction in time available for research and teaching for an extended period. The service provided by the individual during this period must have been exceptional in its quality and resulted in significant positive impact, and the individual must have demonstrated strong leadership at a senior level.

The individual's record of scholarly achievement must demonstrate high quality research, mature scholarship, and competence in teaching and mentoring at all levels.

## 2. Evaluation

The evaluation of the quality of research and scholarship will be done according to Sections 2.A and 3.A, above. In promotion to the rank of Professor, confidential letters of reference must be obtained from international experts in the field testifying to the quality of the individual's research and their national/international stature. Opinions of knowledgeable colleagues (i.e. Professors) within the Department should also be sought and, where appropriate, from colleagues in other departments.

Unlike the evaluation of research when promotion is justified on the basis of "excellence in research and/or teaching", this evaluation may focus on the individual's research and
scholarship prior to beginning the extraordinary service, which should be judged in comparison to peers at that career stage and not at the time they were promoted to Professor.

Evidence of teaching effectiveness must be based on information from both students and peers. For the evaluation of the faculty member's effectiveness in teaching see Sections 2.8 and 3.B above. The individual must include in the promotion submission a one-page statement describing their teaching achievements. Unlike the evaluation of teaching when promotion is justified on the basis of "excellence in research and/or teaching", this evaluation may focus on the individual's teaching and mentoring prior to beginning the extraordinary service.

Opinions will be obtained through confidential letters of reference from individuals who are best qualified to judge the demanding nature of the service, the exceptional quality of the service performed by the individual, and the leadership demonstrated by the individual.

# University of Alberta <br> Faculty of Science 

# Standards of Performance and Procedures for Merit Increments, Continuing Appointment, and Promotion for Faculty Service Officers (FSOs) 

1. FSO staff member consultation; February 13, 2012
2. Science Faculty Evaluation Committee approval: February 22, 2012 (via email vote)
3. Provost \& Vice - President (Academic) approval: May 3, 2012

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## 1. Introduction

The purpose of this document is to set out the standards of performance and evaluation procedures for Faculty Service Officers (FSOs) as required under Articles B6.01 and B6.03.2 of the Collective Agreement between the Governors of the Board of the University of Alberta and the Association of the Academic Staff of the University of Alberta, July 1, 2018 - June 30, 2020 (Schedule B for FSOs) (hereafter "Schedule B").

The responsibilities of FSOs in the Faculty of Science are varied, but all support the Faculty's endeavors in teaching, research, and service. The terms of the appointment and job description shall outline the specific duties in teaching, research, and service (Article B2.01).

This document was approved by the Faculty of Science Faculty Council on the 19th of May 2022 and a decision was also taken by Council to make the effective date of this document the 1 st of July 2022, and will be used by FEC to evaluate work done during the July 2021 to June 2022 period.

## 2. Annual Review of Performance

The reporting period in the Faculty of Science is July 1 to June 30.
As per Article B2.03, an FSO shall submit each year an Annual Report on responsibilities during the previous academic year. This report will serve as the basis for recommendations by the Department Chair to FEC on merit increments, actions to be taken at the end of probationary periods, continuing appointment decisions, and applications for promotion. The format of the report is approved by the Science Faculty Council and shall be based on written job responsibilities of the position.

In preparing a recommendation to FEC, each year the Department Chair shall review the annual report prepared by the FSO. Each review shall include a meeting between the FSO and the Department Chair, unless the FSO is not available or refuses to meet (Article B6.13). A copy of the completed form must be given to the FSO at the same time as it is submitted to the Dean.

If the FSO is serving a probationary period, the Department Chair shall also annually advise the FSO in writing on their progress.

## 3. Standards of Performance for FSO Ranks

FSO performance will be evaluated with respect to the standards set out for each rank. For all ranks, professional, technical and leadership competencies and the ability to meet diverse demands in a timely and useful manner are of primary importance. If deemed necessary, persons outside the Faculty may be consulted with regard to assessing the competence of the FSO for merit increment, continuing appointment, and promotion decisions. Assessment of the

[^6]FSO's performance may be facilitated by formal requests for feedback from individuals with whom the FSO interacts as part of their job. If the FSO's responsibilities include supervision of staff, then the quality of supervision will be part of the performance evaluation.

## Faculty Service Officer I

1.1 The FSO shall become familiar with new techniques, methodologies and approaches in the areas designated in the job description and remain current in their knowledge of these areas.
1.2 The FSO shall be competent and effective in carrying out the duties in their job description.
1.3 The FSO shall work effectively with their supervisor(s) in teaching, research, and/or service.

## Faculty Service Officer II

In addition to the above,
2.1 The FSO shall effectively represent their Department ${ }^{2}$ interests at Faculty and University levels.
2.2 The FSO shall provide effective supervision as required by their job description.

## Faculty Service Officer III

In addition to the above,
3.1 The FSO shall provide effective enhancement of the learning/research/working environment.
3.2 The FSO shall contribute to effective liaison with University entities and external groups as required by their job description.
3.3 The FSO shall provide leadership in support of the Department's teaching, research and/or service activities and be capable of managing projects, including supervision of research assistants and other staff as required.

## Faculty Service Officer IV

In addition to the above,
4.1 The FSO shall exercise independence of action and judgment consistent with participation in senior management.
4.2 The FSO shall provide substantive and meaningful advice to senior administrators regarding teaching, research, and/or service

[^7]4.3 The FSO shall perform a major role in maintaining and improving liaison with University entities and external groups, as required by their job description.
4.4 The FSO shall consistently demonstrate a high level of initiative and leadership.

## 3. Increments

An increment means the basic unit by which the FSO 's salary is increased (Article 1.18), where there is a recommendation to do so.

In accordance with Articles B6.09.01 and B6.14.1, each year the Department Chair shall recommend in writing to FEC, with a copy to the FSO, an increment recommendation based on the FSO's annual report, the FSO's responsibilities under Article B2.02, the standards of performance under Article B6.03, and the standards set forth in this document. The recommendation is made using the Chair's Recommendation Form.

If the FSO is in the last year of a probationary period, the Department Chair's review shall cover the entire probationary period (86.14.2), as well as covering the current year under review.
"Merit" will come under more detailed scrutiny as progress through the ranks occurs; and in the course of the progression, emphasis on the evaluation of performance will shift from a level of competent service to demonstrated initiative and leadership in establishing and executing their duties and serving Departmental needs. The standards of performance shall be higher in the higher ranks and as progress through the ranks occurs ( 86.03 .6 ).

## 4. Continuing Appointment

In the last year of the FSO's probationary appointment, and by the deadline specified in the Science FEC Schedule of Events, the Dean shall recommend to FEC in writing, with a copy to the FSO, either
a) that a Continuing Appointment be offered to the FSO, or
b) that no further appointment be offered to the FSO.

The FEC shall consider a recommendation under Article B5.03.1 and shall decide either
a) that a Continuing Appointment be offered to the FSO, or
b) that no further appointment be offered to the FSO.

A decision to award a continuing appointment is prospective and is based on the FSO 's record of performance during the entire probationary period. The FSO shall have demonstrated capability in carrying out responsibilities and the potential for continued high performance in meeting Department requirements in teaching, research and/or service. The recommendation of the Department Chair under Article B12.07 shall cover the entire probationary period, including the year under review. As per Article B6.12.5 "Upon receipt of the application and documentation under Article B6.12.2, the Department Chair shall decide either to support the
application or to oppose the application at the FEC hearing and shall so advise the FSO Member through the Department Chair's submission to FEC under Article B6.14.1.

## 5. Promotion

An FSO shall be first eligible to apply for promotion when their current salary is within one increment of, or is higher than, the salary minimum of the next rank (B6.12.1). The Dean shall notify the FSO of their eligibility to make an application for promotion on or before May 15th (see Science FEC Schedule of Events) in the year in which they first become eligible to do so. There will be no subsequent notification.

When promotion to a higher rank is under consideration, the FSO 's entire career will be carefully reviewed and evaluated by FEC (Article B6.12.3). Promotion to the next higher rank requires strong performance in all dimensions of that rank and excellence in at least one dimension, and a demonstrated ability to sustain such performance after promotion. Promotion to FSO IV additionally requires demonstrated capacity to effectively contribute in senior management decision making on issues related to teaching, research and/or service in the Department. Appraisal of this capacity will include assessment of the FSO's judgment and leadership qualities, and of the future benefit to the Department from having the FSO participate at a more senior management level.

# Attachment 1 <br> <br> PROCEDURES <br> <br> PROCEDURES <br> for <br> PROMOTION and GRANTING CONTINUING APPOINTMENT <br> for <br> FACULTY SERVICE OFFICERS 

The procedures set out below detail the respective roles and responsibilities of the FSO, their Department Chair, and the Chair of the Faculty Evaluation Committee, as well as the deadlines and timing for the submission of materials and notification of decisions. Specific dates for deadlines are updated each year and provided in the Science FEC Schedule of Events document.

## A. Documentation

The FSO will provide annually the following to the Department Chair:
a) Annual Report
b) Reports and other material prepared as part of their work
c) Publications, conference presentations, technical reports, creative works and, when being considered for Continuing Appointment and/or Promotion,
d) Up-to-date curriculum vitae
e) List of potential assessors (see Section B below)
f) Any other material deemed relevant

The Department Chair will provide annually the following to FEC:
a) Current Position Description
b) Annual Report of FSO
c) Chair's Recommendation form, which contains an evaluation summary and merit recommendation
and, when being considered for Continuing Appointment and/or Promotion
d) Revised Position Description (if applicable)
e) Statement of support or opposition of application for continuing appointment or promotion, including a statement of the FSO's overall contribution to the Department
f) List of assessors (see Section B below)
g) Written assessments of performance from internal assessors
h) Written assessments of performance from external assessors

## B. Assessments for Continuing Appointment and Promotion

The FSO shall submit to the Department Chair a list of 3-4 individuals who can attest to the quality of their work, of which at least two must be from the same department as the FSO under review ("internal assessors") and at least one must be from outside the department ("external assessors"). The latter may be individuals within the University (but outside the department) or from the external community. The Department Chair shall add 3-4 other individuals to this list, with at least two being internal assessors and at least one being external.

Faculty members currently serving on FEC shall not be included on either list. Faculty members on either list must be tenured, and FSOs on either list must have a continuing appointment above the current rank of the FSO under review. From this pool of potential assessors, the Department Chair shall solicit written references from a sufficient number of individuals so that at least four references are received. References must be solicited from at least two of the individuals on the list submitted by the FSO and at least two of the individuals on the Chair's list, and at least one reference must be solicited from an external assessor.

