

The following Motions and Documents were considered by the GFC Programs Committee at its Thursday, April 15, 2021 meeting:

Agenda Title: **Course and Minor Program Changes**

- Augustana
- Education
- Rehabilitation Medicine
- Saint-Jean
- Science

CARRIED MOTION:

THAT the GFC Programs Committee approve, with delegated authority from General Faculties Council, the attached course and minor program change submissions from the Faculties of Augustana, Education, Rehabilitation Medicine, Saint-Jean, and Science.

FINAL Item 4

Agenda Title: **Proposed New Course Designator, CCALS (Centre collégial de l'Alberta Anglais Langue Seconde), Centre collégial de l'Alberta, Faculté Saint-Jean**

CARRIED MOTION:

THAT the GFC Programs Committee approve, with delegated authority from General Faculties Council, a new course designator for Centre collégial de l'Alberta Anglais Langue Seconde, CCALS, as submitted by the Centre collégial de l'Alberta, Faculté Saint-Jean.

FINAL Item 5

Agenda Title: **Proposed New Graduate Certificate in Educational Studies, Faculty of Education and Faculty of Graduate Studies and Research**

CARRIED MOTION:

THAT GFC Programs Committee approve, with delegated authority from General Faculties Council, the new Graduate Certificate in Educational Studies (GCES), as submitted by the Faculty of Education, and as set forth in attachments 1 and 2, to take effect upon final approval.

FINAL Item 6

FINAL Item No. 4

Governance Executive Summary
Action Item

Agenda Title	Course and Minor Program Changes <ul style="list-style-type: none"> - Augustana - Education - Rehabilitation Medicine - Saint-Jean - Science
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Item

Action Requested	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Recommendation
Proposed by	Faculty Councils
Presenter(s)	Tammy Hopper, Vice-Provost (Programs) and Chair, GFC PC

Details

Office of Administrative Responsibility	Provost and Vice-President (Academic)
The Purpose of the Proposal is <i>(please be specific)</i>	To approve course and minor program changes.
Executive Summary <i>(outline the specific item – and remember your audience)</i>	All routine course and minor program changes that do not involve or affect other Faculties or units and do not form part of a proposal for a new program or a substantive program change are approved regularly by the GFC Programs Committee in an omnibus motion. See individual item for Faculty Council approval information.
Supplementary Notes and context	<This section is for use by University Governance only to outline governance process.>

Engagement and Routing (Include meeting dates)

Consultation and Stakeholder Participation (parties who have seen the proposal and in what capacity) <For information on the protocol see the Governance Resources section Student Participation Protocol >	<u>Those who are actively participating:</u> <ul style="list-style-type: none"> • Vice-Provost (Programs) and Chair, GFC Academic Standards Committee • Faculty Councils • Representatives of the Office of the Registrar
	<u>Those who have been consulted:</u> <ul style="list-style-type: none"> • Undergraduate Program Support Team
	<u>Those who have been informed:</u> <ul style="list-style-type: none"> • Items have been posted on the University Governance website for information
Approval Route (Governance) (including meeting dates)	See individual item for Faculty approval information GFC PC April 15, 2021

Strategic Alignment

Alignment with <i>For the Public Good</i>	Objective 21
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Item No. 4

Legislative Compliance and jurisdiction	<i>Post-Secondary Learning Act (PSLA)</i> GFC Programs Committee (PC) Terms of Reference
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Attachments

1. Arts
2. Education
3. Rehabilitation Medicine
4. Saint-Jean
5. Science

Prepared by: Heather Richholt, Assistant Secretary to GFC, heather.richholt@ualberta.ca

**Augustana Faculty
Course Changes
For **Early Implementation** in Fall 2021**

Current	Proposed
<u>New</u>	<p><u>AUMUS 148 Choral Ensemble</u> ★ <u>1 (fi 2) (either term 2-0-0)</u> <u>Performance of choral music in an inclusion choir context. Prerequisites: Consent of the instructor.</u> <u>Note: a *1 course over either term. The course does not require participation in a performance tour.</u></p>
<u>New</u>	<p><u>AUMUS 248 Choral Ensemble</u> ★ <u>1 (fi 2) (either term 2-0-0)</u> <u>Performance of choral music in an inclusion choir context. Prerequisites: Consent of the instructor.</u> <u>Note: a *1 course over either term. The course does not require participation in a performance tour.</u></p>
<u>New</u>	<p><u>AUMUS 348 Choral Ensemble</u> ★ <u>1 (fi 2) (either term 2-0-0)</u> <u>Performance of choral music in an inclusion choir context. Prerequisites: Consent of the instructor.</u> <u>Note: a *1 course over either term. The course does not require participation in a performance tour.</u></p>
<u>New</u>	<p><u>AUMUS 448 Choral Ensemble</u> ★ <u>1 (fi 2) (either term 2-0-0)</u> <u>Performance of choral music in an inclusion choir context. Prerequisites: Consent of the instructor.</u> <u>Note: a *1 course over either term. The course does not require participation in a performance tour.</u></p>

Changes approved by Augustana Faculty Council, December 4, 2020

**Augustana Faculty
Course Changes
For Implementation in Fall 2022**

Current	Proposed
<p>AUMAT 220 – Linear Algebra II ★ 3 (fi 6) (either term, 3-0-0) Vector spaces, bases, linear transformations, change of bases, eigenvectors, characteristic polynomials, diagonalization, inner products and Gram-Schmidt orthogonalization, orthogonal and unitary operators. Prerequisites: AUMAT 120 and one of 110 or 116.</p>	<p>Delete</p>
<p>New</p>	<p>AUMAT 320 Numerical Linear Algebra ★ 3 (fi 6) (either term 3-0-0) Computational problems in linear algebra, including linear systems and least squares and eigenvalues problems, with matrix factorizations as a main tool for tackling these problems. Prerequisites: AUSCI 250.</p>

Changes approved by Augustana Faculty Council, December 4, 2020

FACULTY OF EDUCATION CALENDAR CHANGE REQUEST FORM

Department: **Secondary Education**

Implementation: NORMAL
 EARLY (Note: new course offerings only)

Type of Change: Program Regulation*
 New Course*† Course Change
 Course Deletion Editorial

*Documentation is required to verify that other units in the Faculty of Education or other Faculties impacted by the proposal have no objection to the proposed new course or course change. Applicable: Yes No

†**Attachments:** Course Outline
 KSA (Knowledge, skills and Attributes) Rating Sheets
 (Completed by course developers and instructors)


CURRENT	PROPOSED
Calendar Section Number (§) Education Chart 1, taken from https://calendar.ualberta.ca/preview_program.php?catoid=29&poid=28293 <i>(Use strike out for all changes)</i>	Calendar Section Number (§) Education Chart 1, taken from https://calendar.ualberta.ca/preview_program.php?catoid=29&poid=28293 <i>(Underline all additions)</i>
Education Chart 1 – BEd Majors	Education Chart 1 – BEd Majors
Biological Sciences (★36) [Education]	Biological Sciences (★36) [Education]
[NO CHANGES UNTIL]	[NO CHANGES UNTIL]
★9 to ★15 but with no more than ★9 in each of	★9 to ★15 but with no more than ★9 in each of
<ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Chemistry • Environmental Sciences [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics 	<ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Biophysics • Chemistry • Environmental Sciences [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics
[NO CHANGES UNTIL]	[NO CHANGES UNTIL]
Chemistry (★36) [Education]	Chemistry (★36) [Education]
[NO CHANGES UNTIL]	[NO CHANGES UNTIL]

<p>★12 to ★15 but with no more than ★9 in each of</p> <ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Chemistry • [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics <p>[NO CHANGES UNTIL]</p> <p>General Sciences (★36) [Education]</p>	<p>★12 to ★15 but with no more than ★9 in each of</p> <ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Biophysics • Chemistry • [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics <p>[NO CHANGES UNTIL]</p> <p>General Sciences (★36) [Education]</p>
<p>[NO CHANGES UNTIL]</p>	<p>[NO CHANGES UNTIL]</p>
<p>★12 to ★15 but with no more than ★9 in each of</p> <ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Chemistry • Environmental Sciences [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics <p>[NO CHANGES UNTIL]</p> <p>Physical Sciences (★36) [Education]</p>	<p>★12 to ★15 but with no more than ★9 in each of</p> <ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Biophysics • Chemistry • Environmental Sciences [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics <p>[NO CHANGES UNTIL]</p> <p>Physical Sciences (★36) [Education]</p>
<p>[NO CHANGES UNTIL]</p>	<p>[NO CHANGES UNTIL]</p>
<p>★6 to ★9 but with no more than ★9 in each of</p> <ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Chemistry 	<p>★6 to ★9 but with no more than ★9 in each of</p> <ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Biophysics

<ul style="list-style-type: none"> • Environmental Sciences [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics <p>[NO CHANGES UNTIL]</p> <p>Physics (★36) [Education]</p>	<ul style="list-style-type: none"> • Chemistry • Environmental Sciences [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics <p>[NO CHANGES UNTIL]</p> <p>Physics (★36) [Education]</p>
[NO CHANGES UNTIL]	[NO CHANGES UNTIL]
<p>★12 to ★15 but with no more than ★9 in each of</p> <ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Chemistry • Environmental Sciences [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics <p>[NO FURTHER CHANGES]</p>	<p>★12 to ★15 but with no more than ★9 in each of</p> <ul style="list-style-type: none"> • Astronomy • Biochemistry • Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology) • Biophysics • Chemistry • Environmental Sciences [EAS (Faculty of Science), ENCS, REN R] • Mathematics • Physics <p>[NO FURTHER CHANGES]</p>

Justification: (Note: A detailed justification must be provided except in the case of a course deletion or editorial change). If more than one change is submitted be sure to indicate the **course number** that applies to your explanation.

Biophysics (BIOPH) is a new course descriptor being added by the Faculty of Science. These new BIOPH courses are being added as options for the Biological Sciences, Chemistry, General Sciences, Physical Sciences, and Physics Majors in Education Chart 1.