## C. Confidential Material

In cases where the FSO has a right to contest or have their case reconsidered by FEC, the FEC Chair shall prepare a summary of the confidential material received and shall provide the FSO and the Department Chair with a copy at least ten days prior to the FEC hearing. For the specific deadline each year, refer to the Science FEC Schedule of Events.

| Due Date | Action Required | Relevance |
| :---: | :---: | :---: |
| April 1 | The annual calendar of the FoS deadlines for Faculty, FSO procedures is published | Faculty/FSO |
| April | The Chair of FEC notifies faculty members and FSOs (henceforth staff) of important milestones, ahead of this year's FEC meetings, including end of probationary periods, promotion eligibility, tenure eligibility, and continuing appointment eligibility. | Faculty/FSO |
| May | The staff member notifies their Department Chair and FEC Chair of their intent to apply (Application) for tenure, continuing appointment, orpromotion. | Faculty standards (A) FSO Standards (5) |
| August | All staff members submit their Annual Report (AR) or their Sabbatical Reports (SabR) through the eFEC system. |  |
| September | The Department Chair notifies the staff member and the FEC Chair of their recommendation on their Application. <br> If the Department Chair's recommendation on the staff member's Application is negative, a summary of the relevant confidential material and the Department Chair's Summary Recommendation Letter is due to the FEC Chair and staff member. | Faculty Standards (4A) FSO Standards ${ }^{2} 2$ <br> Faculty standards (F) FSO standards (C) |
|  | If the staff member contests the Chair's negative recommendation, they notify the Chair of FEC (cc their Department Chair) of their intention to appear at FEC or submit documentation or both; relevant materials are also due at this time. |  |
| October | The Department Chair notifies the FEC chair of their recommendations and all supporting documents for all other Applications. Names of all tenure representatives are due at the same time. |  |
|  | The Department Chair notifies the staff member and the FEC Chair of their merit recommendation based on the staff member's AR. |  |
|  | In cases where increment and promotion recommendations that may be contested, the staff member notifies the FEC Chair and Department Chair indicating their intention to appear at FEC. | Faculty standards FSO standards <br> Faculty standards (F) FSO standards (B) |
|  | Eligible staff members submit their applications for Sabbatical Leave to the FEC Chair. |  |
|  | The FEC Chair notifies staff members, in cases where FEC did not support a Chair's recommendation to award tenure or a continuing appointment. | Faculty standards (C) |
|  | The staff member <br> (a) notifies the FEC Chair and their Department Chair requesting reconsideration of their preliminary FEC tenure or continuing appointment decision. <br> (b) the PRC Chair to request PRC review, for cases where the FEC did not support a Chair's recommendation toaward tenure. | Faculty standards (F) FSO standards |
| November | The Department Chair notifies the Vice Dean (cc to staff member) with their response <br> (a) to the staff member's contested merit or promotion case submission, or <br> (b) to the staff member's contested tenure or continuing appointment reconsideration submission. |  |
|  | Tenure/Continuing Appointment Meeting ( 1 day) FEC Meetings (4 days) |  |
|  | The staff membernotifies <br> (a) the FEC Chair and Department Chair requesting reconsideration of their preliminary FEC decision, and <br> (b) PRC Chair to request PRC review of FEC Promotion decision. | Faculty standards (F) FSO standards |
| December | In cases where the FEC did not support a Chair's recommendation for promotion, <br> the FEC chair notifies the staff member with a summary of confidential material and the Chair's Summary Recommendation. <br> If the case is reconsidered byFEC, <br> then the staff member provides a statement and all related documents to the FEC chair and their department chair. <br> If the case is reconsidered by FEC, <br> then the Deaprtment Chair responds to the staff member's reconsideration case submission to the Vice Dean in reply (ce to staff member). |  |
| January | FEC Reconvenes |  |
| July 1 | All merit, continuing appointmnet, tenure, and promotion decisions by FEC take effect |  |

## Supplementary Professional Activity <br> Faculty of Science Regulations

The University of Alberta Collective Agreement presents general definitions, scope, and other considerations for supplementary professional activities (SPA) for members of the Association of Academic Staff of the University of Alberta.

Article A3 of that agreement stipulates that each Faculty Council shall set faculty-specific definitions for "major" and "minor" SPA, as well as regulations for approval and reporting of SPA by Academic Faculty Members. Article B3 sets forth the context of SPA for Faculty Service Officers.

This document sets out these SPA definitions, regulations, and procedures for the Faculty of Science as they apply to academic faculty members and faculty service officers. Reporting of real or perceived conflict of interest is governed by the policies stated in the University of Alberta Code of Conduct: Employees' Obligations Respecting Conflict of Interest, not by this document.

The material presented below operates within the context set by the Faculty Agreement, by the University of Alberta Definitions of Conflict of Interest, Conflict of Commitment, and Institutional Conflict, and by the University of Alberta Code of Conduct: Employees' Obligations Respecting Conflict of Interest, and is not intended to contravene these other sources.

Faculty members and faculty service officers are directed to review Section F in the University of Alberta Code of Conduct: Employees' Obligations Respecting Conflict of Interest, which concerns "concurrent activities" and SPA. This material is re-produced in an Appendix at the end of this document.

## 1. Definitions

These definitions apply to this document only.

## Academic Staff Member

An academic staff member is either an academic faculty member or a faculty service officer.

## Academic Year

The academic year is the twelve month period of July 1 - June 30 .

## Financial Benefit

Financial Benefit is the receipt or expectation of anything of monetary value, including pay or salary or other payments for services, equity, or other ownership interests (adapted from the University of Alberta Policy on Conflict of interest. Conflict of Commitment, and Institutional Conflict)s

## Financial Interest

Financial interest is an ownership position in a privately held company (adapted from University of Alberta Policy on Conflict of Interest. Conflict of Commitment, and Institutional Conflict).

## Paid Professional Activity

## Paid professional activity is either

1) Activity for which an academic staff member receives a financial benefit from another institution, agency, or organization that results from the member's professional expertise as a researcher, teacher, or administrator; or
2) Activity that advances a financial interest of an academic staff member.

## External Professional Service Activities

External professional service activities are services that an academic staff member undertakes, in recognition of the member's professional expertise as a researcher, teacher or administrator, for institutions, agencies, or organizations or for which there is no financial benefit.

## Secondary University of Alberta Contract

A secondary University of Alberta contract is a teaching or research contract between an academic staff member and the University of Alberta, outside the academic staff member's normal university contract, that results in additional self-employment income to the academic staff member.

## Major Supplementary Professional Activity

Major SPA is any Paid Professional Activity that involves any one or more of the following:

1) Teaching for Financial Benefit that takes place outside the University of Alberta, whether it is at another academic institution or for a professional development program;
2) A Secondary University Contract;
3) A commitment to one or more projects that in sum require a time commitment exceeding 240 hours during the 12-month academic year;
4) Any use of university facilities, or the engagement of University of Alberta staff or students, regardless of duration.

## Minor Supplementary Professional Activity

Minor SPA is any paid professional activity that is not major SPA.

## 3. Faculty of Science Approval Procedures

Major SPA requires approval. Minor SPA does not require approval.

The request for approval of a Major SPA will be made in writing to the person to whom the academic staff member reports (Department Chair or Dean) and will indicate:

1) The category or type of client;
2) The nature of the work;
3) An estimate of the time required to perform the work;
4) The extent, if any, of the use of University facilities, supplies, support staff or students;
5) Evidence of adequate personal liability insurance, if university facilities are used or if off-site activities are undertaken as part of a Secondary University Contract;
6) Any other major paid professional activities that have already been approved in that year or which are continuing from an earlier year; and
7) The impact the activity will have on teaching, research, and service responsibilities and what actions will be taken to mitigate any negative impact.

The Dean or Chair will evaluate the request by considering:

1) Issues related to scope, context, authorization, and requirements as identified in Article A3: Supplementary Professional Activity and Article B3: Supplementary Professional Activity in the collective agreement for academic faculty members and faculty service officers, respectively,
2) Conflict of interest considerations, with respect to either the involvement of university facilities, the staff under the direction of the academic staff member or the students enrolled in classes taught by the faculty member or under the supervision of the academic staff member;
3) Compliance with these Faculty of Science regulations concerning the use of facilities, staff, or students in carrying out SPA.

Approval will be subject to the conditions specified in Article A3.05.1 and A3.05.2 of the collective agreement for faculty members (Article B3 of the collective agreement for faculty service officers), and any other condition that the Department Chair may impose, as long as such conditions do not contravene Articles A or B of the current collective agreement.

If the Major SPA will involve use of specialized facilities, then the staff member must provide evidence to the Dean/Chair of sufficient liability insurance to indemnify the University against claims (see collective agreement, A3.08 (g)).

## 4. Faculty of Science SPA Regulations for Use of Facilities

Major and Minor SPA must not interfere with or compromise the primary teaching or research purposes of Faculty of Science and/or departmental facilities, including those facilities or labs under the direct supervision of the individual faculty member.

Access to facilities for approved SPA activities must not compromise the safety of other university facilities, offices, or other areas normally restricted to university staff and/or students.

The staff member who is conducting Major SPA with the approved use of these facilities is responsible for any damage that may occur to equipment during the SPA work and for the safety of personnel in the facilities.

Normally, the Dean/Chair will require payment to the department by the faculty member for the use of the facilities, supplies, or support staff, but only to the extent of the actual cost, including overhead. Exceptions to this include cases in which the SPA is subject to an intellectual property agreement between the UofA and the faculty member.

For cases in which facilities were approved for Major SPA use prior to the adoption of these regulations, the faculty member is still required to have adequate personal liability insurance and to provide evidence of that insurance (see collective agreement, A3.08 (g)).

## 5. Faculty of Science SPA Regulations Concerning Students

The engagement of students involved in Major SPA, through classroom assignments, thesis work, or other academic work for which they receive academic credit or assessment, represents a potential real or apparent conflict of interest. Academic staff members must disclose to their Department Chair the nature of student involvement in any Major SPA.

## 6. Faculty of Science SPA Reporting Procedures

Academic staff members must report both Major SPA and Minor SPA in the SPA section of the annual report submitted to Science's Faculty Evaluation Committee (FEC), providing the following information (see Article 8.17 of the Faculty Agreement):

1) The category or type of client
2) The nature of the work
3) Estimate of the time to perform the work
4) The names and nature of any continuing contractual arrangements with outside organizations.

This reporting procedure also applies to Major and Minor SPA undertaken during sabbaticals, assisted leave, or secondment (see collective agreement, A3.07.2).

Academic staff members will continue to report External Professional Service Activities in the service section of the Faculty of Science annual report.

External Professional Service Activities that result in a nominal cash compensation in the form of an honorarium (e.g., external reviews of programs, special lectures) will be annotated with "(honorarium)" on the annual report in the section describing professional service activities. Honoraria accepted for these activities will not be considered "gifts" as defined by the University of Alberta Code of Conduct: Employees' Obligations Respecting Conflict of Interest.

## Appendix: Concurrent Activities and Employees' Code of Conduct

The following is excerpted from Section F of the University of Alberta Code of Conduct: Employees' Obligations Respecting Conflict of Interest.

## F. Managing Conflicts of Interest: Concurrent Activities and Supplementary Professional Activities

## Requirement to Report Concurrent Activity

A Representative involved in a concurrent appointment, business, undertaking, employment, or self- employment (collectively "concurrent activity") other than their position with the University may be in a potential conflict. Representatives are therefore required to report all concurrent activity, subject to the pre- approvals below, so that the activity may be assessed for a conflict and where appropriate, managed. Reports must be made in accordance with Section ' $E$ '. Where a current Representative is considering engaging in a new concurrent activity, the Representative must seek prior approval of the University before doing so.

Some Representatives' concurrent activity may be the kind of activity defined as "Supplementary Professional Activities" (or "SPA") in their collective agreement. In the case of an appointment, business, undertaking, employment or self-employment meeting the definition of SPA within a collective agreement, the Representative's obligations in respect of that activity will be wholly as set out in their collective agreement and will not need to be additionally reported under Section 'E'. Collective agreements with SPA obligations are discussed further below.

Where a Representative subject to a collective agreement engages in concurrent activity that does not meet the definition of "SPA" under their collective agreement, or where the concurrent activity is not otherwise contemplated within their collective agreement, the Representative must report the concurrent activity unless the activity is pre-approved as below.

The requirement to report includes where a Representative receives income through a research grant where the research work:
i. is not administered by the University through the Research Services Office; and
ii. the research work does not meet the definition of Supplementary Professional Activity in the Representative's collective agreement.

## Pre-Approved Concurrent Activity

The University deems some concurrent activity to be pre-approved. In those situations, the Representative is not required to report the activity unless it otherwise creates an actual or perceived conflict of interest.

## Pre-approval is deemed for:

- Representatives engaging in concurrent activity for which the Representative will not receive nor be entitled to receive remuneration.
- Students of the University who are also employees of the University, where the concurrent activity is in the retail, hospitality, or service industry.
- Academic staff who do not hold a full-time position at the University, where:
i. their position at the University is unpaid;
ii. the academic staff member teaches no more than two courses per semester at the University;
iii. the concurrent activity is with another post-secondary institution; or
iv. the concurrent activity requires the academic staff member to be a member of a specified professional association which has a code of conduct and can discipline members for a breach of their code. The "specified professional associations" must be approved by the President or the President's delegate.

The associations currently approved are listed at Appendix A.

- Academic staff, whether full-time or part-time at the University, where the University knows at the time of their hiring or appointment that:
i. the academic staff member is being concurrently or jointly hired or appointed to the concurrent activity at another organization; or
ii. the academic staff member is already engaged in the concurrent activity at another organization.
- Non-student employees of the University who are members of the Non-Academic Staff Association or who are support staff excluded from the Non-Academic Staff Association, whose concurrent activity requires 20 hours or less per week, the required hours of which are not scheduled during the Representative's normal working hours at the University.

In limited circumstances, the manner in which concurrent activity may need to be reported and approved is addressed by external documentation. These situations are where:

- the Representative's concurrent activity meets the definition of Supplementary Professional Activity within their collective agreement, as the obligations relating to the reporting and approval of the activity will be wholly governed by their collective agreement; or
- the Representative is the President, as the President's obligations relating to the reporting and approval of concurrent activity are governed by the Conflicts of Interest Act and the requirement at Section $1-2$ of this Code.


## Collective Agreements with SPA Obligations

The University's collective agreements provide direction for certain Representatives with respect to professional development through activity which is supplementary to their primary obligations to the University (known as 'SPA'). The types of Representatives with SPA obligations, and the nature of those obligations, are excerpted directly from the relevant collective agreements below.

The University endeavours to include the most recent excerpts from its collective agreements regarding SPA in this Code. However, because collective agreements frequently evolve through bargaining, the excerpts provided may at times be out of date. In the case of a discrepancy between an included excerpt and a collective agreement, the collective agreement will govern. Representatives governed by a collective agreement have a responsibility to know its contents and how it affects them in their role with the University.
[end of section excerpt. Consult full document as needed]

## AGENDA ITEM \#5.2

## Engagement \& EDI Plan 2020-2023 for the Faculty of Science

Revised December 11, 2020
Prepared by: Tara McGee, Associate Dean (Engagement and EDI), Faculty of Science in collaboration with the Faculty of Science Engagement \& EDI committee Approved by: Matina Kalcounis-Rueppell, Dean, Faculty of Science.

Note: This is a living document that will be amended from time to time.

## Introduction

Equity, Diversity, and Inclusivity are central to the University of Alberta's Institutional Strategic Plan, For the Public Good (2016). Two years later, the University developed the 4 -year Strategic Plan for Equity, Diversity, and Inclusivity, which aims to embed EDI into the culture of the University. The vision of the University's EDI plan is:

The University of Alberta is committed to cultivating an institutional culture that values, supports, and promotes equity, human rights, respect, and accountability among faculty, staff, and students. In our inclusive community, we encourage and support individual and collaborative efforts to identify and address inequities, and we welcome and enable contributions of all voices as we engage with diverse ideas, knowledges, and perspectives in the pursuit of inclusive excellence for the public good ${ }^{[1]}$.

The University's EDI plan is guided by: Diversity, Equity, Inclusion, Human Rights, Equality Substantive, Intersectionality, Accessibility, and Respect for reconciliation with Indigenous peoples. These principles also guide Engagement and EDI efforts in the Faculty of Science.

This Engagement \& EDI plan for the Faculty of Science describes who we are in fall 2020, current EDI efforts in the Faculty of Science, and our plans for 2020-2023.

## Who we are

A crucial starting point to moving forward is knowing where we are now, or knowing who we are in the Faculty of Science. As of October 2020, we do not yet have a clear picture of who we are in the Faculty of Science due to incomplete data. In particular, we currently do not have any data regarding Blacks and People of Colour in the Faculty of Science because this data is currently not included in the University's Acorn Database. This data and having a complete picture of diversity in the Faculty of Science is incredibly important to us and obtaining additional data is a high priority.

[^8]What we currently know in fall 2020 based on data available in the Acorn Data Warehouse is that the Faculty of Science is a large faculty with 436 academic staff, 165 postdoctoral researchers, and 337 support staff. 1301 graduate students are enrolled in graduate programs within the Faculty's seven departments, and 7279 undergraduate students are enrolled in undergraduate programs in the Faculty of Science.

At the undergraduate level, $49 \%$ of students identify as female. The proportion of females decreases amongst graduate students (42.9\%), postdoctoral researchers (32.3\%), and academic staff ( $27.3 \%$ ). $21 \%$ of faculty members in Science departments are female. Currently, $2.6 \%$ of graduate students (15) and $2.0 \%$ of undergraduate students (146) in Faculty of Science programs self-identify as First Nation, Métis, Inuit.

There is some variation across the seven departments in the Faculty of Science. In Biological Sciences, Chemistry, EAS and Psychology, 50\% or more of undergraduate students identify as female. Less than half of undergraduate students identify as female in MSS ( $41 \%$ ), Physics ( $28 \%$ ) and Computing Science (19\%). At the graduate level, more than half of graduate students identify as female in Psychology, Biological Sciences and EAS. With the exception of MSS, in other Science departments less than half of postdoctoral researchers are female. Across Science, only $21 \%$ of faculty members are female. There is considerable variation across departments, with $35 \%$ of faculty members in Biological Sciences and $31 \%$ of faculty members in Psychology; 24\% of faculty members in EAS and 21\% of faculty members in Chemistry; and only $14 \%$ in Computing Science, $11 \%$ in Physics, and $8 \%$ in MSS identifying as female.

The highest proportion of undergraduate students who self-identify as First Nation, Métis, and Inuit are enrolled in physics (5.3\%) and the psychology program in the faculty of Arts (5.1\%). In all other departments, less than $3 \%$ (and in several cases less than $2 \%$ ) of undergraduate students self-identify as First Nation, Métis, and Inuit. At the graduate level, $4.2 \%$ of graduate students in Biological Sciences self-identify as First Nation, Métis, or Inuit. In all other departments, very few graduate students self-identify as First Nation, Métis, or Inuit.

The University's National Status data provides some insights into diversity with respect to the national status of people in the Faculty of Science. More than half of our postdoctoral researchers ( $58.8 \%$ ) and graduate students ( $55.3 \%$ ) are international. $20.4 \%$ of undergraduate students are international, and $8.3 \%$ of faculty members are international. Country of Origin data shows that the highest proportion of international graduate students originate from China, India, Iran, the United States, and Bangladesh; the highest proportion of international undergraduate students come from China, India, Bangladesh, Vietnam and Nigeria. 30.1\% of international graduate students and $24.6 \%$ of international undergraduate students originate from China.

In fall 2019, the University launched the EDI Workforce Diversity Census for faculty and other staff members at the University. The report which presents findings from this survey was made public in March 2021. The results of the 2019 Diversity Census for the Faculty of Science are summarized below.

In the Faculty of Science, $56.9 \%$ of eligible academic and non-academic staff completed the EDI Workforce Diversity Census. These survey results therefore provide some information
about the Faculty of Science workforce, but more information is needed to obtain a complete picture.

Note that answers with less than 10 respondents are too small to report and were suppressed by the university.

- Based on the data available for the Faculty of Science, $59.6 \%$ of respondents first learned English at home while $33.7 \%$ first learned another language at home.
- $50.1 \%$ of respondents were born in Canada and $47.2 \%$ were born outside Canada.
- A significant proportion of respondents have at least a basic proficiency in multiple languages.
- $50.2 \%$ of respondents identified as a man and $45.6 \%$ identified as a woman.
- When asked about their sexual orientation, $78.0 \%$ identified as heterosexual, $9.5 \%$ preferred not to answer, 4.7\% identified as bisexual, 3.3\% identified as gay, and 2.9\% identified as asexual.
- $1.9 \%$ of respondents indicated that they identify as Indigenous.
- $22.9 \%$ of respondents indicated they identify as a visible minority/person of colour.

When asked to indicate which group they belonged to, the largest groups identified as Chinese (37.0\%) and South Asian (21.0\%). The number of people in the other groups were too small to report.

- $2.7 \%$ of respondents identified as having a disability. With reference to specific challenges, the majority identified chronic health conditions. All other answers were too small to report.
- When asked about their relationship status, $59.2 \%$ indicated that they are legally married, $17.9 \%$ are single, $12.3 \%$ are common law, and $5.4 \%$ are divorced. $2.9 \%$ preferred not to answer. The number of people in the other groups was too small to report.
- Just under half (44\%) of respondents indicated they had children or adult dependents. $62.5 \%$ in this group indicated that they have at least 1 dependent in the $0-12$ years group. $29.9 \%$ indicated they have a dependent in the 13-17 years group. $29.5 \%$ indicated they have dependents in the $18-60$ years group. $6.7 \%$ indicated they have dependents in the $>60$ age group.


## What are we currently doing?

1. Margaret-Ann Armour was appointed as the first Associate Dean of Diversity at the University of Alberta in 2005 and served until her passing in May 2019. Under her leadership, the Faculty of Science made a great deal of progress with respect to Diversity, particularly for women in science. In addition to her work in the Faculty of Science, Margaret-Ann Armour co-founded WISEST (Women in Scholarship, Engineering, Science and Technology) and led a group of women to found the Canadian Centre for Women in Science, Engineering, Trades and Technology (WinSETT Centre).
2. The Associate Dean (Engagement \& EDI), Tara McGee, was appointed on July 1, 2020. Her complementary working group was recruited and met for the first time in September, 2020. The working group includes representatives from all departments in
the Faculty, staff members, a postdoctoral researcher, and graduate and undergraduate student associations. The group meets monthly.
3. Many individuals and groups in Science are actively involved in EDI issues. We support groups that promote EDI in Science departments (eg. Working for Inclusivity in Chemistry, Ada's Team, Grace Ann Stewart Speaker Series) and in STEM more broadly (WISEST).
4. The Faculty of Science and individual departments engage in a range of community engagement activities, including Science summer camps, HIP high school internship program (Computing science), Astronomical Observatory (Physics), and school talks. We also participate in the USchool program run by the University of Alberta Senate.
5. We support organizations and groups that engage K - 12 children and youth in Science with a focus on EDI (eg. WISEST, Let's Talk Science).
6. The Faculty of Science currently promotes diversity via the 'Diversity in Science' webpage, Science Intranet, Contours magazine, and other communications.
7. Student Services in the Faculty of Science works with the Indigenous recruitment team in the Registrar's office to recruit Indigenous undergraduate students.
8. Advancement in the Faculty of Science works with donors to obtain financial support for EDI in the form of student awards, scholarships, and bursaries; and support for student groups (eg. Ada's Team, Grace Anne Stewart Speaker Series).
9. The Faculty of Science works with First Peoples' House on initiatives to support Indigenous students (e.g. FPH mentors program, seminar version of Math 134).
10. Science departments are establishing department-level EDI working groups in summer/fall 2020.

## Our plans

In Fall 2020, we began working on tasks grouped under the following seven topics: EDI data, information and education, accountability, academic and support staff, graduate and undergraduate students, safe places, and engagement. Beside each item there is a ST and/or MT to indicate when these items will start. $\mathrm{ST}=$ short-term; MT=Medium term. Note that this is a living document, so these plans will be adapted over time.

## 1. EDI Data

We aspire to: Be transparent about the Diversity and Inclusion in all constituent groups in the Faculty of Science.

## How we can get there:

- Collect, analyze and report on diversity data available from the Acorn Warehouse. (ST)
- Analyze and distribute the results of the 2019 EDI Workforce Diversity Census. (ST)
- Analyze and distribute the results of the Student Diversity Census which is currently being prepared by the Provost's office. (MT)
- Provide feedback on the draft University inclusion survey. Analyze the results once the survey has been administered and the results released. (MT)
- Assist departments to carry out surveys upon request. (ST/MT)


## 2 Information and Education

We aspire to: Provide education and training about EDI to all constituents in the Faculty of Science.