Submitted by: Jason Wallin	Signature of Department Chair or Designee 	Date: January 15, 2021	FACULTY USE ONLY Approval Process xAcademic Affairs	Date Jan 28, 2021
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FACULTY OF EDUCATION CALENDAR CHANGE REQUEST FORM

Department: **Secondary Education**

Implementation: NORMAL
 EARLY (Note: new course offerings only)

Type of Change: Program Regulation*
 New Course*† Course Change
 Course Deletion Editorial

*Documentation is required to verify that other units in the Faculty of Education or other Faculties impacted by the proposal have no objection to the proposed new course or course change. Applicable: Yes No

†**Attachments:** Course Outline
 KSA (Knowledge, skills and Attributes) Rating Sheets
(Completed by course developers and instructors)

CURRENT	PROPOSED
<p>Calendar Section Number (§) Education Chart 3, taken from https://calendar.ualberta.ca/content.php?catoid=33&navoid=10046 <i>(Use strike out for all changes)</i></p>	<p>Calendar Section Number (§) Education Chart 3, taken from https://calendar.ualberta.ca/content.php?catoid=33&navoid=10046 <i>(Underline all additions)</i></p>
<p>Education Chart 3 – After Degree Majors</p> <p>Biological Sciences WITHOUT BSc (★36) Students NOT presenting a Bachelor of Science (BSc) with a Major in a Biological Science will need to present 36 credits in the following categories for the Biological Sciences Major in Secondary Education prior to graduation from the program:</p> <ol style="list-style-type: none"> 1. ★15-18 Biological Sciences (including Anatomy; Animal Sciences; Biochemistry; Bioinformatics; Biology; Botany; Cell Biology; Ecology; Entomology; Environmental Studies; Environmental and Conservation Sciences [Arts or Science]; Forestry; Genetics; Histology; Immunology; Marine Science; Microbiology; Paleontology; Pharmacology; Physiology; Plant Science; Renewable Resources; Soil Science; Zoology) 2. ★3-6 Physiology or Anatomy 3. ★12-15 in Science courses, including Environmental and Conservation Sciences; Forestry; Plant Science; Renewable Resources; Soil Science (a maximum of ★6 Science, Technology & Society can be completed in this listing). 	<p>Education Chart 3 – After Degree Majors</p> <p>Biological Sciences WITHOUT BSc (★36) Students NOT presenting a Bachelor of Science (BSc) with a Major in a Biological Science will need to present 36 credits in the following categories for the Biological Sciences Major in Secondary Education prior to graduation from the program:</p> <ol style="list-style-type: none"> 1. ★15-18 Biological Sciences (including Anatomy; Animal Sciences; Biochemistry; Bioinformatics; Biology; Biophysics; Botany; Cell Biology; Ecology; Entomology; Environmental Studies; Environmental and Conservation Sciences [Arts or Science]; Forestry; Genetics; Histology; Immunology; Marine Science; Microbiology; Paleontology; Pharmacology; Physiology; Plant Science; Renewable Resources; Soil Science; Zoology) 2. ★3-6 Physiology or Anatomy 3. ★12-15 in Science courses, with a maximum of ★6 in Science, Technology & Society and no more than ★9 in each of the following areas that includes, but is not limited to: <ul style="list-style-type: none"> • Astronomy • Biochemistry

[NO CHANGES UNTIL]

Chemistry WITHOUT BSc in Chemistry, Pharmacology or Chemical Engineering Majors (★36)

Students NOT presenting a Bachelor of Science (BSc) with a Major in Chemistry, Pharmacology or Chemical Engineering will need to present 36 credits in the following Categories for the Chemistry Major in Secondary Education prior to graduation from the program:

1. ★18 Chemistry or Biochemistry courses
2. ★18 in Science courses ~~as well as Environmental and Conservation Sciences; Forestry; Plant Science; Renewable Resources; Soil Science (a maximum of ★6 Science, Technology & Society can be completed in this listing)~~

[NO CHANGES UNTIL]

General Sciences WITHOUT BSc in Agriculture, EAS, Forestry, Geology or Soil Science (★36)

Students NOT presenting a Bachelor of Science (BSc) with a major in Agriculture, Earth and Atmospheric Sciences, Forestry, Geology or Soil Science will need to present 36 credits in the following Category for the General Science Major in Secondary Education prior

- Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology)
- Biophysics
- Chemistry
- Environmental Sciences [EAS (Faculty of Science), ENCS, REN R]
- Mathematics
- Physics

[NO CHANGES UNTIL]

Chemistry WITHOUT BSc in Chemistry, Pharmacology or Chemical Engineering Majors (★36)

Students NOT presenting a Bachelor of Science (BSc) with a Major in Chemistry, Pharmacology or Chemical Engineering will need to present 36 credits in the following Categories for the Chemistry Major in Secondary Education prior to graduation from the program:

1. ★18 Chemistry or Biochemistry courses
2. ★18 in Science courses, with a maximum of ★6 in Science, Technology & Society and no more than ★9 in each of the following areas that includes, but is not limited to:

- Astronomy
- Biochemistry
- Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology)
- Biophysics
- Chemistry
- Environmental Sciences [EAS (Faculty of Science), ENCS, REN R]
- Mathematics
- Physics

[NO CHANGES UNTIL]

General Sciences WITHOUT BSc in Agriculture, EAS, Forestry, Geology or Soil Science (★36)

Students NOT presenting a Bachelor of Science (BSc) with a major in Agriculture, Earth and Atmospheric Sciences, Forestry, Geology or Soil Science will need to present 36 credits in the following Category for the General Science Major in Secondary Education prior

to graduation from the program:

1. ★36 Science courses including but not limited to: ~~Anatomy; Animal Sciences; Biochemistry; Bioinformatics; Biology; Botany; Cell Biology; Chemistry; Ecology; Entomology; Environmental Studies; Environmental and Conservation Sciences [Arts or Science]; Forestry; Genetics; Histology; Immunology; Marine Science; Microbiology; Paleontology; Pharmacology; Physics; Physiology; Plant Science; Soil Science; Zoology (a maximum of ★6 Science, Technology & Society can be completed in this listing)~~

[NO CHANGES UNTIL]

Physical Sciences (★36)

Students presenting a Bachelor of Science (BSc) with a Major in Physics, Electrical Engineering or Mechanical Engineering will meet all of the 36 credits required for the Physical Science Major in Secondary Education

Physical Sciences WITHOUT BSc in Physics, Electrical Engineering or Mechanical Engineering (★36)

Students NOT presenting a Bachelor of Science (BSc) with a Major in Physics, Electrical Engineering or Mechanical Engineering will need to present 36 credits in the following Categories for the Physical Science Major in Secondary Education prior to graduation from the program:

1. ★12 Physics
2. ★12 Chemistry or Biochemistry
3. ★12 Science ~~courses as well as Environmental and Conservation Sciences; Forestry; Plant Science; Renewable Resources; Soil Science (a maximum of ★6 Science, Technology & Society can be completed in this listing)~~

to graduation from the program:

1. ★36 Science courses, with a maximum of ★6 in Science, Technology & Society and no more than ★9 in each of the following areas that includes, but is not limited to:

- Astronomy
- Biochemistry
- Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology)
- Biophysics
- Chemistry
- Environmental Sciences [EAS (Faculty of Science), ENCS, REN R]
- Mathematics
- Physics

[NO CHANGES UNTIL]

Physical Sciences (★36)

Students presenting a Bachelor of Science (BSc) with a Major in Physics, Electrical Engineering or Mechanical Engineering will meet all of the 36 credits required for the Physical Science Major in Secondary Education

Physical Sciences WITHOUT BSc in Physics, Electrical Engineering or Mechanical Engineering (★36)

Students NOT presenting a Bachelor of Science (BSc) with a Major in Physics, Electrical Engineering or Mechanical Engineering will need to present 36 credits in the following Categories for the Physical Science Major in Secondary Education prior to graduation from the program:

1. ★12 Physics
2. ★12 Chemistry or Biochemistry
3. ★12 Science courses, with a maximum of ★6 in Science, Technology & Society and no more than ★9 in each of the following areas that includes, but is not limited to:
 - Astronomy
 - Biochemistry
 - Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils

[NO CHANGES UNTIL]

Physics WITHOUT BSc in Physics, Electrical Engineering or Mechanical Engineering (★36)

Students NOT presenting a Bachelor of Science (BSc) with a Major in Physics, Astrophysics, Electrical Engineering or Mechanical Engineering will need to present 36 credits in the following Categories for the Physics Major in Secondary Education prior to graduation from the program:

1. ★18 Physics
2. ★18 Science courses ~~as well as Environmental and Conservation Sciences; Forestry; Plant Science; Renewable Resources; Soil Science (a maximum of ★6 Science, Technology & Society can be completed in this listing)~~

[NO FURTHER CHANGES]

and Zoology)

- Biophysics
- Chemistry
- Environmental Sciences [EAS (Faculty of Science), ENCS, REN R]
- Mathematics
- Physics

[NO CHANGES UNTIL]

Physics WITHOUT BSc in Physics, Electrical Engineering or Mechanical Engineering (★36)

Students NOT presenting a Bachelor of Science (BSc) with a Major in Physics, Astrophysics, Electrical Engineering or Mechanical Engineering will need to present 36 credits in the following Categories for the Physics Major in Secondary Education prior to graduation from the program:

1. ★18 Physics
2. ★18 Science courses, with a maximum of ★6 in Science, Technology & Society and no more than ★9 in each of the following areas that includes, but is not limited to:


- Astronomy
- Biochemistry
- Biological Sciences (including Botany, Forestry, Genetics, Microbiology, Soils and Zoology)
- Biophysics
- Chemistry
- Environmental Sciences [EAS (Faculty of Science), ENCS, REN R]
- Mathematics
- Physics

[NO FURTHER CHANGES]

Justification: (Note: A detailed justification must be provided except in the case of a course deletion or editorial change). If more than one change is submitted be sure to indicate the **course number** that applies to your explanation.

Biophysics (BIOPH) is a new course descriptor being added by the Faculty of Science. These new BIOPH courses are being added as options for after-degree Science Majors in Education Chart 3. Also updating the list of courses for each of the Science Majors in Education Chart 3 to be consistent with what is listed for BED Science Majors in Education Chart 1.

Submitted by:	Signature of Department	Date:	FACULTY USE ONLY
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Jason Wallin	 Chair or Designee ¹	January 15, 2021	Approval Process <input checked="" type="checkbox"/> Academic Affairs	Date Jan 28, 2021
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FACULTY OF EDUCATION CALENDAR CHANGE REQUEST FORM

Department: **Secondary Education**

Implementation: NORMAL
 EARLY (Note: new course offerings only)

Type of Change: Program Regulation*
 New Course*† Course Change
 Course Deletion Editorial

**Documentation is required to verify that other units in the Faculty of Education or other Faculties impacted by the proposal have no objection to the proposed new course or course change.* Applicable: Yes No

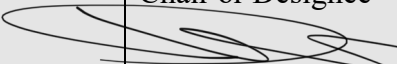
†**Attachments:** Course Outline
 KSA (Knowledge, skills and Attributes) Rating Sheets
 (Completed by course developers and instructors)

CURRENT	PROPOSED
Calendar Section Number (§) Education Chart 2, taken from https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37522 <i>(Use strike out for all changes)</i>	Calendar Section Number (§) Education Chart 2, taken from https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37522 <i>(Underline all additions)</i>
Education Chart 2 – BEd Minors	Education Chart 2 – BEd Minors
Chemistry (★18) [Education]	Chemistry (★18) [Education]
[NO CHANGES UNTIL]	[NO CHANGES UNTIL]
★6 chosen from <ul style="list-style-type: none"> • Biochemistry • Chemistry • Environmental Sciences (EAS, ENCS, REN R) • Physics <p style="text-align: center; padding: 5px;">[NO FURTHER CHANGES UNTIL]</p>	★6 chosen from <ul style="list-style-type: none"> • Biochemistry • Biophysics • Chemistry • Environmental Sciences (EAS, ENCS, REN R) • Physics <p style="text-align: center; padding: 5px;">[NO FURTHER CHANGES UNTIL]</p>
Physical Sciences (★18) [Education]	Physical Sciences (★18) [Education]
[NO CHANGES UNTIL]	[NO CHANGES UNTIL]
★6 <ul style="list-style-type: none"> • Astronomy • Chemistry • Environmental Sciences [EAS, ENCS, REN R] 	★6 <ul style="list-style-type: none"> • Astronomy • Biophysics • Chemistry • Environmental Sciences [EAS, ENCS, REN R]

<ul style="list-style-type: none"> Physics <p>[NO FURTHER CHANGES UNTIL]</p> <p>Physics (★18) [Education]</p>	<p>R]</p> <ul style="list-style-type: none"> Physics <p>[NO FURTHER CHANGES UNTIL]</p> <p>Physics (★18) [Education]</p>
<p>[NO CHANGES UNTIL]</p>	<p>[NO CHANGES UNTIL]</p>
<p>★6 from</p> <ul style="list-style-type: none"> Astronomy Chemistry Environmental Sciences (EAS, ENCS, REN R) Physics <p>[NO FURTHER CHANGES]</p>	<p>★6 from</p> <ul style="list-style-type: none"> Astronomy Biophysics Chemistry Environmental Sciences (EAS, ENCS, REN R) Physics <p>[NO FURTHER CHANGES]</p>

Justification: (Note: A detailed justification must be provided except in the case of a course deletion or editorial change). If more than one change is submitted be sure to indicate the **course number** that applies to your explanation.