## How we can get there:

- Work with the Faculty of Science Communications team to update the EDI webpage on the Faculty of Science website. (ST)
- Share additional EDI information to Faculty of Science constituents via a variety of other channels. (ST)
- Share information about Faculty of Science EDI initiatives elsewhere in the University. (ST)
- Support all student groups that foster EDI and engagement in Science. (MT)
- Provide EDI information to Faculty of Science executive members for their portfolios. (ST \& MT)
- Provide advice and support to departmental EDI committees, department chairs, and other Faculty of Science constituents.


## 3. Accountability

We aspire to: Monitor EDI progress in the Faculty of Science and Faculty of Science departments.

- Synthesize diversity data from the ACORN database and University of Alberta Diversity Census and the upcoming inclusion survey prepared by the Provost's office. (ST \& MT)
- Department representatives on the Faculty of Science Engagement \& EDI committee will liaise with departmental EDI committees/working groups and report on progress. (ST)
- Amend the FEC annual report to incorporate information about how faculty are learning about (eg. education, training) and implementing EDI principles. (MT)
- Explore additional opportunities to review EDI progress. (MT)


## 4. Academic and support staff

We aspire to: Ensure that policies and decision-making for hiring, promotion and tenure of academic ${ }^{[2]}$ and support staff are intentional about increasing diversity and inclusivity.

How we can get there:

- Develop equitable guidelines for hiring faculty and postdoctoral researchers. These guidelines will include links to EDI information and training required for hiring committees. (ST)
- Prepare a document outlining services available in Science and elsewhere at the $U$ of $A$ for candidates invited for an interview (MT).
- Ensure that departments have effective mentoring programs so that new academic staff have mentors through the probation period (MT).
- Identify criteria and guidelines being used in science departments for promotion and tenure; and provide equitable practice guidelines (MT).


## 5. Graduate and Undergraduate Students

We aspire to: Increase the diversity of undergraduate and graduate students so that women make up $50 \%$ of undergraduate and graduate students by 2023 and Indigenous students make up $5 \%$ of undergraduate and graduate students by 2023. We aspire to support the success of all of our graduate and undergraduate students.

## How we can get there:

- Provide guidance to graduate student recruitment committees about recruiting to enhance diversity. (MT)
- Continue to support student groups that foster EDI and engagement in Science. (ST)

[^9]- Assist with the development of plans to increase recruitment and support for Indigenous undergraduate and graduate students. (MT)
- Identify and connect with other groups who can advise us about supporting undergraduate and graduate students in other underrepresented groups. (MT)
- Develop new programs and support existing programs designed to support undergraduate and graduate students from underrepresented groups (MT)


## 6. Safe places

We aspire to: Ensure all constituents in the Faculty of Science have safe places to go to obtain guidance and support if inclusion problems arise.

## How we can get there:

- Inform all constituents in the Faculty of Science about existing safe places to go to report inclusion problems and obtain guidance and support. (ST)


## 7. Engagement

We aspire to: Ensure that all engagement activities in the Faculty of Science are conducted with an EDI lens.

How we can get there:

- Meet with the Faculty of Science Communications/Extension team to identify ways to enhance current engagement activities and extend activities for $\mathrm{K}-12$ students from underrepresented groups. (ST)
- Continue to support organizations, groups, and programs that engage K-12 children and youth in Science with a focus on EDI. (ST)
- Provide advice/support to departments to incorporate EDI into their engagement activities (ST)


## AGENDA ITEM \#5.3

New Academic Staff Appointments

| Department | Name | Rank | Hire Date |
| :--- | :--- | :--- | :--- |
| Chemistry | Joudan, Shira | Assistant Professor | Jan 1, 2023 |
| Computing Science | Goebel, Randolph G | Professor 3 | Jan 1, 2022 |
| Computing Science | Tan, Xiaoqi | Assistant Professor | Jul 1, 2021 |
| Computing Science | Choo, Euijin | Assistant Professor | April 1, 2022 |
| Physics | Tuszynski, Jacek A | Professor 3 | Jul 1, 2021 |
| Physics | Boettcher, Igor | Assistant Professor | Feb 1, 2021 |
| Physics | Bozorgnia, Nasim | Assistant Professor | Jul 1,2022 |

## AGENDA ITEM \#5.4

## Academic Staff Promotions and/or Tenure/Continuing Appointments Effective July 1, 2022

| FULL NAME | DEPARTMENT | CURRENT RANK | NEW RANK EFFECTIVE <br> JULY 1, 2022 |
| :--- | :--- | :--- | :--- |
| Criscitiello, Alison | Earth \& Atmospheric Sciences | FSO II | FSO III |
| DuFrane, Scott | Earth \& Atmospheric Sciences | FSO II | FSO III |
| McNeily, David | Mathematical \& Statistical <br> Sciences | FSO III | FSO IV |
| Ali, Karim | Computing Science | Assistant Professor | Associate Professor |
| Fernandez Munoz, <br> Rodrigo | Physics | Assistant Professor | Associate Professor |
| Jensen, Britta | Earth \& Atmospheric Sciences | Assistant Professor | Associate Professor |
| Lecumberri-Sanchez, <br> Pilar | Earth \& Atmospheric Sciences | Assistant Professor | Associate Professor |
| Macauley, Matthew | Chemistry | Assistant Professor | Associate Professor |
| Mathot, Kimberley | Biological Sciences | Assistant Professor | Associate Professor |
| Nadi, Sarah | Computing Science | Assistant Professor | Associate Professor |
| Spribille, Toby | Biological Sciences | Assistant Professor | Associate Professor |
| Alessi, Daniel | Earth \& Atmospheric Sciences | Associate Professor | Professor |
| Barbosa, Denilson | Computing Science | Associate Professor | Professor |
| Favero, David | Mathematical \& Statistical <br> Sciences | Associate Professor | Professor |
| Hanna, Gabriel | Chemistry | Associate Professor | Professor |
| Kong, Linglong | Mathematical \& Statistical <br> Sciences | Associate Professor | Professor |
| Rosolowsky, Erik | Physics | Associate Professor | Professor |
| Wilson, Siobhan | Earth \& Atmospheric Sciences | Associate Professor | Professor |

## AGENDA ITEM \#5.5

Proposed Changes to BSc Degree Framework and BSc Academic Standing

## Executive Summary - Proposed Changes to BSc Degree Framework

Executive Summary - Proposed Changes to BSc Academic Standing

# PROPOSED CHANGES TO SCIENCE BACCALAUREATE DEGREE FRAMEWORK 

## Executive Summary - Phase 1, Part A

Programs: Bachelor of Science (General)<br>Bachelor of Science (Specialization)<br>Bachelor of Science (Honors)<br>\section*{Offered by: Faculty of Science}<br>Prepared by:<br>Gerda de Vries, Professor and Associate Dean (Undergraduate), Faculty of Science<br>Michelle Spila, Assistant Lecturer, Department of Earth and Atmospheric Sciences<br>sciadu@ualberta.ca<br>spila@ualberta.ca

Based on work completed by members of the BSc Renewal working group.
Last updated: January 15, 2022

## Preamble

In July of 2019, the Faculty of Science at the University of Alberta initiated the BSc Renewal Project with the primary goals of conducting a thorough review of its existing degree and program structure, assessing how it compared to other Faculties and institutions, and making the necessary changes for maximum improvement. The Faculty's degree and program framework had not been reviewed or updated in such a significant fashion for at least 25 years or more. Phase l of the project focused on house-cleaning -- the reorganization of our degrees and programs in order to build a logical degree framework that better aligns with Campus Alberta standards, other $U$ of $A$ faculties, other Albertan institutions, and comparable universities from across Canada. Phase II of the project will result in the establishment of learning outcomes (at the Faculty and program levels) and adjustment of the curricular content of our programs, including scientific communication, work-integrated learning opportunities, and indigenization/de-colonization.

This executive summary provides a high-level overview of Part A of the Phase 1 proposed changes to the degree structure within the Faculty of Science. A more comprehensive report, presenting detailed summaries of the proposed changes, along with the necessary programmatic changes, can be found here. The purpose of this executive summary is to provide university governance committees with enough background information for discussion in order to socialize the planned changes. An additional presentation at a later date will focus on Part $B$, which will address associated changes to the academic standing parameters.

## Existing Degree Framework

The Faculty of Science at the University of Alberta currently offers three types of degrees: BSc (General), BSc with Specialization, and BSc with Honors. Approximately $57 \%$ of Science students are in the BSc (General) program, $25 \%$ are in BSc with Specialization programs, and $18 \%$ are in BSc with Honors programs. Figure 1 reveals how the fields of study that we offer are distributed between the three degree types and lists Minors that are available for BSc General students.

Program requirements for the General program are standardized in that all students must complete a set of junior course requirements, a Major, and either a Minor or second Major (see BSc General Degree Requifements). Specialization and Honors program requirements consist of a defined list of courses that is specific to the field of study; therefore, they vary by the department offering the program. Specialization and Honors program requirements can be found in the University Calendar.

The key distinctions between these three types of BSc degrees are summarized in Table 1. For a summary of issues resulting from the existing degree structure, please see Section 2 in the full report.


Figure 1: Summary of the existing baccalaureate degree structure in the Faculty of Science noting how fields of study are distributed amongst the three degree types.

Table 1.: Summary of key distinctions between the General, Specialization, and Honors programs.

| Criteria | General | Specialization | Honors |
| :---: | :---: | :---: | :---: |
| \# of available fields of study | 9 | 25 | 28 |
| Minor | Required ${ }^{\wedge}$ | Not available* | Not available* |
| Availability of second Science Major | Yes** | No | No |
| \# of units in communication/writing | 6 | 0-6 | 0-6 |
| Junior core or breadth requirement | 6 units in MATH, CMPUT, STAT 6 units in CHEM, PHYS 6 units BIOL, EAS, PSYCO | Typically not considered | Typically not considered |
| Minimum \# of units in Science | 72 | 60-108 | 63-108 |
| Minimum \# of units in the discipline | 36 | 30-84 | 30-93 |
| Minimum \# of units in 300-level courses | 9 (Major) + 6 (Minor) | 12-45 | 12-57 |
| Minimum \# of units in 400-level courses | 3 (Major) | 0-21 | 6-27 |
| Minimum \# of units in option courses | 36 | 21-63 | 18-75 |
| Minimum \# of units in required research | 0 | 0 | 0-15 |
| Breadth (Min. \# of disciplines represented) | 4-5 | 3-6 | 2-6 |

[^10]
## Proposed Changes

The changes proposed herein reflect a long-overdue reorganization of the BSc degree programs offered by the Faculty of Science. No major curriculum re-writes are occurring at this time. Although most programs will need minor adjustments in order to fit into the new framework, all fields of study will continue to be offered as high-quality degree programs. To address consistency and variability issues, high-level, overarching requirements also will be proposed. These standards will exist at the Faculty level and serve to govern the administration of our programs, their modification over time, and the development of new programs into the future. We identified seven main goals to help focus the proposed changes:

1. Address articulation issues between degree types.
2. Reduce and/or justify variability within degree types.
3. Provide the option for a Minor credential to all students.
4. Simplify administration from admission to graduation.
5. Address Quality Assurance feedback.
6. Improve alignment with CAQC standards and other Canadian institutions.
7. Establish an overarching degree framework.

## New Degree Framework

Based on our analysis of existing programs in the Faculty of Science, and those from other $U$ of $A$ Faculties and Canadian institutions, we are proposing to move to two degree levels, Major degree programs leading to a Bachelor of Science and Honors degree programs leading to a Bachelor of Science with Honors. Our existing Honors program will largely remain intact; the General and Specialization programs will be effectively merged. See Figure 2 for a diagrammatic visualization of the proposed changes.