Biophysics (BIOPH) is a new course descriptor being added by the Faculty of Science. These new BIOPH courses are being added as options for the Chemistry, Physical Sciences, and Physics Minors in Education Chart 2.

Submitted by: Jason Wallin	Signature of Department Chair or Designee 	Date: January 15, 2021	FACULTY USE ONLY Approval Process Date <input checked="" type="checkbox"/> Academic Affairs Jan 28, 2021
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FACULTY OF EDUCATION CALENDAR CHANGE REQUEST FORM

Department: **Secondary Education**

Implementation: NORMAL
 EARLY (Note: new course offerings only)

Type of Change: Program Regulation*
 New Course*† Course Change
 Course Deletion Editorial

**Documentation is required to verify that other units in the Faculty of Education or other Faculties impacted by the proposal have no objection to the proposed new course or course change.* Applicable: Yes No

†**Attachments:** Course Outline
 KSA (Knowledge, skills and Attributes) Rating Sheets
 (Completed by course developers and instructors)

CURRENT	PROPOSED
Calendar Section Number (§) Education Chart 4, taken from https://calendar.ualberta.ca/content.php?catoid=33&navoid=10047 <i>(Use strike out for all changes)</i>	Calendar Section Number (§) Education Chart 4, taken from https://calendar.ualberta.ca/content.php?catoid=33&navoid=10047 <i>(Underline all additions)</i>
Education Chart 4 – After Degree Minors Biological Sciences (★18) ★6 Biology ★12 Biological Sciences including: Anatomy, Animal Sciences, Biochemistry, Bioinformatics, Biology, Botany, Cell Biology, Ecology, Entomology, Environmental Studies, Environmental and Conservation Sciences [Arts or Science], Genetics, Histology, Immunology, Marine Science, Microbiology, Paleontology, Physiology, Plant Science, Renewable Resources, Zoology <div style="text-align: center;">[NO CHANGES UNTIL]</div> Chemistry (★18) ★6 Chemistry ★12 Chemistry (including Biochemistry; Chemistry; Earth and Atmospheric Sciences; Environmental and Conservation Sciences; Pharmacology; Physics; Renewable Resources) <div style="text-align: center;">[NO CHANGES UNTIL]</div>	Education Chart 4 – After Degree Minors Biological Sciences (★18) ★6 Biology ★12 Biological Sciences including: Anatomy, Animal Sciences, Biochemistry, Bioinformatics, Biology, Biophysics , Botany, Cell Biology, Ecology, Entomology, Environmental Studies, Environmental and Conservation Sciences [Arts or Science], Genetics, Histology, Immunology, Marine Science, Microbiology, Paleontology, Physiology, Plant Science, Renewable Resources, Zoology <div style="text-align: center;">[NO CHANGES UNTIL]</div> Chemistry (★18) ★6 Chemistry ★12 Chemistry (including Biochemistry; Biophysics ; Chemistry; Earth and Atmospheric Sciences; Environmental and Conservation Sciences; Pharmacology; Physics; Renewable Resources) <div style="text-align: center;">[NO CHANGES UNTIL]</div>

General Sciences (★18)

★6 Biology and/or Anatomy, Animal Sciences, Bioinformatics, Botany, Cell Biology, Earth and Atmospheric Sciences, Entomology, Environmental and Conservation Sciences (Science), Forestry, Genetics, Histology, Immunology, Marine Science, Microbiology, Paleontology, Pharmacology, Physiology, Plant Science, Renewable Resources, Soil Science, Zoology

★6 Chemistry and/or Biochemistry

★6 Physics and/or Mathematical Physics, Mathematical Sciences, Mathematics, Physics courses from the Engineering discipline

[NO CHANGES UNTIL]

Physical Sciences (★18)

★6 Chemistry

★12 Physical Sciences chosen from Astronomy, Biochemistry, Chemistry, Earth and Atmospheric Sciences (Science), Environmental and Conservation Sciences, Geophysics, Mathematical Physics, Physics or Renewable Resources

[NO CHANGES UNTIL]

Physics (★18)

★6 Physics

★12 Physical Sciences chosen from Astronomy, Biochemistry, Chemistry, Earth and Atmospheric Sciences (Science), Environmental and Conservation Sciences, Geophysics, Mathematical Physics, Physics or Renewable Resources

[NO FURTHER CHANGES]

General Sciences (★18)

★6 Biology and/or Anatomy, Animal Sciences, Bioinformatics, **Biophysics**, Botany, Cell Biology, Earth and Atmospheric Sciences, Entomology, Environmental and Conservation Sciences (Science), Forestry, Genetics, Histology, Immunology, Marine Science, Microbiology, Paleontology, Pharmacology, Physiology, Plant Science, Renewable Resources, Soil Science, Zoology

★6 Chemistry and/or Biochemistry

★6 Physics and/or Mathematical Physics, Mathematical Sciences, Mathematics, Physics courses from the Engineering discipline

[NO CHANGES UNTIL]

Physical Sciences (★18)

★6 Chemistry

★12 Physical Sciences chosen from Astronomy, Biochemistry, **Biophysics**, Chemistry, Earth and Atmospheric Sciences (Science), Environmental and Conservation Sciences, Geophysics, Mathematical Physics, Physics or Renewable Resources

[NO CHANGES UNTIL]

Physics (★18)

★6 Physics

★12 Physical Sciences chosen from Astronomy, Biochemistry, **Biophysics**, Chemistry, Earth and Atmospheric Sciences (Science), Environmental and Conservation Sciences, Geophysics, Mathematical Physics, Physics or Renewable Resources

[NO FURTHER CHANGES]

Justification: (Note: A detailed justification must be provided except in the case of a course deletion or editorial change). If more than one change is submitted be sure to indicate the **course number** that applies to your explanation.

Biophysics (BIOPH) is a new course descriptor being added by the Faculty of Science. These new BIOPH courses are being added as options for the Biological Sciences, Chemistry, General Sciences, Physical Sciences, and Physics after degree minors in Education Chart 4.

Submitted by:	Signature of Department	Date:	FACULTY USE ONLY	
			Approval Process	Date

Jason Wallin	Chair or Designee	January 15, 2021	<input checked="" type="checkbox"/> Academic Affairs Jan 28, 2021
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**FACULTY OF EDUCATION
CALENDAR CHANGE REQUEST FORM**

Department: **Secondary Education**

Implementation: NORMAL
 EARLY (Note: new course offerings only)

Type of Change: Program Regulation*
 New Course*† Course Change
 Course Deletion Editorial

**Documentation is required to verify that other units in the Faculty of Education or other Faculties impacted by the proposal have no objection to the proposed new course or course change. Applicable: Yes No*


†**Attachments:** Course Outline
 KSA (Knowledge, skills and Attributes) Rating Sheets
(Completed by course developers and instructors)

CURRENT	PROPOSED
Calendar Section Number (§) Education Chart 2, taken from: https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37536 <i>(Use strike out for all changes)</i>	Calendar Section Number (§) Education Chart 2, taken from: https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37536 <i>(Underline all additions)</i>
Indigenous Curriculum and Pedagogy (★18) [Education]	Indigenous Curriculum and Pedagogy (★18) [Education]
Requirements	Requirements
Non-Education (★9)	Non-Education (★9)
Note: A minimum of ★3 must be chosen from NS 110, NS 111, or NS 200.	Note: A minimum of ★3 must be chosen from NS 110, NS 111, or NS 200.
★9 chosen from	★9 chosen from
<ul style="list-style-type: none"> • ANTHR 150 - Race and Racism • ANTHR 207 - Introduction to Social and Cultural Anthropology • ANTHR 323 • ANTHR 350 - Kinship and Social Structure • ANTHR 385 - Topics in Social Cultural Anthropology • ANTHR 393 - Health and Healing • ANTHR 301 - Introduction to Ethnographic Methods • ANTHR 422 • ANTHR 424 - Visual Anthropology 	<ul style="list-style-type: none"> • ANTHR 150 - Race and Racism • ANTHR 207 - Introduction to Social and Cultural Anthropology • ANTHR 323 • ANTHR 350 - Kinship and Social Structure • ANTHR 385 - Topics in Social Cultural Anthropology • ANTHR 393 - Health and Healing • ANTHR 301 - Introduction to Ethnographic Methods • ANTHR 422 • ANTHR 424 - Visual Anthropology

<ul style="list-style-type: none"> • ANTHR 436 • ANTHR 438 • HIST 368 - History of the Native Peoples of Canada to 1867 • HIST 369 - History of the Native Peoples of Canada Since 1867 • NS 110 - Historical Perspectives in Indigenous Studies • NS 111 - Contemporary Perspectives in Indigenous Studies • NS 152 - Introductory Cree • NS 200 - Indigenous Canada: Looking Forward/Looking Back • NS 260 - Contemporary Indigenous Art • NS 300 - Traditional Cultural Foundations I • NS 314 - History of First Nations of Western Canada • NS 320 - Indigenous Politics and Diplomacy • POL S 327 - Aboriginal Peoples and Politics in Canada • SOC 367 <p style="text-align: center;">[NO FURTHER CHANGES]</p>	<ul style="list-style-type: none"> • ANTHR 436 • ANTHR 438 • HIST 368 - History of the Native Peoples of Canada to 1867 • HIST 369 - History of the Native Peoples of Canada Since 1867 • NS 110 - Historical Perspectives in Indigenous Studies • NS 111 - Contemporary Perspectives in Indigenous Studies • NS 115 - Indigenous Peoples and Technoscience • NS 152 - Introductory Cree • NS 161 - Countering Stereotypes of Indigenous Peoples • NS 200 - Indigenous Canada: Looking Forward/Looking Back • NS 260 - Contemporary Indigenous Art • NS 300 - Traditional Cultural Foundations I • NS 314 - History of First Nations of Western Canada • NS 320 - Indigenous Politics and Diplomacy • POL S 327 - Aboriginal Peoples and Politics in Canada • SOC 367 <p style="text-align: center;">[NO FURTHER CHANGES]</p>
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Justification: (Note: A detailed justification must be provided except in the case of a course deletion or editorial change). If more than one change is submitted be sure to indicate the **course number** that applies to your explanation.

Rationale: Adding NS 115 and NS 161 as options. These are two new courses being offered by the Faculty of Native Studies.

Submitted by: Jason Wallin	Signature of Department Chair or Designee 	Date: January 15, 2021	FACULTY USE ONLY Approval Process Date <input checked="" type="checkbox"/> Academic Affairs Jan 28, 2021
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FACULTY OF EDUCATION CALENDAR CHANGE REQUEST FORM

Department: **Secondary Education**

Implementation: NORMAL
 EARLY (Note: new course offerings only)

Type of Change: Program Regulation*
 New Course*† Course Change
 Course Deletion Editorial


**Documentation is required to verify that other units in the Faculty of Education or other Faculties impacted by the proposal have no objection to the proposed new course or course change.* Applicable: Yes No

†**Attachments:** Course Outline
 KSA (Knowledge, skills and Attributes) Rating Sheets
 (Completed by course developers and instructors)

CURRENT	PROPOSED
<p style="text-align: center;">Calendar Section Number (§) Education Chart 3, taken from https://calendar.ualberta.ca/content.php?catoid=33&navoid=10046#career-and-technology-studies-human-sciences-hrh-nutrition-route-without-degree-in-nutrition-or-journey-certificate <i>(Use strike out for all changes)</i></p>	<p style="text-align: center;">Calendar Section Number (§) Education Chart 3, taken from https://calendar.ualberta.ca/content.php?catoid=33&navoid=10046#career-and-technology-studies-human-sciences-hrh-nutrition-route-without-degree-in-nutrition-or-journey-certificate <i>(Underline all additions)</i></p>
<p>Education Chart 3 – After Degree Majors</p> <p>Career and Technology Studies: Human Sciences (HRH) NUTRITION Route WITHOUT degree in Nutrition, or Journey Certificate (★36)</p> <p>Students not presenting an approved Degree with a Major in Nutrition or an approved 3 or 4 year degree and Journey Certificate for Chef/Cook, Baker will need to present 36 credits in the following Categories for the CTS: Human Sciences Major in Secondary Education prior to graduation from the program:</p> <ol style="list-style-type: none"> 1. ★3 EDSE 495 2. ★3 Health Education 3. ★18 in Nutrition, and Nutrition and Food Studies with a maximum of 6 credits from introductory courses 4. ★12 chosen from Category 2 or chosen from Education Chart 2 Career and Technology Studies Minor Requirements <p style="text-align: center;">[NO FURTHER CHANGES]</p>	<p>Education Chart 3 – After Degree Majors</p> <p>Career and Technology Studies: Human Sciences (HRH) NUTRITION Route WITHOUT degree in Nutrition, or Journey Certificate (★36)</p> <p>Students not presenting an approved Degree with a Major in Nutrition or an approved 3 or 4 year degree and Journey Certificate for Chef/Cook, Baker will need to present 36 credits in the following Categories for the CTS: Human Sciences Major in Secondary Education prior to graduation from the program:</p> <ol style="list-style-type: none"> 1. ★3 EDSE 495 2. ★3 Health Education 3. ★18 in Nutrition, and Nutrition and Food Studies with a maximum of 12 credits from introductory courses 4. ★12 chosen from Category 2 or chosen from Education Chart 2 Career and Technology Studies Minor Requirements <p style="text-align: center;">[NO FURTHER CHANGES]</p>

Justification: *(Note: A detailed justification must be provided except in the case of a course deletion or editorial change). If more than one change is submitted be sure to indicate the **course number** that applies to your explanation.*

The 6-credit maximum of introductory courses for Category 3 is creating issues for after-degree applicants/students as they navigate their programs. The change to increase this maximum from 6 to 12 credits will benefit students who choose this major for their after-degree program.

Submitted by: Jason Wallin	Signature of Department Chair or Designee 	Date: January 15, 2021	FACULTY USE ONLY Approval Process Date <input checked="" type="checkbox"/> Academic Affairs Jan 28, 2021
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FACULTY OF EDUCATION CALENDAR CHANGE REQUEST FORM

Department: **Secondary Education**

Implementation: NORMAL
 EARLY (Note: new course offerings only)

Type of Change: Program Regulation*
 New Course*† Course Change
 Course Deletion Editorial

**Documentation is required to verify that other units in the Faculty of Education or other Faculties impacted by the proposal have no objection to the proposed new course or course change.* Applicable: Yes No


†**Attachments:** Course Outline
 KSA (Knowledge, skills and Attributes) Rating Sheets
(Completed by course developers and instructors)

CURRENT	PROPOSED
Calendar Section Number (§) Education Chart 3, taken from https://calendar.ualberta.ca/content.php?catoid=33&navoid=10047#english-language-arts <i>(Use strike out for all changes)</i>	Calendar Section Number (§) Education Chart 3, taken from https://calendar.ualberta.ca/content.php?catoid=33&navoid=10047#english-language-arts <i>(Underline all additions)</i>
Education Chart 4 – After Degree Minors English Language Arts (★18) ★6 Junior English or ★3 JR ENGL and ★3 Writing Studies ★9 from Senior English, Senior Comparative Literature, Film Studies, or Library & Information Studies ★3 in senior level Composition and Language NOTES: No more than ★12 in this Minor may be taken at the 100-level and no more than ★6 of the ★12 credits in 100 level English. Note Students must take EDSE 328 which is normally offered in the Fall and Winter Terms.	Education Chart 4 – After Degree Minors English Language Arts (★18) ★6 Junior English or ★3 JR ENGL and ★3 Writing Studies ★9 from Senior English, Senior Comparative Literature, Film Studies, or Library & Information Studies ★3 in senior level Composition and Language or ★3 from LING NOTES: No more than ★12 in this Minor may be taken at the 100-level and no more than ★6 of the ★12 credits in 100 level English. Note Students must take EDSE 328 which is normally offered in the Fall and Winter Terms.

Justification: (Note: A detailed justification must be provided except in the case of a course deletion or editorial change). If more than one change is submitted be sure to indicate the **course number** that applies to your explanation.

The current listing of category 3 prevents students from using a junior-level LING course which in many cases would then require that students have extra to degree courses, as junior-level LING courses are prereqs for senior-level LING courses. This change allows students to meet this requirement with a

junior level LING course.

Submitted by: Jason Wallin	Signature of Department Chair or Designee 	Date: January 15, 2021	FACULTY USE ONLY Approval Process Date <input checked="" type="checkbox"/> Academic Affairs Jan <u>28</u> , 2021
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**FACULTY OF EDUCATION
CALENDAR CHANGE REQUEST FORM**

Department: **Secondary Education**

Implementation: NORMAL
 EARLY (Note: new course offerings only)

Type of Change: Program Regulation*
 New Course*† Course Change
 Course Deletion Editorial

**Documentation is required to verify that other units in the Faculty of Education or other Faculties impacted by the proposal have no objection to the proposed new course or course change.* Applicable: Yes No

†**Attachments:** Course Outline
 KSA (Knowledge, skills and Attributes) Rating Sheets
(Completed by course developers and instructors)

CURRENT	PROPOSED
<p>Calendar Section Number (§) Secondary Education BMus/BEEd Combined Degree, taken from: https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37527 <i>(Use strike out for all changes)</i></p>	<p>Calendar Section Number (§) Secondary Education BMus/BEEd Combined Degree, taken from: https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37527 <i>(Underline all additions)</i></p>
<p>BMus/BEEd (Secondary) [Education] Program Requirements</p> <p>Note: Years 1, 2, and 3 are completed in the Faculty of Arts. Years 4 and 5 are completed in the Faculty of Education. This information may also be found in BMus/BEEd (Secondary) [Arts].</p> <p>Year 1 (★33) Taken in the Faculty of Arts</p> <ul style="list-style-type: none"> • Approved junior ENGL (★6) • MUSIC 125 - Applied Music • MUSIC 102 - Introduction to World Music See Notes Below OR • MUSIC 129 - Fundamental Keyboard Skills See Notes Below • MUSIC 140 - Choral Ensemble OR • MUSIC 141 - Instrumental Ensemble • MUSIC 151 - Aural and Keyboard Skills I • MUSIC 155 - Music Theory I • MUSIC 156 - Music Theory II 	<p>BMus/BEEd (Secondary) [Education] Program Requirements</p> <p>Note: Years 1, 2, and 3 are completed in the Faculty of Arts. Years 4 and 5 are completed in the Faculty of Education. This information may also be found in BMus/BEEd (Secondary) [Arts].</p> <p>Year 1 (★33) Taken in the Faculty of Arts</p> <ul style="list-style-type: none"> • Approved junior ENGL (★6) • MUSIC 125 - Applied Music • MUSIC 129 - Fundamental Keyboard Skills See Notes Below OR • MUSIC 186 - Musical Life in the Contemporary World • MUSIC 140 - Choral Ensemble OR • MUSIC 141 - Instrumental Ensemble • MUSIC 151 - Aural and Keyboard Skills I • MUSIC 155 - Music Theory I • MUSIC 156 - Music Theory II

- Minor: choose any course from the specific teaching minor (★6)

Notes

1. MUSIC 129 must be taken by those students who have failed the Piano Proficiency Examination.
2. ~~MUSIC 102 must be taken by those students who have passed the Piano Proficiency Examination.~~

Year 2 (★33) Taken in the Faculty of Arts

- EDU 100 - Contexts of Education
- ~~MUSIC 102 - Introduction to World Music~~
- MUSIC 225 - Applied Music
- MUSIC 245 - Introduction to Music Technologies
- MUSIC 251 - Aural and Keyboard Skills II
- MUSIC 255 - Music Theory III
- MUSIC 256 - Music Theory IV
- MUSIC 440 - Choral Ensemble **OR**
- MUSIC 441 - Instrumental Ensemble
- Second Language: choose from any one language other than English (★6)

- Minor: choose any course from the specific teaching minor (★6)

Notes

1. MUSIC 129 must be taken by those students who have failed the Piano Proficiency Examination.

Year 2 (★33) Taken in the Faculty of Arts

- EDU 100 - Contexts of Education
- **MUSIC 186 - Musical Life in the Contemporary World **OR****
- **MUSIC option (★3) See Notes Below**
- MUSIC 225 - Applied Music
- MUSIC 245 - Introduction to Music Technologies
- MUSIC 251 - Aural and Keyboard Skills II
- MUSIC 255 - Music Theory III
- MUSIC 256 - Music Theory IV
- MUSIC 440 - Choral Ensemble **OR**
- MUSIC 441 - Instrumental Ensemble
- Second Language: choose from any one language other than English (★6) **OR MUSIC, Arts, or Science Option (★6) See Notes Below**

Notes

1. **MUSIC 186 must be taken by those students who have failed the Piano Proficiency Examination.**
2. **MUSIC option: must be taken by those students who have passed the Piano Proficiency Examination.**
3. **The Language Other than English (★6) requirement can be replaced with MUSIC, Arts, or Science Option (★6) for students who have:**
 - a. **successfully completed a**

Language Other than English at the 30-level (or equivalent), or
b. been required to take an English Language Proficiency test for admission

Year 3 (★33) Taken in the Faculty of Arts

- EDU 211 - Aboriginal Education and Contexts for Professional and Personal Engagement
- MUSIC 213 - Woodwind Techniques
- MUSIC 214 - Brass Techniques
- MUSIC 215 - Percussion Techniques
- ~~MUSIC 280 - Introduction to the Study of Western Music History~~
- MUSIC 315 - Introduction to Conducting
- MUSIC 425 - Applied Music
- ~~MUSIC option (★3)~~
- ~~EDSE 3XX (minor) (★3)~~
- Minor: choose any course from the specific Teaching minor (★3)

Year 4 ~~and 5~~ (★63) Taken in the Faculty of Education

Students should refer to their individual Program Sheet for proper course sequencing.