Figure 2: Diagrammatic summary of the proposed changes to the Science Baccalaureate degree structure. Students must complete either the Major or Honors component and sufficient options to reach 120 units for the degree. Their options may be used to complete a Minor (or second Science Major for students choosing a Major from Group A).

To address the high variability that currently exists in our Specialization and Honors programs, we are also proposing to establish two sets of minima/maxima for the number of specified credits that comprise each Major and Honors. Establishing Group $A$ and Group B categories will ensure better consistency between the fields of study that we offer. Group A Majors will consist of 42-54 units, which is an acceptable step up from where our current Major in the General program sits. Foundational knowledge can be established in these fields of study within 42-54 units. In addition, this range permits a Double Major, between two Group A fields
of study, to be readily completed within 120 units. Group A Honors will consist of 60-72 units, which includes additional courses at the 300 level or higher and a capstone or research experience.

Group B fields of study are those in which additional courses (usually at the 100 and 200 levels) need to be completed in order for a reasonable level of expertise to be achieved. These fields of study are typically more multidisciplinary in nature (for example, Mathematical Physics or Neuroscience) or accredited programs where a greater number of courses are required for registration in a professional association upon graduation (for example, Geology or Geophysics). The range of specified courses for Group B fields of study increases by 30 units ( $72-85$ units for the Major and $90-102$ units for the Honors). Note that Group B fields of study are comparable to Combined or Joint programs found at other institutions across Canada. Also note that "specified" credits includes all foundational science courses, disciplinary courses, and cognate or supplementary courses that are deemed critical for students to complete in order to earn the Major or Honors credential. "Specified" credits also includes "list" requirements like "complete 9 units in $3 \mathrm{XX}+$ courses in the discipline" or "choose 9 units from the following list of courses".

This new framework allows us to expand the option to earn a Minor credential to all Science students. The current list of Minors will be expanded to include a few new Minors (see Table 2) with more new Minors to be developed in the future.

Table 2: List of optional Minors available to all Science students in the new proposed degree framework. Minors available from the Faculty of Arts are listed here.

| Any Minor from ARTS | Earth Sciences |
| :--- | :--- |
| Agriculture [ALES] | Geophysics (NEW) |
| Astrophysics (NEW) | Human Ecology [ALES] |
| Biochemistry (NEW) | Mathematics |
| Bioinformatics | Native Studies [NS] |
| Biological Sciences | Nutrition [ALES] |
| Business [BUS] | Pharmacology (NEW) |
| Cell Biology (NEW) | Physics |
| Chemistry | Psychology |
| Climate Dynamics (NEW) | Statistics |
| Computing Science |  |

## New Faculty-level Common Requirements

To complement the proposed changes to the degree framework, we are also establishing a set of common or core requirements that all BSc students in the Faculty of Science must complete by graduation. These common requirements represent the minimal breadth that must be incorporated into a student's degree program, as determined by brainstorming sessions that were held with a group of undergraduate Science students and the Associate Chairs (Undergraduate). In these sessions, four basic principles were identified:

1. Science students should have strong communication and writing skills.
2. Science students should experience breadth across non-scientific disciplines such as humanities, social sciences, business, etc.
3. Science students should experience breadth across the scientific disciplines offered by the Faculty of Science.
4. Science students should be able to demonstrate quantitative skills, knowledge of the scientific method, lab and/or field skills, problem-solving and critical thinking, and abilities related to modeling, synthesis, and systems knowledge.

With these principles in mind, the proposed Faculty-level core requirements are summarized in Figure 3.

| Communication/ Writing | 6 units in ENGL or WRS <br> To evolve overtime to inctude scientific communication or writing in the scientic discipline courses |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Breadth from Outside of the Faculty of Science | 6 units, with at least 3 units from two of the following categories: |  |  |  |
| Breadth from Within the Faculty of Science <br> Must inctude at least 3 units in a fab or field experience | 9 units, with at least 3 units from each of the following categories: <br> Bastc Sciences <br> Formal Sciences <br> Specialized Sciences <br> (eg. BHOL. CHEM, PHYS) <br> (eg. GMPUT, MAPH, MATH, STAT) <br> (EQ, ASTRO, EIOCH, BOT, CELL, EAS, ENT, GEOPH, NEURO, PALEO. PMCOL PHYSL, Selence PSYCO, 2OOL, |  |  |  |
| Maximum @ 100 Level | 42 units |  |  |  |
| Minimum in Science | 72 unlts |  |  |  |
| Specified units in the field of study | $\frac{\text { Group A Maior }}{42-54}$ | $\frac{\text { Group B Maior }}{72-84}$ | $\frac{\text { Group A Honors }}{60-72}$ | $\frac{\text { Group B Honors }}{90 \cdot 102}$ |
| Min. units 300 level or higher in degree overall | 36 | 36 | 42 | 42 |
| Min. units @ 300 level or higher in field of study | 18 | 24 | 30 | 36 |
| Min. units 400 tevel in field of study | 6 | 9 | 15 | 18 |

Note: Values in purple are inclusive (for example, of the 36 units at the 300 level or higher required in the Major overall, at least 18 units must be in the program, and of those 18 units, at least 6 units must be at the 400 level).
Figure 3: Summary of proposed core course requirements.

## Program Modifications

All existing degree programs must undergo some change in order to align with the new proposed degree framework. Most programs only require minor changes (i.e. the addition or subtraction of 1-3 courses or renumbering of course lists from $2 \mathrm{XX}+$ to $3 X X+$ and/or $4 X X$ ). A few programs require moderate changes; these were typically the programs that existed as outliers (e.g. Honors programs with requirements that were actually "lighter" than the corresponding Major in the General program). For a few programs, these changes reflect curriculum reform that was already underway. For programs that previously existed only at the Specialization or Honors level, a corresponding Honors or Major, respectively, has been developed. As stated earlier, a wide-ranging curriculum review is not being undertaken at this time; programs were only modified as needed to fit the new proposed degree framework.

The changes to existing degree programs are summarized in Table 3. Note that several Science programs are delivered in part by units situated within the Faculty of Medicine and Dentistry (FoMD) even though they are administered by the Faculty of Science.
Table 3: Summary of changes to existing degree programs. Blue links lead to comparison diagrams of existing versus new proposed program plans.

| Department/ Unit | Fields of Study | Existing Program Plans | New Program Plans | Summary of Changes | Links to Program Comparisons |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Biochemistry (FoMD) | Biochemistry | Spec, Hons | Min, Maj, Hons | - New Minor proposed <br> - Specialization was highly prescribed \& very similar to Honors; moderate changes made to convert it into the new Major <br> - Minimal changes made to Honors | Biochemistry |
| Biological Sciences | Biological Sciences <br> Bioinformatics <br> Ecology, Evolution \& Environmental Biology Immunology \& Infection Integrative Physiology Molecular, Cellular \& Developmental Biology | Gen Maj/Min Gen Min Spec, Hons Spec, Hons Spec, Hons Spec, Hons | Min, Maj, Hons Min Maj, Hons Maj, Hons Maj, Hons Maj, Hons | - Minimal changes made to Biological Sciences Minor \& Major; new Honors proposed <br> - No changes to Bioinformatics Minor <br> - Minimal to moderate changes made to remaining Specializations to convert them into the new Majors; minimal changes made to Honors | BiologicalSciences <br> Bioinformatics <br> E.E \& E Biology <br> Immun \& Infection <br> integrative Physiol <br> M.C \& D Biology |
| Cell Biology (FoMD) | Cell Biology | Spec, Hons | Min, Maj, Hons | - New Minor proposed <br> - Minimal changes made to Specialization to convert it into new Major; minimal changes made to Honors | Cell Biology |
| Chemistry | Chemistry | Gen Maj/Min, Spec, Hons | Min, Maj, Hons | - No changes to Minor <br> - Moderate changes required to merge existing Major and Specialization into new Major <br> - Minimal changes made to Honor | Chemistry |
| Computing Science | Computing Science <br> Computing Science - Business Minor Computing Science - Software Practice | Gen Maj/Min, Spec, Hons Spec Spec | Min, Maj, Hons Discontinued Maj, Hons | - No changes to Minor <br> - Moderate changes required to merge existing Major and Specialization in Computing Science <br> - Honors in Computing Science was lighter than Major in General program; moderate changes made accordingly <br> - Comp Sci - Bus Min discontinued (Maj/Min combo or Double Maj) <br> - Comp Sci - Software Practice new Honors proposed | Computing Science <br> Comp Sci-Soft Prac |
| Earth \& Atmospheric Sciences | Climate Dynamics (was Atmospheric Sciences) <br> Earth Science (was Earth \& Atmospheric Sciences) <br> Environmental Earth Sciences <br> Geology <br> Paleontology <br> Planning | Spec, Hons Gen Maj/Min Spec, Hons Spec, Hons Spec, Hons Spec | Min, Maj, Hons Min, Maj, Hons Maj, Hons Maj, Hons Maj, Hons Maj, Hons | - Atmospheric Sciences is currently suspended; new minor to be added now; name change, minimal changes to Specialization to convert it into new Major, \& minimal changes to Honors planned for reactivation in future <br> - Minimal changes to Earth Science Minor \& Major; new Honors <br> - Minimal changes made to remaining Specializations to convert them into new Majors; minimal changes to Honors <br> - New Planning Honors added | Climate Dynamics <br> Earth \$ciences <br> Env Earth Sciences <br> Geology <br> Paleontology <br> Planning |

Table 3 cont'd: Summary of changes to existing degree programs. Blue links lead to comparison diagrams of existing versus new proposed program plans.

| Department/ Unit | Fields of Study | Existing Program Plans | New Program Plans | Summary of Changes | Links to Program Comparisons |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mathematical \& Statistical Sciences | Applied Mathematics <br> Applied Mathematics - Computing Science Minor <br> Applied Mathematics - Statistics Minor <br> Mathematics <br> Mathematics - Computing Science Minor <br> Mathematics - Statistics Minor <br> Mathematics - Computational Science <br> Mathematics \& Economics <br> Mathematics \& Finance <br> Statistics | Hons <br> Hons <br> Hons <br> Gen Maj/Min, Spec, Hons <br> Hons <br> Hons <br> Spec <br> Spec, Hons <br> Spec, Hons <br> Gen Maj/Min, Spec, Hons | Maj, Hons <br> Discontinued <br> Discontinued <br> Min, Maj, Hons <br> Discontinued <br> Discontinued <br> Discontinued <br> Maj, Hons <br> Maj, Hons <br> Min, Maj, Hons | - New Major added for Applied Mathematics <br> - Programs with built-in Minors and the Mathematics Computational Science program will be discontinued (students can take Maj/Min combo or Double Major) <br> - Minimal changes made to Mathematics Minor to reflect curriculum reform; no changes to Statistics Minor <br> - Minimal changes to remaining Specializations \& Honors to reflect curriculum reform and to convert Specializations into new Majors | Applied Math <br> Mathematics <br> Math \& Economics <br> Math \& Finance <br> Statistics |
| Neuroscience (FoMD) | Neuroscience | Hons | Maj, Hons | - New Major added <br> - Minimal changes to Honors | Neuroscience |
| Pharmacology (FoMD) | Pharmacology | Spec, Hons | Min, Maj, Hons | - New Minor added <br> - Minimal changes to Specialization to convert it into new Major <br> - Minimal changes to Honors | Pharmacology |
| Physiology (FoMD) | Physiology | Hons | Maj, Hons | - New Miajor added <br> - Minimal changes to Honors | Physiology |
| Physics | Astrophysics <br> Geophysics <br> Mathematical Physics <br> Physical Sciences <br> Physics | Spec, Hons <br> Spec, Hons <br> Hons <br> Gen Maj/Min <br> Gen Maj/Min, Spec, Hons | Min, Maj, Hons Min, Maj, Hons Maj, Hons Discontinued Min, Maj, Hons | - New Astrophysics \& Geophysics Minors added <br> - Moderate changes to Astrophysics, Geophysics \& Physics Specialization \& Honors programs to reflect curriculum reform and to convert Specializations into new Majors <br> - New Mathematical Physics Major added; minimal changes to Honors <br> - Physical Sciences program discontinued (students can take Maj/Min combo or Double Major) | Astronhysics Geophysics Math Physics <br> Physics |
| Psychology | Psychology | Gen Maj/Min, Spec, Hons | Min, Maj, Hons | - No change to Minor <br> - Moderate changes required to merge existing Major and Specialization into new Major <br> - Honors in Psychology was lighter than Major in General program; moderate changes were made accordingly | Psychology |

Diagrams that compare each of the existing program requirements with the new proposed program requirements are presented in Appendix $B$ of the full report, along with quick links to the associated Ministry templates, $U$ of $A$ internal program approval templates, and calendar changes. Tables 4,5 and 6 summarize the programmatic changes associated with Statistics, as an example of the impacts on a Group A field of study that currently exists at all three degree levels. Table 7 summarizes the programmatic changes associated with Neuroscience, as an example of the impacts on a Group B field of study that currently exists at only one degree level (Honors).