~~Course Requirements (★33):~~

- ~~MUSIC 230 - Choral Techniques and Pedagogy~~
- ~~MUSIC 440 - Choral Ensemble OR~~
- ~~MUSIC 441 - Instrumental Ensemble~~
- ~~MUSIC 103 - Introduction to Popular Music OR~~
- ~~MUSIC 206 - History of Jazz OR~~
- ~~MUSIC 314 - Music in Canada OR~~
- ~~MUSIC 365 - Topics in Ethnomusicology~~
- ~~MUSIC 283 - Western Art Music, 1600-1850~~

Year 3 (★33) Taken in the Faculty of Arts

- EDU 211 - Aboriginal Education and Contexts for Professional and Personal Engagement
- MUSIC 213 - Woodwind Techniques
- MUSIC 214 - Brass Techniques
- MUSIC 215 - Percussion Techniques
- MUSIC 283 - Western Art Music, Medieval-1750
- MUSIC 315 - Introduction to Conducting
- MUSIC 425 - Applied Music
- MUSIC 218 Guitar, Bass, and Ukulele Techniques OR
- MUSIC 301 Music Pedagogy I
- MUSIC 440 - Choral Ensemble OR
- MUSIC 441 - Instrumental Ensemble
- Minor: choose any course from the specific Teaching minor (★3)

Year 4 (★33) Taken in the Faculty of Education

Students should refer to their individual Program Sheet for proper course sequencing.

- MUSIC 284 - Western Art Music, 1850-present
- MUSIC 416 - Instrumental Conducting
- MUSIC 417 - Choral Conducting and Pedagogy
- EDPS 410 - Ethics and Law in Teaching
- EDPY 301 - Introduction to Inclusive Education: Adapting Classroom Instruction for Students with Special Needs
- EDPY 304 - Adolescent Development and Learning
- EDSE 3XX(minor) (★3)
- Minor: choose any courses from the specific Teaching minor (★9)

~~OR~~

- ~~• MUSIC 284 - Western Art Music, 1850-present~~
- ~~• MUSIC 416 - Instrumental Conducting OR~~
- ~~• MUSIC 417 - Choral Conducting and Pedagogy OR~~
- ~~• MUSIC 431 - Band Techniques~~

- ~~• EDPS 410 - Ethics and Law in Teaching~~
- ~~• EDPY 301 - Introduction to Inclusive Education: Adapting Classroom Instruction for Students with Special Needs~~
- ~~• EDPY 304 - Adolescent Development and Learning~~
- ~~• Minor: choose any courses from the specific Teaching minor (★9)~~

Field Experience Terms (★30)

Courses taken in the Field Experience Terms are normally taken concurrently.

Introductory Professional Term (★15)

- EDFX 350 - Secondary Route Field Experience for the Introductory Professional Term
- EDPY 303 - Educational Assessment
- EDSE 307 - Language, Literacy and Society in Educational Contexts
- EDSE 343 - Curriculum and Teaching Music in the Secondary School: Wind Band I

Advanced Professional Term (★15)

- EDFX 450 - Secondary Route: Advanced Field Experience
- EDSE 443 - Curriculum and Teaching for Secondary School Music: Wind Band II
- EDSE 451 - Integrating Theory and Classroom Practice in the Advanced Professional Term

- **One of:**

MUSIC 103 - Introduction to Popular Music
MUSIC 206 - History of Jazz
MUSIC 314 - Music in Canada
MUSIC 365 - Topics in Ethnomusicology

Year 5 (★30) Taken in the Faculty of Education

Field Experience Terms (★30)

Courses taken in the Field Experience Terms are normally taken concurrently.

Introductory Professional Term (★15) [Must take this in Fall Term]


- EDFX 350 - Secondary Route Field Experience for the Introductory Professional Term
- EDPY 303 - Educational Assessment
- EDSE 307 - Language, Literacy and Society in Educational Contexts
- EDSE 343 - Curriculum and Teaching Music in the Secondary School: Wind Band I

Advanced Professional Term (★15) [Must take this in Winter Term]

- EDFX 450 - Secondary Route: Advanced Field Experience
- EDSE 443 - Curriculum and Teaching for Secondary School Music: Wind Band II
- EDSE 451 - Integrating Theory and Classroom Practice in the Advanced Professional Term

Justification: (Note: A detailed justification must be provided except in the case of a course deletion or editorial change). If more than one change is submitted be sure to indicate the **course number** that applies to your explanation.

Rationale: The changes proposed here are the result of a curriculum review process, with multiple meetings held over the 2018-2020 academic years involving all members of the Department of Music faculty, students, and representatives from the Faculty of Education and the Edmonton Public Schools curriculum office. These changes are also be done for the corresponding information that is listed under the Arts Faculty for the combined BMus/BEEd program.

Submitted by: Jason Wallin	Signature of Department Chair or Designee 	Date: January 15, 2021	FACULTY USE ONLY Approval Process Date <input checked="" type="checkbox"/> Academic Affairs Jan 28, 2021
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Withdrawal of Faculty of Education Changes approved by GFC Programs Committee on January 14, 2021

<p style="text-align: center;">CURRENT</p> <p style="text-align: center;">https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37877 (Use yellow highlight and strike out for all changes)</p>	<p style="text-align: center;">PROPOSED</p> <p style="text-align: center;">https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37877 (Use <u>yellow highlight and underline</u> all additions)</p>
<p>Certificate in Digital Learning Requirements (★15)</p> <p>*3 EDET 421 Technologies for Teaching</p> <p>*3 EDET 422 Social Justice Issues for Technology in Education</p> <p>*3 EDET 423 Online Pedagogy</p> <p>*3 EDET 424 Project-Based Learning with Educational Technology</p> <p>*3 EDET 425 Special Topics in Educational Technology</p> <p>For more information Contact the Professional Learning Unit in the Faculty of Education or visit ualberta.ca/education/professional-learning.</p>	<p>Certificate in Digital Learning Requirements (★15)</p> <p>*3 <u>EDU</u> 421 Technologies for Teaching</p> <p>*3 <u>EDU</u> 422 Social Justice Issues for Technology in Education</p> <p>*3 <u>EDU</u> 423 Online Pedagogy</p> <p>*3 <u>EDU</u> 424 Project-Based Learning with Educational Technology</p> <p>*3 <u>EDU</u> 425 Special Topics in Educational Technology</p> <p>For more information Contact the Professional Learning Unit in the Faculty of Education or visit ualberta.ca/education/professional-learning.</p>

Rationale:

- When attempting to implement the above changes to the requirements for the Digital Learning Certificate, the Calendar Editor found that they were in error and could not be updated in the Calendar.

-The Faculty was contacted and upon discussion, the best solution was determined to be withdrawal of the changes.

-The changes were withdrawn on March 1, 2021 and the final motions were revised:

<https://www.ualberta.ca/governance/media-library/documents/member-zone/gfc-standing-committees/pc-motions/2021-01-14-pc-motions-revised.pdf>

CALENDAR CHANGE REQUEST FORM

 Department: **Occupational Therapy (2021-2022)**

Highlight type of change request below:

- 1.
- Course Change**
2. Editorial Change 3. Admission Requirement 4. Program Regulation


CURRENT	PROPOSED
<p>Strike through and highlight deletions</p> <p>OCCTH 566 – <u>Research and Scholarly Practice</u></p> <p>★ 4 (fi 8) (either term, 2-2s-0) Critical thinking, assessing, evaluating and synthesizing the evidence for occupational therapy and a review of evidence generation methodologies and research design. Understanding and application of principles of knowledge translation as it relates to the healthcare and the profession of occupational therapy.</p> <p>*NEW*</p>	<p><u>Underline and highlight</u> additions</p> <p>OCCTH 566 – Research and Scholarly Practice <u>1</u></p> <p><u>★ 2 (fi 4) (either term, 1-1s-0) The theory-research-practice nexus; skills for inquiry-based learning and evidence-based practice; acquiring, interpreting and applying best evidence for safe, ethical and effective occupational therapy practice.</u></p> <p><u>OCCTH 568 – Research and Scholarly Practice 2</u></p> <p><u>★ 2 (fi 4) (either term, 1-1s-0) Critical inquiry and anti-oppressive practice; critically situating and politicizing occupation and occupational therapy; community-engaged research and socially transformative action.</u></p>

Rationale for change: (Not required for course deletion or editorial changes)

Original OCCTH 566 *4 credit course divided into 2 course OCCTH 566, 568. OCCTH 566 will be reduced to 2 credits and a new course 568 will be created. The change will allow integration of research methods and critical inquiry within occupational therapy practice courses. Course title and credit change to reflect curriculum changes to be more focused on evidence-informed practice and research methods.

All names, signatures and dates are required:

Department Contact Name: Shaniff Esmail	Department Chair or Designate Name: Mary Forhan	Date approved by Dept Council: February 19, 2021 Date approved by FRM Executive Committee: March 23, 2021
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Email: shesmail@ualberta.ca	Signature: 	Date Submitted: March 24, 2021
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Email a signed PDF and an editable word version to noriko.hessmann@ualberta.ca

CALENDAR CHANGE REQUEST FORM

 Department: **Occupational Therapy (2021-2022)**

Highlight type of change request below:

- 1.
- Course Change**
- 2.
- Editorial Change**
- 3.
- Admission Requirement**
- 4.
- Program Regulation**

CURRENT	PROPOSED
<p>Strike through and highlight deletions</p> <p>Occupational Therapy [Graduate]</p> <p>[...]</p> <p>The Degree of MSc (Occupational Therapy) [Graduate]</p> <p>[...]</p> <p>MSc course-based entry-level stream</p> <p>Students are required to complete ★90 in coursework, including ★3 of approved interprofessional coursework, field placements, and a ★6 final project.</p> <p>Orientation Program: The program requires that each student, after acceptance into the program, attend a department orientation program immediately before the beginning of the first term. Dates are confirmed on admission. Attendance at the orientation program is a prerequisite for first year courses. Normally students must complete all previous term/year courses to be eligible to proceed to the subsequent term/year. It is imperative that registered students attend all listed hours of instruction. Students with absences will receive a grade of NC (failure, no grade point value assigned).</p> <p>Course requirements (★90)</p> <p>OCCTH 502 - Assessment and Evaluation of Occupational Performance</p>	<p><u>Underline and highlight</u> additions</p> <p>Occupational Therapy [Graduate]</p> <p>[...]</p> <p>The Degree of MSc (Occupational Therapy) [Graduate]</p> <p>[...]</p> <p>MSc course-based entry-level stream</p> <p>Students are required to complete ★90 in coursework, including ★3 of approved interprofessional coursework, field placements, and a ★6 final project.</p> <p>Orientation Program: The program requires that each student, after acceptance into the program, attend a department orientation program immediately before the beginning of the first term. Dates are confirmed on admission. Attendance at the orientation program is a prerequisite for first year courses. Normally students must complete all previous term/year courses to be eligible to proceed to the subsequent term/year. It is imperative that registered students attend all listed hours of instruction. Students with absences will receive a grade of NC (failure, no grade point value assigned).</p> <p>Course requirements (★90)</p> <p>OCCTH 502 - Assessment and Evaluation of Occupational Performance</p>

OCCTH 503 - Professionalism and the Intentional Relationship in Practice
OCCTH 507 - Occupation and Society: Theory and Practice
OCCTH 510 - Occupational Therapy Process and Practice: Application
OCCTH 517 - Foundations of Psychiatry and Mental Health Practice for Occupational Therapists
OCCTH 518 - Assessment and Interventions for Occupational Therapists in Mental Health Practice
OCCTH 519 - Enabling Occupation: Advanced Practices in Mental Health
OCCTH 520 - Occupational Therapy Process and Practice: Integration
OCCTH 522 - Enabling Occupation Through the Use of Assistive Technology
OCCTH 525 - Fieldwork-Learning in a Practice Context
OCCTH 526 - Fieldwork - Learning in a Practice Context
OCCTH 527 - Fieldwork-Learning in a Practice Context
OCCTH 528 - Fieldwork - Learning in a Practice Context
OCCTH 530 - Occupational Therapy Process and Practice: Synthesis
OCCTH 540 - Occupational Therapy Process and Practice: Evaluation
OCCTH 543 - Student Selected Modules All students must complete and pass either a minimum of three distinct OCCTH 543 modules or one ★3 Individual Study (OCCTH 599 or equivalent). The modules are designed to be intensive and interactive.
OCCTH 544 – Applied Assessment and Intervention Approaches in Occupational Therapy
OCCTH 550 – Occupational Therapy Process and Practice: Transition
OCCTH 555 - Enabling Occupation and Participation for Children and Youth
OCCTH 556 - Enabling Occupation and Participation for Older Adults
OCCTH 558 - Enabling Occupation: Community
OCCTH 559 - Enabling Occupation: Productivity
OCCTH 566 – Research and Scholarly Practice


OCCTH 583 - Influences on Occupational Performance: Human Systems I: Structure, Function and Conditions
OCCTH 584 - Influences on Occupational Performance: Human Systems II: Conditions and Interventions

OCCTH 503 - Professionalism and the Intentional Relationship in Practice
OCCTH 507 - Occupation and Society: Theory and Practice
OCCTH 510 - Occupational Therapy Process and Practice: Application
OCCTH 517 - Foundations of Psychiatry and Mental Health Practice for Occupational Therapists
OCCTH 518 - Assessment and Interventions for Occupational Therapists in Mental Health Practice
OCCTH 519 - Enabling Occupation: Advanced Practices in Mental Health
OCCTH 520 - Occupational Therapy Process and Practice: Integration
OCCTH 522 - Enabling Occupation Through the Use of Assistive Technology
OCCTH 525 - Fieldwork-Learning in a Practice Context
OCCTH 526 - Fieldwork - Learning in a Practice Context
OCCTH 527 - Fieldwork-Learning in a Practice Context
OCCTH 528 - Fieldwork - Learning in a Practice Context
OCCTH 530 - Occupational Therapy Process and Practice: Synthesis
OCCTH 540 - Occupational Therapy Process and Practice: Evaluation
OCCTH 543 - Student Selected Modules All students must complete and pass either a minimum of three distinct OCCTH 543 modules or one ★3 Individual Study (OCCTH 599 or equivalent). The modules are designed to be intensive and interactive.
OCCTH 544 – Applied Assessment and Intervention Approaches in Occupational Therapy
OCCTH 550 – Occupational Therapy Process and Practice: Transition
OCCTH 555 - Enabling Occupation and Participation for Children and Youth
OCCTH 556 - Enabling Occupation and Participation for Older Adults
OCCTH 558 - Enabling Occupation: Community
OCCTH 559 - Enabling Occupation: Productivity
OCCTH 566 – Research and Scholarly Practice¹
OCCTH 568 – Research and Scholarly Practice²
OCCTH 583 - Influences on Occupational Performance: Human Systems I: Structure, Function and Conditions
OCCTH 584 - Influences on Occupational Performance: Human Systems II: Conditions and Interventions

<p>OCCTH 585 - Influences on Occupational Performance: Human Systems III: Theory and Practice in Neurology</p> <p>[...]</p> <p>Capping Exercise (★6)</p> <p>OCCTH 906 – Final Directed Project: Program Development and Evaluation</p>	<p>OCCTH 585 - Influences on Occupational Performance: Human Systems III: Theory and Practice in Neurology</p> <p>[...]</p> <p>Capping Exercise (★6)</p> <p>OCCTH 906 – Final Directed Project: Program Development and Evaluation</p>
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Rationale for change: (Not required for course deletion or editorial changes)
Updated course requirement list to reflect the new course changes including additions/deletions.

All names, signatures and dates are required:

<p>Department Contact Name: Shaniff Esmail</p>	<p>Department Chair or Designate Name: Mary Forhan</p>	<p>Date approved by Dept Council: February 19, 2021 Date approved by FRM Executive Committee: March 23, 2021</p>
<p>Email: shesmail@ualberta.ca</p>	<p>Signature:</p> 	<p>Date Submitted: March 24, 2021</p>

Email a signed PDF and an editable word version to noriko.hessmann@ualberta.ca

**Centre Collégial de l'Alberta
Faculté Saint-Jean
Calendar Change Request**

CURRENT	PROPOSED
<p>TAAFI 242 - Financement des sociétés *3 (fi 6) (l'un ou l'autre semestre, variable) Le cours de finance corporative examine les décisions financières et d'investissement du point de vue de l'entreprise. Les marchés financiers, le compromis entre risque et rendement, le coût de l'entreprise de capital, les décisions de budgétisation des investissements, les décisions de gestion de capitaux et les marchés de produits dérivés font partie intégrante de l'évaluation des actifs financiers. C'est le champ d'application de la finance d'entreprise. Préalables : TAATC120, TAATC121, TAATC110, TAATC111, TAATC140.</p>	<p>TAAFI 242 - Finance d'entreprise *3 (fi 6) (l'un ou l'autre semestre, variable) Le cours de finance corporative examine les décisions financières et d'investissement du point de vue de l'entreprise. Les marchés financiers, le compromis entre risque et rendement, le coût de l'entreprise de capital, les décisions de budgétisation des investissements, les décisions de gestion de capitaux et les marchés de produits dérivés font partie intégrante de l'évaluation des actifs financiers. C'est le champ d'application de la finance d'entreprise. Préalables : TAATC120, TAATC121, TAATC110, TAATC111, TAATC140.</p>
<p>EPE 250 - Stage III *5 (fi 10) (l'un ou l'autre semestre, 11-3.5-0) Ce stage permettra à l'étudiant d'observer des enfants qui ont des besoins particuliers et à proposer, en collaboration avec l'équipe d'éducateurs, des stratégies permettant l'inclusion de l'enfant dans le programme. Préalables : EPE 151 et avoir réussi un minimum de 30* de cours siglés EPE.</p>	<p>EPE 250 - Stage III *5 (fi 10) (l'un ou l'autre semestre, 11-3.5-0) Ce stage permettra à l'étudiant d'observer des enfants qui ont des besoins particuliers et à proposer, en collaboration avec l'équipe d'éducateurs, des stratégies permettant l'inclusion de l'enfant dans le programme. <u>Préalable: EPE 151.</u></p>
<p>Rationale for Proposal:</p> <p>TAAFI 242: The name of the course is being revised to be consistent with the language of financial theory. EPE 250 : There is redundancy in the prerequisites of EPE 151 and EPE 250 and modify the prerequisite of EPE 250 will eliminate this redundancy.</p>	
<p>Approved : February 18, 2021 by the Comité exécutif du Centre Collégial de l'Alberta.</p>	



CALENDAR CHANGE REQUEST FORM

Department: CHEMISTRY

Highlight type of change request below:

1. **Course Change** (new course, change to existing course, course deletion) 2. **Editorial Change** (basic editing) 3. **Admission Requirement** 4. **Program Change**

CURRENT	PROPOSED
https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37126&returnto=9991	
<p>Honors students in Chemistry must take a core of Chemistry and auxiliary courses. The core consists of ★45 in Chemistry courses, ★12 in Mathematics courses, ★6 in Physics courses, ★3 in BIOCH 200, ★3 in CHEM 401, ★6 in a junior ENGL or ★3 in ENGL and ★3 in Arts option, and ★12 in Arts options. In addition to the core courses, honors students must complete at least ★18 in senior courses in Chemistry from the courses listed below, with ★6 of these taken at the 400-level. If a student participates in the Science Internship Program, this student may choose to complete ★18 in senior courses in Chemistry as given in the previous statement, or to complete senior courses from Chemistry as follows: ★15 in senior courses in Chemistry from the courses listed below, with ★6 of these taken at the 400-level. Finally, the honors student must include ★15 in options in the third and fourth years of the program. These are normally chosen from offerings within the Faculty of Science (see details of courses). All options must be selected in consultation with the Department of Chemistry.</p> <p>Continuation in the Honors in Chemistry program requires successful completion of at least ★24 with a minimum 3.0 GPA and a minimum 3.0 GPA on all CHEM courses completed in the previous Fall/Winter. In addition, graduation requires a minimum 3.0 GPA on the last ★90 credited to the degree.</p> <p>The Honors Chemistry degree is accredited by the Canadian Society for Chemistry.</p>	<p>Honors students in Chemistry must take a core of Chemistry and auxiliary courses. The core consists of ★45 in Chemistry courses, ★12 in Mathematics courses, ★6 in Physics courses, ★3 in BIOCH 200, ★3 in CHEM 401, ★6 in a junior ENGL or ★3 in ENGL and ★3 in Arts option, and ★12 in Arts options. In addition to the core courses, honors students must complete at least ★18 in senior courses in Chemistry from the courses listed below, with ★6 of these taken at the 400-level. Finally, the honors student must include ★15 in options in the third and fourth years of the program. These are normally chosen from offerings within the Faculty of Science (see details of courses). All options must be selected in consultation with the Department of Chemistry.</p> <p>Continuation in the Honors in Chemistry program requires successful completion of at least ★24 with a minimum 3.0 GPA and a minimum 3.0 GPA on all CHEM courses completed in the previous Fall/Winter. In addition, graduation requires a minimum 3.0 GPA on the last ★90 credited to the degree.</p> <p>The Honors Chemistry degree is accredited by the Canadian Society for Chemistry.</p>