Table 4: Comparison of the requirements for the existing Minor in Statistics (General program) with the new proposed Minor in Statistics, which will be available to all Majors and Honors students as an optional add-on. Note that no changes were necessary.

|  | Existing |  |  |
| :--- | :--- | :--- | :--- |
| Minor in Statistics |  |  |  |
| Cognate \& | STAT 151 | STAT 378 |  |
| Discipline | STAT 252 | STAT 2XX+ |  |
| Requirements | STAT 265 | STAT 2XX+ |  |
|  | STAT 266 | STAT 3XX+ |  |
| Total Units |  |  | 24 |


| New Proposed Minor in Statistics |  |
| :--- | :--- |
| STAT 151 | STAT 378 |
| STAT 252 | STAT 2XX |
| STAT 265 | STAT 2XX+ |
| STAT 266 | STAT 3XX+ |
|  |  |

Table 5: Comparison of the requirements for the existing Major in Statistics (General program) and Specialization in Statistics, with those of the new proposed Major in Statistics. Note that the new Major is most similar to the existing Specialization, with just a reduction in the specified STAT courses by 12 units.

|  | Existing Major in Statistics |
| :---: | :---: |
| Science <br> Foundation <br> \& Breadth <br> Requirements | 3 units in CMPUT or MATH 1XX 6 units in ASTRO, CHEM, PHYS 1XX 6 units in BIOL, EAS 1XX, PSYCO 104 STAT 151 |
| Total Units | 18 |
| Cognate \& Discipline Requirements | STAT 252 <br> STAT 265 <br> STAT 266 <br> STAT 378 <br> 12 units in STAT $2 X X+$ <br> 6 units in STAT $3 X X+$ <br> 3 units in STAT 4XX |
| Total Units | 33 |
| Other Requirements | 6 units in ENGL or WRS 21 units in Science Options 12 units in Arts Options 30 units in Open Options |
| Total Units | 69 |


| New Proposed Major in Statistics |  |
| :---: | :---: |
| CMPUT 174 | STAT 151 |
| CMPUT 175 |  |
| MATH 117, 134, 144 or 154 |  |
| MATH 118, 136, 146 or 156 |  |
| MATH 125 or 127 |  |
| 18 |  |
| STAT 252 | MATH 216 (or $2 \mathrm{XX}+$ if |
| STAT 265 | completed MATH 118 ) |
| STAT 266 | MATH 214 or 217 |
| STAT 371 | MATH 225 or 227 |
| STAT 372 | MATH 315 (was 215) or 317 |
| STAT 378 |  |
| 6 units in STAT 4XX |  |
| 36 |  |
| 6 units in ENGL or WRS |  |
| 6 units in Non-Science Breadth |  |
| 6 units in Science Breadth |  |
| 12 units in Science Options (with at least |  |
| 36 units in Open Options 18 units at $3 \times \mathrm{X}+7$ |  |
|  | 66 |


| Existing Specialization in Statistics |  |
| :---: | :---: |
| CMPUT 174 STAT 151 |  |
| CMPUT 175 |  |
| 6 units in MATH 114, 115, 117, 118, 134, |  |
| 136, 144, 146, 154, 156 |  |
| MATH 125 or 127 |  |
| 18 |  |
| STAT 252 MATH 216 <br> STAT 265 6 units in MATH 214, 215, |  |
|  |  |
| STAT 266 217,317 |  |
| STAT 361 MATH 225 or 227 |  |
| STAT 36899 units in STAT $3 \mathrm{XX}+$ |  |
| STAT 371 |  |
| STAT 372 |  |
| STAT 378 |  |
| 48 |  |
| 6 units in ENGL or 3 in ENGL \& 3 in WRS 6 units in Science Options 12 units in Arts Options 30 units in Open Options |  |
|  | 54 |

Table 6: Comparison of the requirements for the existing Honors in Statistics with the new proposed Honors in Statistics, with just a reduction in the specified STAT courses by 9 units.

|  | Existing Honors in Statistics | New Proposed Honors in Statistics |
| :---: | :---: | :---: |
| Science <br> Foundation <br> \& Breadth <br> Requirements | CMPUT 174 STAT 151 | CMPUT 174 STAT 151 |
|  | CMPUT 175 | CMPUT 175 |
|  | 6 units in MATH 114, 115, 117, 118, 134, | MATH 117, 134, 144 or 154 |
|  | $136,144,146,154,156$ | MATH 118, 136, 146 or 156 |
|  | MATH 125 or 127 | MATH 125 or 127 |
| Total Units. | 18 | 18 |
| Cognate \& Discipline Requirements | STAT 252 MATH 217 | STAT 252 MATH 216 (or $2 \mathrm{XX}+$ if |
|  | STAT 265 MATH 225 or 227 | STAT 265 completed MATH 118) |
|  | STAT 266 MATH 317 | STAT 266 MATH 217 |
|  | STAT 361 Math 417 | STAT 371 MATH 225 or 227 |
|  | STAT 368 MATH $2 \mathrm{XX}+$ | STAT 372 MATH 317 |
|  | STAT 371 | STAT 378 MATH 417 |
|  | STAT 372 | STAT 471 STAT $3 \mathrm{XX}+$ |
|  | STAT 378 | STAT 499 STAT 4XX |
|  | STAT 471 | STAT 4XX |
|  | STAT 499 |  |
| Total Units | 57 | 48 |
| Other Requirements | 6 units in ENGL or 3 in ENGL \& 3 in WRS | 6 units in ENGL or WRS |
|  | 18 units in Science Options | 6 units in Non-Science Breadth |
|  | 12 units in Arts Options | 6 units in Science Breadth |
|  | 9 units in Open Options | 6 units in Science Options (with at least |
| Total Units | 45 | - 54 |

Table 7: Comparison of the existing requirements for the existing Honors in Neuroscience with the new proposed Major and Honors in Neuroscience.


| New Proposed Major in Neuroscience |  |
| :---: | :---: |
| 8IOL 107 | PHYS 124 |
| MATH 134 | PHYS 126 |
| MATH 136 or STAT 151 | PSYCO 104 |
| CHEM 101 |  |
| 21 |  |
| NEURO 210 | BIOCH 200 |
| NEURO 375 | BIOL 207 |
| NEURO 450, 451 or 452 | CHEM 261 |
| PHYSL 212 | CHEM 263 |
| PHYSL 214 |  |
| PHYSL 372 |  |
| PSYCO 275 |  |
| PMCOL 371 or ZOOL 342 |  |
| PSYCO 371, 375, 377, GENET 270, 390 or ZOOL 344 |  |
| 6 units from NEURO 410, 411, PHYSL 444, PMCOL 412, 475, 512, PSYCO 478 |  |
| 6 units from NEURO 443, 472, KIN 497. PHYSL 403, 405, PSYCI 511, |  |
| PSYCO 471, BME 510 or 520 |  |
| 51 |  |
| 6 units in ENGL. or WRS |  |
| 6 units in Non-Science Breadth |  |
| 36 units in Open Options (with at least |  |
| 12 units at $3 \mathrm{XX}+$ + |  |
|  | 48 |


| New Proposed Honors in Neuroscience |  |
| :---: | :---: |
| BIOL 107 | PHYS 124 |
| MATH 134 | PHYS 126 |
| MATH 136 or STAT 151 | PSYCO 104 |
| CHEM 101 |  |
| 21 |  |
| NEURO 210 | BIOCH 200 |
| NEURO 375 | BIOL 207 |
| NEURO 498 (6 units) | CHEM 261 |
| NEURO 499 (6 units) | CHEM 263 |
| PHYSL 212 |  |
| PHYSL 214 |  |
| PHYSL 372 |  |
| PSYCO 275 |  |
| PMCOL 371 or 200 L 342 |  |
| 9 units from PSYCO 371, 375, 377, GENET 270, 390, ZOOL 344 |  |
| 6-9 units from NEURO 410, 411, PHYSL 444, PMCOL 412, 475, 512, PSYCO 478 |  |
| $6-9$ units from NEURO 443, 472, KIN 497, PHYSL 403, 405, PSYCI 511, |  |
| PSYCO 471, BME 510 or 520 |  |
|  | 69 |
| 6 units in ENGL or WRS |  |
| 6 units in Non-Science Breadth |  |
| 18 units in Open Options |  |
|  | 30 |

## Consultation

Consultation took place between Fall 2019 and Winter 2021 in the form of small group meetings，departmental town halls， brainstorming sessions，working groups，advisory committees，and one－on－one discussions．A summary of these consultation events is provided in Table 8．Each checkmark reflects one of the aforementioned meetings；meeting duration ranged from 0．5－2 hours．

Table 8：Record of consultation events associated with the BSc Renewal Project．

| Department／Group | Meeting Occurrences | Town Hall |
| :---: | :---: | :---: |
| Biochemistry | $\checkmark \checkmark \checkmark$ | N／A |
| Biological Sciences | VVVV | $\checkmark$ |
| Cell Biology | $\checkmark \checkmark$ | $\checkmark$ |
| Chemistry | $\checkmark \checkmark V$ | N／A |
| Computing Science | $\checkmark \checkmark$ | $\checkmark$ |
| Earth \＆Atmospheric Sciences | $\checkmark \checkmark V$ | $\checkmark$ |
| Mathematical \＆Statistical Sciences | レVVV | $\checkmark$ |
| Neuroscience | $\checkmark \checkmark V$ | $\checkmark$ |
| Pharmacology | $\checkmark$ | $\checkmark$ |
| Physics | ひVVV | $\checkmark$ |
| Physiology | VVV | N／A |
| Psychology | VVV | $\checkmark$ |
| Undergraduate Associate Chairs |  v | －－ |
| Science Department Chairs | $\checkmark$ | －－ |
| Teaching \＆Learning Committee | $\checkmark \checkmark$ | －－ |
| Student Services Staff |  | ．． |
| Science Mentors | $\checkmark$ | －－ |
| ISSS／COSSA Executive | $\checkmark \checkmark$ | $\checkmark$ |
| Student Advisory Group | VVVVV | －－ |
| Vice－Provost，Programs | VレVVVV | －－ |
| Vice－Provost，Indigenous Programming \＆Research | $\checkmark \checkmark$ | －－ |
| Registrar | マVVVV | ．＊ |
| Faculty of ALES | $\checkmark$ | －－ |
| Faculty of Arts | $\checkmark$ | －－ |
| Faculty of Medicine \＆Dentistry | $\checkmark$ | － |

## Implementation Plan

The successful implementation of the proposed changes is associated with six key aspects：
1．Collaboration between departments and the faculty
Faculty and departmental staff have been working together closely to establish these proposed changes；they will continue to work closely together to ensure forms and policies are updated，procedural changes are made，advisors are brought up to speed， and students are communicated with properly．In addition，each department has approved（or are in the process of approving．） the proposed changes＂in principle＂，which means that they believe their programs can fit into the new degree framework with relatively minor changes needed in the interim；further changes may be made in the future as deemed necessary．

2．Minimal to No Additional Resources Needed
The proposed changes focus on the degree structure within the Faculty of Science and require relatively minor programmatic changes．Minimal to no new resources are needed to offer the associated courses．

## 3．Enrolment Management

We predict that the number of students currently in our General and Specialization programs will translate directly to the new proposed Major programs and that the number of Honors students will remain relatively consistent．With the proposed changes also comes the ability to implement program－level controls on admission，something we are not currently able to do．

## 4. Projected Savings

Any additional costs associated with unplanned enrollment increases will be offset by the savings that we are projecting for the Faculty with these proposed changes (e.g. reductions in the administrative work needed to manage our programs, number of student inquiries and appeals, number of program changes and course withdrawals, etc.).

## 5. Collaboration with Provost and Registrar

The new proposed degree framework will require major changes in the way our programs are presented in the Academic Calendar and organized in Campus Solutions/Peoplesoft, the University's primary course and program management system. These changes will require close collaboration with the Offices of the Provost and Registrar.

## 6. Communication with Students

In addition to cleaning up the calendar language to make it more understandable and logical, our communication plan includes the enhancement of undergraduate pages on the Faculty of Science webpage and all corresponding departmental pages. We will utilize newsletters and social media to share important information regarding the changes. We will also rely on the dissemination of information through departments and course instructors. But perhaps the most crucial part of our plan is to maintain strong recruitment and advisement strategies.

## Teach Out Plan

The expected date of implementation is Fall 2024. We also recognize that certain calendar changes can be implemented as soon as the changes are approved; others may need to be in the calendar a full year before they can be implemented. To ensure both continuing and new students are accommodated in terms of the year of program they are eligible to follow, we will require all new program and plan codes for the new modified Major and Honors programs; it is not possible to just use existing codes. As is currently the case, students are eligible to follow the program requirements published in the calendar the year they were admitted to the Faculty of Science or any successive calendar year. Although some students may find the new proposed degree structure with Major/Honors/Minors appealing and advantageous to follow, many students will choose to follow older program requirements. There are usually around 7000 registrants in the Faculty of Science in any given year; approximately 25\% are new incoming high school and transfer students. The Faculty of Science graduates approximately 1000-1200 students per year. Considering most students take more than four years to complete their degree, it is estimated that it could be 5-7 years before we will no longer need to utilize the old General, Specialization and Honors program and plan codes. To accommodate both new and continuing students, we will ensure all necessary courses are offered or acceptable accommodations are made. We will also ensure advisors are familiar with all calendar year versions of our programs (as is currently done).

# PROPOSED CHANGES TO SCIENCE BACCALAUREATE ACADEMIC STANDING PARAMETERS <br> <br> Executive Summary - Phase 1, Part B 

 <br> <br> Executive Summary - Phase 1, Part B}

Programs: Bachelor of Science (General)<br>Bachelor of Science (Specialization)<br>Bachelor of Science (Honors)<br>Offered by: Faculty of Science<br>\section*{Prepared by:}<br>Gerda de Vries, Professor and Associate Dean (Undergraduate), Faculty of Science<br>Michelle Spila, Assistant Lecturer, Department of Earth and Atmospheric Sciences<br>sciadu@ualberta.ca<br>spila@ualberta.ca

Based on work completed by members of the BSc Renewal working group.
Last updated: March 15, 2022

## Preamble

In July of 2019, the Faculty of Science at the University of Alberta initiated the BSC Renewal Project with the primary goals of conducting a thorough review of its existing degree and program structure, assessing how it compared to other Faculties and institutions, and making the necessary changes for maximum improvement. The Faculty's degree and program framework had not been reviewed or updated in such a significant fashion for at least 25 years or more. Phase l of the project focused on house-cleaning -- the reorganization of our degrees and programs in order to build a logical degree framework that better aligns with Campus Alberta standards, other $U$ of $A$ faculties, other Albertan institutions, and comparable universities from across Canada. Phase II of the project will result in the establishment of learning outcomes (at the Faculty and program levels) and adjustment of the curricular content of our programs, including scientific communication, work-integrated learning opportunities, and indigenization/ decolonization. An executive summary providing a high-level overview of the proposed changes associated with Part A of Phase 1 can be found here; a more comprehensive report presenting detailed summaries can be found here.

This executive summary provides a high-level overview of Part B of the Phase 1 proposed changes, the academic standing parameters for continuation and graduation that will accompany the new degree framework. The purpose of this executive summary is to provide university governance committees with enough background information for discussion in order to socialize the planned changes.

## Existing Academic Standing Parameters

The current academic standing rules for continuation and graduation in Faculty of Science programs are highly variable. One set of rules applies to all Majors within the General program; however, the rules for Specialization and Honors programs are not standardized. Practically each Specialization and Honors program has its own academic standing parameters for continuation and graduation. This variability is showcased in Figures 1-3 and explained further below.

General - Continuation:


General - Graduation:

## GPA $\geq \mathbf{2 . 0}$ on last 60 units Major GPA 22.3

Figure 1: Academic standing parameters for continuation (left) and graduation (right) for the General program. "F/W" = Fall/Winter; "GPA" = Grade Point Average

As summarized in Figure 1, the current academic standing system used for the General program is effective in that the same parameters are used for all Majors, and graduation requirements reflect a more-or-less holistic view of how a student has been doing. However, we do not check the Major GPA until graduation and this presents problems for students that have "Satisfactory Standing" on their Fall/Winter GPAs on a yearly basis, but are not doing well in their Major. Poor performance in the Major does not come to light until a student applies to graduate. We also do not require General students to maintain a minimum course load.

*The Specialization in Pharmacology program requires a minimum Science GPA of 2.7

Specialization - Graduation:
GPA $\geq 2.3$ [ 2.7] on last 60-90 units
Discipline GPA $\geq 2.3$ [2.7]
(and sometimes Science GPA $\geq 2.7$ )*
*The Specialization in Pharmacology program requires a minimum Sciance GPA of 27

Figure 2: Academic standing parameters for continuation (left) and graduation (right) for Specialization programs.
"F/W" = Fall/Winter; "GPA" = Grade Point Average; "DGPA" = Discipline GPA; "SGPA" = Science GPA

Figure 2 demonstrates the highly variable nature of the current academic standing rules for Specialization programs in the Faculty of Science. For "Satisfactory in Program Standing", students must maintain a Fall/Winter GPA of either 2.3 or 2.7 (depending on the subject area) and ensure they take a minimum course load of either 18 or 24 units (depending on the subject area). In addition, students must maintain a GPA of either 2.3 or 2.7 in the discipline. However, the discipline GPA is not considered in some subject areas. And when it is considered, it is calculated in different ways. There is also one subject area (Pharmacology) that considers a Science GPA of 2.7 (calculated over all science courses taken). For graduation, the same GPAs are generally considered in the same ways they were for continuation. However, the number of units the GPA is calculated over is variable (may either be 60 or 90 units, depending on the subject area.


Honors - Graduation:

## GPA $\geq 3.0$ [ $\geq 3.3]$ on last

 60-90 units Discipline GPA $\geq 3.0$ [3.3] (and sometimes Science GPA $\geq 3.0$ )**The Honors in Pharmacotogy program requires a minimum Science GPA of 3.0

Figure 3: Academic standing parameters for continuation (left) and graduation (right) for Honors programs.
"F/W" = Fall/Winter; "GPA" = Grade Point Average; "DGPA" = Discipline GPA; "SGPA" = science GPA

The current academic standing rules for Honors programs in the Faculty of Science are equally variable. As showcased in Figure 3, 'Satisfactory in Program Standing" requires Honors students to maintain a Fall/Winter GPA of either 3.0 or 3.3 (depending on the subject area) and take a minimum course load of either 24 or 30 units (depending on the subject area). In addition, students must maintain a GPA of either 3.0 or 3.3 in the discipline. However, the discipline GPA is not considered in some subject areas. And when it is considered, it is calculated in different ways. There is also one subject area (Pharmacology) that considers a Science GPA of 3.0 (calculated over all science courses taken). For graduation, the same GPAs are generally considered in the same ways they were for continuation. However, the number of units the GPA is calculated over is variable (may either be 60 or 90 units, depending on the subject area).

The system used for Specialization/Honors programs is effective in that all programs check a Fall/Winter GPA. However, this GPA is either 2.3 or 2.7 for Specialization programs and 3.0 or 3.3 for Honors programs. In addition, many Specialization and Honors programs conduct a yearly check on a student's performance in the discipline. And the graduation requirements reflect a holistic view of a student's performance. Although some subject areas do not check a discipline GPA at all. And those that do have different ways of calculating the discipline GPA. In addition, the GPA at graduation applies to different amounts of units. Therefore, the rules are not consistently applied from Specialization to Specialization (and from Honors to Honors).

It is also important to note that students in Specialization and Honors programs can potentially receive a "May Not Continue" for any one of four different reasons:

- Did not meet load requirement
- Did not meet annual GPA requirement
- Did not meet annual discipline GPA requirement
- Did not meet annual science GPA requirement

This often leads to "May Not Continue" decisions resulting from very small faults. Examples include a Fall/Winter GPA of 2.24 rounded down to 2.2 , being 3 units short of the minimum course load, or a discipline GPA or science GPA falling just short of satisfactory. Such "May not Continue" decisions have a big impact on the student. The student automatically receives a "May Not Continue" notation on their transcript and must immediately withdraw from the Specialization or Honors program. "May Not Continue" decisions result in unnecessary appeals that increase administrative workloads for staff members in the Student Services Office. The appeals received are also imbalanced; students that have truly major faults and really shouldn't appeal, do, while students who fall just short due to a minor fault and really should appeal, don't.

Differences in when and the way Major or discipline GPAs are checked (or not checked) also causes significant problems for students that transfer between degree programs. For example, a student in the General program might be in "Satisfactory Standing" according to the General program rules. However, because their Major GPA has not been tracked from year to year, they may be in for a huge surprise if they attempt to transfer to the Specialization program and learn that their discipline GPA is not sufficient. In addition, we've uncovered inconsistencies in how degrees are granted on the basis of discipline GPAs. In one situation, we discovered that a Specialization student in Psychology was allowed to graduate with a GPA of 1.6 in the discipline (because the discipline GPA is not checked for the Specialization in Psychology program). However, if this student were in the General program with a Major in Psychology, they would not have been allowed to graduate (as they would have needed a Major GPA of 2.3).

We've also uncovered instances where students will "hide" courses they perceive to be challenging (or know to be challenging because they've already made an attempt) in the Spring/Summer terms because we don't include Spring/Summer courses in either GPA calculation. The other side of this relates to students that do well in Spring/Summer courses: they do not benefit from that good performance when academic standing decisions are made. These effects are only temporary, though, as the courses are eventually considered in GPA calculations upon graduation.

## Principles for New Continuation Requirements

Considering the variability and inconsistencies in our current academic standing parameters, we cannot just adopt the General model; nor can we just adopt the Specialization/Honors model. We need to come up with a new model that incorporates the most effective components of both the General and Specialization/Honors models. Accordingly, we identified five principles to guide the development of new academic standing parameters for our new proposed Major versus Honors programs:

## 1. Course load requirements must be eliminated.

The Faculty of Science at the University of Alberta is one of the last science faculties across Canada upholding such an archaic standard. No other schools were found to have a course load minimum built into their academic standing parameters. Such a requirement also has serious EDI (equality, diversity and inclusion) implications; students should no longer be expected to maintain a minimum course load given the challenges they face, and the way students complete undergraduate degrees in today's world. Instead, we should encourage students to complete their degree in a timely fashion by monitoring their progress and implementing other controls where deemed necessary.