Years 3 and 4	Years 3 and 4
<p> CHEM 313 - Instrumentation in Chemical Analysis CHEM 361 - Organic Chemistry CHEM 363 - Organic Chemistry CHEM 371 - Energetics of Chemical Reactions CHEM 373 - Physical Properties and Dynamics of Chemical Systems CHEM 398 - Molecular Spectroscopy CHEM 401 - Introduction to Chemical Research BIOCH 200 - Introductory Biochemistry ★18 in senior chemistry courses (with at least ★6 taken at the 400-level). See Note 3. ★12 in Science options (see details of courses) ★6 in Arts options </p>	<p> CHEM 313 - Instrumentation in Chemical Analysis CHEM 361 - Organic Chemistry CHEM 460 - Contemporary Organic Chemistry CHEM 371 - Energetics of Chemical Reactions CHEM 373 - Physical Properties and Dynamics of Chemical Systems CHEM 398 - Molecular Spectroscopy CHEM 401 - Introduction to Chemical Research BIOCH 200 - Introductory Biochemistry ★18 in senior chemistry courses (with at least ★6 taken at the 400-level). See Note 3. ★12 in Science options (see details of courses) ★6 in Arts options </p>
<p>Notes</p> <p> 1. Credit in SCI 100 will be considered equivalent to CHEM 101, CHEM 102, CHEM 164, MATH 114, MATH 115, PHYS 144, PHYS 146, BIOL 107 and ★3 Science option (see details of courses). 2. Credit in SCI 151 will be considered equivalent to STAT 151 and ★3 Science option. 3. Students in the Science Internship Program may take ★15 in senior chemistry courses (with at least ★6 taken at the 400-level). </p>	<p>Notes</p> <p> 1. Credit in SCI 100 will be considered equivalent to CHEM 101, CHEM 102, CHEM 164, MATH 114, MATH 115, PHYS 144, PHYS 146, BIOL 107 and ★3 Science option (see details of courses). 2. Credit in SCI 151 will be considered equivalent to STAT 151 and ★3 Science option. </p>

Rationale for change: (Not required for course deletion or editorial changes)

References to INT D 400 (a course that has been eliminated) were incorrect. The references to SIP and INT D 400 should have been completely eliminate from the Honors program.

CHEM 363 is currently proposed to change to CHEM 460. The changes in years 3 and 4 section will reflect that change in course number and description.

Department Contact Name: Christie McDermott	Department Chair or Designate Name: Alex Brown	Date approved by Dept Council:
Email: cmcdermo@ualberta.ca	Alex.brown@ualberta.ca	Date submitted to FoS: FEB 24, 2021

Upload this form to the FoS Calendar Google Site.
 Include one form for each grouping of changes. ie, all course changes can go in one document if they were approved at the same department council.

CALENDAR CHANGE REQUEST FORM

Department: CHEMISTRY

Highlight type of change request below:

1. Course Change
(new course, change
to existing course,
course deletion)

2. Editorial Change
(basic editing)

3. Admission Requirement

4. Program Change

CURRENT	PROPOSED
<p>https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37125&returnto=9991</p> <p>Specialization in Chemistry [Science]</p> <p>Senior Courses in Chemistry</p> <p><u>BIOCH 310 - Bioenergetics and Metabolism</u> <u>BIOCH 320 - Structure and Catalysis</u> <u>BIOCH 330 - Nucleic Acids and Molecular Biology</u> <u>CHEM 303 - Environmental Chemistry I</u> <u>CHEM 305 - Environmental Chemistry II</u> <u>CHEM 333 - Inorganic Materials Chemistry</u> <u>CHEM 363 - Organic Chemistry</u> <u>CHEM 401 - Introduction to Chemical Research</u> <u>CHEM 403 - Chemical Research</u> <u>CHEM 405 - Special Topics in Chemistry</u> <u>CHEM 419 - Bioanalytical and Environmental Analytical Chemistry</u> <u>CHEM 424 - Optical Spectroscopy and Electrochemistry</u> <u>CHEM 425 - Separations and Mass Spectrometry</u> <u>CHEM 434 - X-ray Crystallography</u> <u>CHEM 436 - Synthesis and Applications of Inorganic and Nano-materials</u> <u>CHEM 437 - Transition Metal Chemistry</u> <u>CHEM 438 - Solid State Chemistry</u> <u>CHEM 443 - Asymmetric Catalysis</u> <u>CHEM 444 - Characterization Methods in Nanoscience</u> <u>CHEM 451 - Chemical Biology</u> <u>CHEM 454 - Bioconjugate Chemistry</u> <u>CHEM 461 - Qualitative Organic Analysis</u> <u>CHEM 462 - Physical Organic Chemistry</u> <u>CHEM 463 - Organic Synthesis</u> <u>CHEM 477 - Molecular Symmetry and Spectroscopy</u> <u>CHEM 479 - Molecular Kinetics</u> CHEM 489 <u>CHEM 493 - Computational Chemistry</u> <u>CHEM 495 - Molecular Dynamics and its Applications</u></p>	<p>Senior Courses in Chemistry</p> <p><u>BIOCH 310 - Bioenergetics and Metabolism</u> <u>BIOCH 320 - Structure and Catalysis</u> <u>BIOCH 330 - Nucleic Acids and Molecular Biology</u> <u>CHEM 303 - Environmental Chemistry I</u> <u>CHEM 305 - Environmental Chemistry II</u> <u>CHEM 333 - Inorganic Materials Chemistry</u> <u>CHEM 401 - Introduction to Chemical Research</u> <u>CHEM 403 - Chemical Research</u> <u>CHEM 405 - Special Topics in Chemistry</u> <u>CHEM 419 - Bioanalytical and Environmental Analytical Chemistry</u> <u>CHEM 424 - Optical Spectroscopy and Electrochemistry</u> <u>CHEM 425 - Separations and Mass Spectrometry</u> <u>CHEM 434 - X-ray Crystallography</u> <u>CHEM 436 - Synthesis and Applications of Inorganic and Nano-materials</u> <u>CHEM 437 - Transition Metal Chemistry</u> <u>CHEM 438 - Solid State Chemistry</u> <u>CHEM 443 - Asymmetric Catalysis</u> <u>CHEM 444 - Characterization Methods in Nanoscience</u> <u>CHEM 451 - Chemical Biology</u> <u>CHEM 454 - Bioconjugate Chemistry</u> <u>CHEM 460 - Contemporary Organic Chemistry</u> <u>CHEM 461 - Qualitative Organic Analysis</u> <u>CHEM 462 - Physical Organic Chemistry</u> <u>CHEM 463 - Organic Synthesis</u> <u>CHEM 477 - Molecular Symmetry and Spectroscopy</u> <u>CHEM 479 - Molecular Kinetics</u> CHEM 489 <u>CHEM 493 - Computational Chemistry</u> <u>CHEM 495 - Molecular Dynamics and its Applications</u></p>

Rationale for change: (Not required for course deletion or editorial changes)

CHEM 363 is proposed to change to CHEM 460. This change in senior requirements for Specialization Chemistry accompanies the course change.

:

Department Contact Name: Christie McDermott	Department Chair or Designate Name: Alex Brown	Date approved by Dept Council:
Email: cmcdermo@ualberta.ca	Alex.brown@ualberta.ca	Date submitted to FoS: FEB 24, 2021

Upload this form to the FoS Calendar Google Site.

Include one form for each grouping of changes. ie, all course changes can go in one document if they were approved at the same department council.

CALENDAR CHANGE REQUEST FORM

Department: CHEMISTRY

Highlight type of change request below:

1. **Course Change** (new course, change to existing course, course deletion) 2. **Editorial Change** (basic editing) 3. **Admission Requirement** 4. **Program Change**

CURRENT	PROPOSED
CHEM 363 - Organic Chemistry	
<p>CHEM 363 – Organic Chemistry</p> <p>★ 3 (fi 6) (second term, 3-0-4) A continuation of CHEM 361. Prerequisite: CHEM 361.</p>	<p>CHEM 460 Contemporary Organic Chemistry</p> <p>★ 3 (fi 6) (second term, 3-0-4) Modern organic reactions and reactive intermediates. Cations, free radicals, radical ions, carbenes, metallocarbenes, arynes, and transition-metal catalysis. Mechanisms, transition-state conformational analysis and stereoelectronic effects. Diastereoselectivity. The laboratory is focused on multistep organic synthesis, featuring reactions drawn from the lecture topics. Prerequisites: Chem 361 or consent of instructor. Students with credit for Chem 363 cannot take Chem 460 for credit.</p>

Rationale for change: (Not required for course deletion or editorial changes) **CHEM 363 has been developed into a course more appropriate for a 4th-year offering in both the lecture and the lab components. Renumbering the course to the 4th-year will allow students to utilize it in their programs to fulfill the CHEM 4XX requirement.**

<p>Department Contact Name: Christie McDermott</p>	<p>Department Chair or Designate Name: Alex Brown</p>	<p>Date approved by Dept Council: e-Circulated vote by Feb 22/2021</p>
<p>christie.mcdermott@ualberta.ca</p>	<p>alex.brown@ualberta.ca</p>	<p>Date submitted to FoS: Feb 22, 2021</p>

Upload this form to the FoS Calendar Google Site.
Include one form for each grouping of changes. ie, all course changes can go in one document if they were approved at the same department council.

CALENDAR CHANGE REQUEST FORM

Department: Earth and Atmospheric Sciences

Highlight type of change request below:

1. **Course Change** (new course, change to existing course, course deletion) 2. **Editorial Change** (basic editing) 3. **Admission Requirement** 4. **Program Change**

CURRENT <small>Enter the Calendar URL here</small>	PROPOSED
<p>Strike through and highlight deletions</p> <p>EAS 204 - <u>Environment Alberta</u></p> <p>★ 3 (fi 6) (either term, 3-0-0) The physical environment of Alberta. Regional variation in the patterns of climate, landforms, water, soils, vegetation and wildlife; the geographic synthesis of these patterns to give a broad understanding and appreciation of the province and its environmental problems. Prerequisite: One of EAS 100, 101, 102, 201, 210 or SCI 100. [Faculty of Science]</p>	<p><u>Underline and highlight</u> additions</p> <p><u>EAS 204 – The Geology of Your Environment</u></p> <p>★ 3 (fi 6) (either term, 3-0-0) <u>Near-surface geological processes and the physical environment in western Canada. Topics include: natural hazards in developed areas; rivers and flooding; surface water and groundwater resources; soil resources and degradation; air and water pollution; waste management and disposal; environmental geoscience and resource extraction; and global change. Prerequisites: Any 100-level Science course. [Faculty of Science]</u></p>

Rationale for change: (Not required for course deletion or editorial changes)
 (Include documentation that other departments or Faculties offering similar courses support this proposal. In the case of substantial program changes you must also include evidence of consultation with students.)

There is unacceptable overlap between the current course content in EAS 204 and EAS 205. This proposal for linked changes to these courses addresses this overlap by clarifying course titles and calendar descriptions to be consistent with the original learning intent. The proposed changes enhance undergraduate learning, reduce duplication, and increase clarity of course offerings.

EAS 204 is currently discontinued. EAS 204 was a broad overview of the physical environment of Alberta. The proposed changes will expand the scope of the course to focus on western Canada examples of key Earth system processes. The changes also place more emphasis on processes relevant to interactions between people and the physical environment. Largely, this is a shift of current EAS 205 “Environment Earth” content to a western Canada focus under the EAS 204 course number, which frees up the EAS 205 course number to focus on natural disasters (see associated calendar change request for EAS 205).