## 2. Clearly distinguish consequences of deficiencies in GPA and subject area GPA.

As students progress through their degree, their academic performance should be evaluated on two levels -- how they do on all their courses and how they do in their chosen subject area. These evaluations should take place annually (after the conclusion of the Winter term, to include the previous Spring, Summer, Fall, and Winter terms), and upon graduation. These GPAs should be
calculated in a consistent manner and following the same timeframe. We also believe it is critical to establish clear and consistent standards that distinguish the consequences of being deficient in either GPA.

## 3. Perform annual checks of a student's GPA.

A student's overall performance should be evaluated once a year, at the completion of the Winter term. This Annual GPA should be calculated on all courses completed in the previous Spring, Summer, Fall and Winter terms. The standards for the Annual GPA check should also include a notice system for the Honors programs (when a student's Annual GPA is between 2.7 and 2.9) that is similar in spirit to the formal academic warning for non-Honors students (when a student's annual GPA is between 1.7-1.9). With this notice system, students will have one year to bring their annual GPA back up to at least 3.0 without receiving a "May Not Continue" notation on their transcript.

## 4. Perform annual checks of a student's performance on Major or Honors requirements in the subject area.

A student's performance in their selected subject area should be evaluated once a year, at the completion of the Winter term. This Subject GPA will be calculated on all courses comprising either the Major or Honors requirements. Because it can take a while for students to find the subject area that's right for them, it's important not to penalize students for a potentially poor first-year performance. Also, it is important to give some grace until students have completed at least 9 units in the subject area (at the 200 level or above). This Subject GPA should also include the student's performance on courses successfully completed in prior years. This avoids severe consequences in situations where only a small number of courses are taken in the current year and allows the Subject GPA to increasingly approach the holistic evaluation completed at graduation. The new model should also include a "Deficient in Subject Area" notice system in both Major \& Honors programs. If the Subject GPA drops below 2.3 and 3.0, respectively, students have a year to bring it back up without receiving a "May Not Continue" notation on their transcript.

## 5. Ensure continuation standards reflect and build toward graduation standards.

The academic standards in place for annual checks must be consistent and conform to graduation standards. Therefore, both the Annual and Subject GPAs must be checked annually and upon graduation, and over the same number of units at graduation. Satisfactory standing would therefore be $\geq 2.0$ for Majors and $\geq 3.0$ for Honors on the last 60 units. The Subject GPA must be $\geq$ 2.3 for Majors and $\geq 3.0$ for Honors and would be calculated over all 200 level and higher discipline courses credited to the degree (as per the requirements specified for the Major or Honors).

## New Proposed Subject GPA Calculation

To address the principles outlined above (particularly in \#4), we are proposing a new formula for calculating the Subject GPA. This new formula results in a hybrid GPA that tracks the student's academic achievement in their subject area courses in the current evaluation period (which consists of the Spring, Summer, Fall and Winter terms) AND their cumulative academic achievement in their subject area courses. It considers Fs in the current evaluation period, but 'forgives' them once the student progresses to the next evaluation period. In a student's final evaluation period prior to graduation, any subject area course with a grade of $F$ will be omitted in the Subject GPA calculation. Therefore, by the end of their degree, a student's Subject GPA is equivalent to their GPA on all 200 level and higher subject area courses successfully completed and credited toward the degree (which is what we currently check upon graduation). So the Subject GPA effectively tracks the progress in one's subject area in 'real time' and 'looking forward' to graduation. It is designed to not only track a student's progress in their subject area, but provide them with a warning should their progress falter (i.e. drop below the minimum expected Subject GPA). It comprises all courses listed in the requirements for the Major or Honors (both specified and non-specified) plus all courses with designators characteristic of the subject area. An example calculation is provided in Figure 4 below.

| Year | Fictitious Student Record Mathematics Major |  |  | GPA on all $\mathbf{2 X X}+$ courses in the subject area attempted in current evaluation period PLUS all $2 X X+$ courses in the subject area previously credited to degree |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \# of $2 \mathrm{XX}+$ subject area courses attempted in current evaluation period | G.P. value of $2 X X+$ subject area courses attempted in current evaluation period | \# of $2 \times x+$ subject area courses previously credited to degree | G.P. value of $2 X X+$ subject area courses previousiy credited to degree | $\begin{gathered} \text { SGPA }= \\ \Sigma \text { G.P. value } \\ \div \\ \sum \# \text { of } \\ \text { courses } \end{gathered}$ |
| 2 | MATH 214 | B+ | 3.3 | 4 | 9.3 | 0 | 0.0 | 2.3 |
|  | MATH 216 | B+ | 3.3 |  |  |  |  |  |
|  | MATH 225 | B- | 2.7 | Satisfactory |  |  |  |  |
|  | STAT 265 | F | 0.0 |  |  |  |  |  |  |  |  |  |
| 3 | MATH 315 | F | 0.0 | 3 | 2.3 | 3 | 9.3 | 1.9 |
|  | MATH 334 | F | 0.0 |  |  |  |  |  |
|  | STAT 265 | C+ | 2.3 | Deficient in Subject Area Notice |  |  |  |  |
| 4 | MATH 315 | C | 2.0 | 3 | 6.0 | 4 | 11.6 | 2.5 |
|  | MATH 334 | B- | 2.7 |  |  |  |  |  |
|  | MATH 403 | D+ | 1.3 | Satisfactory |  |  |  |  |

Figure 4: Example showcasing the new proposed Subject GPA (SGPA) calcufation. The table lists all courses taken towards the new proposed Mathematics Major at the 200 level or above for a fictitious student. In Year 2, the Subject GPA is based solely on the four courses taken that year, MATH 214, 216, 225 and STAT 265. In Year 3, the Subject GPA is based on the three courses taken that year (MATH 315, 334 and STAT 265) plus the three courses successfully completed in Year 2 (MATH 214, 216 and 225). In Year 4, the Subject GPA is based on the three subject area courses taken that year (MATH 315, 334 and 403) plus the four courses successfully completed in Years 2 and 3 (MATH 214, 216, 225, and STAT 265 [second attempt]).

## New Proposed Academic Standard Parameters

The new model we are proposing for academic standing will apply to all fields of study equally and be defined at two levels, Major and Honors (see Figures 5 and 6).


Major - Graduation:

GPA $\geq 2.0$ on last $\mathbf{6 0}$ units Subject GPA $\geq 2.3$

Figure 5: New proposed academic standards for continuation (left) and graduation (right) in the Major program.

The academic standing parameters for continuation in a Major (Figure 5 above) reflects that there will be two GPAs checked once a year (in May, at the end of the Winter term; so the evaluation period is May 1 - April 30). The Annual GPA will be calculated for students that complete 9 units or more over four terms, Spring, Summer, Fall and Winter. The cut-off values for "Satisfactory Standing" versus "Marginal Standing" versus "Unsatisfactory Standing" do not change relative to what is currently in place as these are established at the University level. The Subject GPA is the new hybrid GPA we are proposing; it will be calculated once a student has completed 9 units in subject area courses (as per the Major requirements) at the 200 level or higher. The matrix shows that once a student drops below the minimum Subject GPA of 2.3 (the last column) they will receive a "Deficient in Subject Area" notice, which is a letter of guidance from the Associate Dean (Undergraduate) informing them of their status and advising them of actions to take. This will be considered their first offence. Upon their second offence, students will be notified that they "May Not Continue" in their current Major subject area. At this point, they will have to apply to a different subject area (one in which they meet the admission requirements). If they are not eligible for any other subject area in the Faculty of Science, they will be informed that they May Not Continue in the Faculty of Science.


Figure 6: New proposed academic standards for continuation (left) and graduation (right) in the Honors program.

The new proposed matrix for Honors academic standing parameters (Figure 6 above) follows the same structure established for the Major. Key differences to highlight include:

- An additional GPA level has been added to the Annual GPA check (2.7-2.9), where students will be given an "Honors Academic Warning" (i.e. a guidance letter from the Associate Dean (Undergraduate) explaining their status and advising them of steps to take). This will be their first offence. Upon their second offence, they will be informed that they cannot continue in the Honors program.
- If the student's Annual GPA is 2.6 or less they will automatically be informed that they cannot continue in the Honors program. They will have to apply to the respective Major subject area (or a different Major subject area, one in which they meet the admission requirements). If they are not eligible for any Major subject area in the Faculty of Science, they will be informed that they "May Not Continue" in the Faculty of Science.
- If the student's Subject GPA is 2.3-2.9 they will receive a "Deficient in Subject Area" notice, which is a formal letter of guidance from the Associate Dean (Undergraduate) informing them of their status and advising them of actions to take. This will be considered their first offence. Upon their second offence, students will be notified that they "May Not Continue' in their current Honors subject area. At this point, they will have to apply to another Honors subject area, the respective Major subject area, or a different Major subject area (one in which they meet the admission requirements). If they are not eligible for any other Honors subject area or any Major subject areas in the Faculty of Science, they will be informed that they "May Not Continue" in the Faculty of Science.
- If the student's Subject GPA is 2.2 or less they will be notified that they "May Not Continue" in their current Honors subject area. At this point, they will have to apply to another Honors subject area, the respective Major subject area, or a different Major subject area (one in which they meet the admission requirements). If they are not eligible for any other Honors subject area or any Major subject areas in the Faculty of Science, they will be informed that they "May Not Continue" in the Faculty of Science.
- Students that receive both an "Honors Academic Warning" and "Deficient in Discipline" notice will only receive one guidance letter (templates will be created for each cell/scenario).

As discussed above, graduation standards will be consistent and conform to the academic standards showcased in the Major and Honors matrices. Therefore, both the Annual and Subject GPAs must be checked upon graduation, and over the same number of units. Satisfactory Standing would therefore be $\geq 2.0$ for Majors and $\geq 3.0$ for Honors on the last 60 units. The Subject GPA must be $\geq 2.3$ for Majors and $\geq 3.0$ for Honors, and would be calculated over all 200 level and higher subject area courses credited to the degree (as per the requirements specified for the Major or Honors program).


[^0]:    ${ }^{1}$ Henceforth, all mentions to 'Articles' in this document are references to articles of Schedule A.

[^1]:    ${ }^{2}$ In the Faculty of Science, the Dean may choose to delegate their responsibilities in faculty evaluation to the Vice Dean with appropriate notice to faculty members.

[^2]:    ${ }^{3}$ Adopted from NSERC Discovery Grants Peer Review Manual, 2019-2020. Available at: https://www.nserc-crsng.gc.ca/ doc/Reviewers-Examinateurs/CompleteManual-ManualEvalComplet eng.pdf.

[^3]:    ${ }^{1}$ Henceforth, all mentions to 'Articles' in this document are references to articles of Schedule B.

[^4]:    2 "Department" is the umbrella term used to include units, divisions, or any entity that has a core user group.

[^5]:    ${ }^{1}$ Henceforth, all mentions to 'Articles' in this document are references to articles of Schedule A.
    ${ }^{2}$ 'Increment' means the basic unit by which a Staff Member's salary is increased.

[^6]:    ${ }^{1}$ Henceforth, all mentions to 'Articles' in this document are references to articles of Schedule B.

[^7]:    2 "Department" is the umbrella term used to include units, divisions, or any entity that has a core user group.

[^8]:    ${ }^{[1]}$ University Strategic Plan for Equity, Diversity, and Inclusivity, page 4.
    https://www.ualberta.ca/equity-diversity-inclusivity/about/strategic-plan-for-edi/index.html

[^9]:    ${ }^{[2]}$ Academic staff include all staff covered by AASUA and postdoctoral researchers.

[^10]:    ${ }^{\wedge}$ Minors consist of ot least 24 units with at least 6 units at the 300 level or above; Minors can be selected from the Faculties of Science, Arts, Business, or Agricultural, Life and Environmental Sciences.
    *Only certain Specialization and Honors programs in computing science and mathematics are available with specific Minors.
    **General students may take a second Science Major in place of a Minor