Department Contact Name: Nancy Thompson	Department Chair or Designate Name: Murray Gingras	Date approved by Dept Council: 11 Feb 2021
Email: nancy.thompson@ualberta.ca		Date submitted to FoS:

Upload this form to the FoS Calendar Google Site.
 Include one form for each grouping of changes. ie, all course changes can go in one document if they were approved at the same department council.

CALENDAR CHANGE REQUEST FORM

Department: Earth and Atmospheric Sciences

Highlight type of change request below:

- | | | | |
|---|---|--|---------------------------------|
| <p>1. Course Change
(new course, change to existing course, course deletion)</p> | <p>2. Editorial Change
(basic editing)</p> | <p>3. Admission Requirement</p> | <p>4. Program Change</p> |
|---|---|--|---------------------------------|

CURRENT <small>Enter the Calendar URL here</small>	PROPOSED
<p>Strike through and highlight deletions</p> <p>EAS 205 - Environment Earth</p> <p>★ 3 (fi 6) (either term, 3-0-0) General introduction to interactions between people and their natural environment, with an emphasis on geological processes. Topics include: soil resources and degradation; earthquakes and volcanoes; streams and flooding; landslides, mass movement and subsidence, shoreline development and coastal processes; surface water and groundwater resources; air and water pollution; waste management and disposal; and global change.</p> <p>Prerequisite: Any 100-level Science course. [Faculty of Science]</p>	<p><u>Underline and highlight</u> additions</p> <p>EAS 205 – <u>Violent Earth: The Geology of Catastrophic Events</u></p> <p>★ 3 (fi 6) (either term, 3-0-0) <u>Processes and geological evidence of natural catastrophes, such as volcanoes, earthquakes, slope failures, tsunamis, floods, extraterrestrial impacts, and other rapid environmental changes. Natural hazard risk in the context of geological time.</u> Prerequisites: Any 100-level Science course. [Faculty of Science]</p>

Rationale for change: (Not required for course deletion or editorial changes)
 (Include documentation that other departments or Faculties offering similar courses support this proposal. In the case of substantial program changes you must also include evidence of consultation with students.)

There is unacceptable overlap between the current course content in EAS 204 and EAS 205. This proposal for linked changes to these courses addresses this overlap by clarifying course titles and calendar descriptions to be consistent with the original learning intent. The proposed changes enhance undergraduate learning, reduce duplication, and increase clarity of course offerings.

EAS 205 currently includes substantial course content on natural hazards. The proposed changes: (1) provide a course title that is less vague and is intended to draw a wider audience to this course for non-majors, (2) more clearly focuses the course content on natural catastrophes and geological disasters, and (3) clarifies the distinction between physical processes of natural catastrophes (this course) and the human dimensions of natural hazards (HGP 252). See associated calendar change request for EAS 204.

Department Contact Name: Nancy Thompson	Department Chair or Designate Name: Murray Gingras	Date approved by Dept Council: 11 Feb 2021
Email: nancy.thompson@ualberta.ca		Date submitted to FoS:

Upload this form to the FoS Calendar Google Site.
 Include one form for each grouping of changes. ie, all course changes can go in one document if they were approved at the same department council.

CALENDAR CHANGE REQUEST FORM

Department: Earth and Atmospheric Sciences

Highlight type of change request below:

1. **Course Change** (new course, change to existing course, course deletion) 2. **Editorial Change** (basic editing) 3. **Admission Requirement** 4. **Program Change**

CURRENT <small>Enter the Calendar URL here</small>	PROPOSED
<p><u>Strike through and highlight</u> deletions</p> <p>EAS 364 - Petroleum Geology and Subsurface Methods</p> <p>★ 3 (fi 6) (either term, 3-0-3) Source rocks and origin of petroleum; principles of fluid migration; reservoir rocks and traps. Exploration and development of hydrocarbon plays using subsurface techniques. Introduction to reservoir evaluation and hydrocarbon production. Prerequisite: EAS 336 or consent of instructor. [Faculty of Science]</p>	<p><u>Underline and highlight</u> additions</p> <p>EAS 364 – <u>Basin Resources and Subsurface Methods</u></p> <p>★ 3 (fi 6) (either term, 3-0-3) <u>The characterization of sedimentary rock properties in the subsurface. Subsurface mapping techniques. An overview of the types of resources exploited in sedimentary basins and the distributions of those resources. Prerequisites: EAS 222 or consent of instructor. [Faculty of Science]</u></p>

Rationale for change: (Not required for course deletion or editorial changes)
 (Include documentation that other departments or Faculties offering similar courses support this proposal. In the case of substantial program changes you must also include evidence of consultation with students.)

This change is proposed to address needed updates in the course content by broadening the scope to include basin resources beyond oil and gas. This change will help accommodate a more modern view of sedimentary resources to include topics such as Lithium, Rare-Earth Element, Uranium and geothermal resources.

Department Contact Name: Nancy Thompson	Department Chair or Designate Name: Murray Gingras	Date approved by Dept Council: 11 Feb 2021
Email: nancy.thompson@ualberta.ca		Date submitted to FoS:

Upload this form to the FoS Calendar Google Site.
 Include one form for each grouping of changes. ie, all course changes can go in one document if they were approved at the same department council.

**Early Implementation
Department of Computing Science
Course Changes
2021 - 21**

CURRENT (2020-21)	PROPOSED (2021-22)	CHANGE TYPES
<p>CMPUT 312 - Introduction to Robotics and Mechatronics *3 (fi 6) (either term, 3-0-3)</p> <p>Algorithms and software paradigms for robot programming; mathematical modeling of robot arms and rovers including kinematics, and an introduction to dynamics and control; sensors, motors and their modeling; basics of image processing and machine vision; vision-guided motion control. Prerequisite: CMPUT 275. Corequisite: CMPUT 340 or 418. Students having CMPUT 174, 175, 201, 204 may seek consent of the instructor.</p>	<p>CMPUT 312 - Introduction to Robotics and Mechatronics *3 (fi 6) (either term, 3-0-3)</p> <p>Algorithms and software paradigms for robot programming; mathematical modeling of robot arms and rovers including kinematics, and an introduction to dynamics and control; sensors, motors and their modeling; basics of image processing and machine vision; vision-guided motion control. Prerequisite: CMPUT 275. Corequisite: CMPUT 340 or 418, or ECE 240. Students having CMPUT 174, 175, 201, 204 may seek consent of the instructor.</p>	<p>Prerequisite</p>
<p>CMPUT 412 - Experimental Mobile Robotics *3 (fi 6) (either term, 3-0-3)</p> <p>A project-based course dealing with the design and implementation of mobile robots to accomplish specific tasks. Students work in groups and are introduced to concepts in sensor technologies, sensor data processing, motion control based on feedback and real-time programming. Prerequisites: CMPUT 201 and 204, or 275; one of CMPUT 340, 418 or equivalent knowledge; MATH 214.</p>	<p>CMPUT 412 - Experimental Mobile Robotics *3 (fi 6) (either term, 3-0-3)</p> <p>A project-based course dealing with the design and implementation of mobile robots to accomplish specific tasks. Students work in groups and are introduced to concepts in sensor technologies, sensor data processing, motion control based on feedback and real-time programming. Prerequisites: CMPUT 201 and 204, or 275; one of CMPUT 340, 418, ECE 240, or equivalent knowledge; MATH 214.</p>	<p>Prerequisite</p>
<p>CMPUT 428 - Computer Vision *3 (fi 6) (either term, 3-0-3)</p> <p>Introduction to the geometry and photometry of the 3D to 2D image formation process for the purpose of computing scene properties from camera images. Computing and analyzing motion in image sequences. Recognition of objects (what) and spatial relationships (where) from images and tracking of these in video sequences. Prerequisites: CMPUT 201 or 275; one of CMPUT 340, 418 or equivalent knowledge; one of MATH 101, 115, 118, 136, 146 or 156, and one of MATH 102, 125, or 127.</p>	<p>CMPUT 428 - Computer Vision *3 (fi 6) (either term, 3-0-3)</p> <p>Introduction to the geometry and photometry of the 3D to 2D image formation process for the purpose of computing scene properties from camera images. Computing and analyzing motion in image sequences. Recognition of objects (what) and spatial relationships (where) from images and tracking of these in video sequences. Prerequisites: CMPUT 201 or 275; one of CMPUT 340, 418, ECE 240, or equivalent knowledge; one of MATH 101, 115, 118, 136, 146 or 156, and one of MATH 102, 125, or 127.</p>	<p>Prerequisite</p>
<p>CMPUT 403 - Practical Algorithmics *3 (fi 6) (either term, 3-0-0)</p>	<p>CMPUT 403 - Practical Algorithmics *3 (fi 6) (either term, 3-0-0)</p>	<p>Editorial Prerequisites</p>

<p>The essence of computing science is in solving problems by computation. It may take anywhere from several minutes to several years from the initial posing of a problem specification to finally getting a working program. This course is interested in problems that can be solved within at most several hours by well prepared people.</p> <p>Prerequisites: Restricted to students participating in the programming contest. Any 300-level course, and consent of the instructor.</p>	<p>The essence of computing science is in solving problems by computation. This course is interested in algorithmic problems that can be solved within at most several hours by well prepared people, where a solution involves properly understanding a written description, designing an efficient algorithm to solve the problem, and then correctly implementing the solution.</p> <p>Prerequisites: CMPUT 204 and any 300-level Computing Science course, or consent of the instructor.</p>	
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Faculty of Science Course Changes 2021-2022

Current

Proposed

Physiology	Physiology Courses
Undergraduate Courses	Undergraduate Courses
New Course	<p>[O] PHYSL 456 Advanced Respiratory Physiology ★3 (fi 6) (second term, 3-0-0). Focus will be on internal respiration and common acute and chronic respiratory diseases including diagnosis and treatments. Prerequisites: PHYSL 212 and 214, or 210 and consent of Department.</p>

Rationale: A new 400-level course on an important topic not presently covered in the Physiology Undergraduate curriculum

Faculty of Science Course Changes 2021-2022

Current

Proposed

Physiology	Physiology Courses
Undergraduate Courses	Undergraduate Courses
New Course	<p>[O] PHYSL 457 Exercise Physiology ★3 (fi 6) (second term, 3-0-0). Acute and chronic adaptations to various modalities of exercise. Focus will be on metabolism, muscular, cardiovascular, and respiratory systems. An introduction to clinical exercise physiology will also be covered. Prerequisites: PHYSL 212 and 214, or 210 and consent of Department.</p>

Rationale: A new 400-level course on an important topic not presently covered in the Physiology Undergraduate curriculum.

FINAL Item No. 5

Governance Executive Summary
Action Item

Agenda Title	Proposed New Course Designator, CCALS (Centre collégial de l'Alberta Anglais Langue Seconde), Centre collégial de l'Alberta, Faculté Saint-Jean
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Motion

THAT the GFC Programs Committee approve, with delegated authority from General Faculties Council, a new course designator for Centre collégial de l'Alberta Anglais Langue Seconde, CCALS, as submitted by the Centre collégial de l'Alberta, Faculté Saint-Jean.

Item

Action Requested	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Recommendation
Proposed by	Pierre-Yves Mocquais, Dean, Centre collégial de l'Alberta (CCA) and Faculté Saint-Jean (FSJ)
Presenter(s)	Catherine Dandonneau, Director, CCA

Details

Office of Administrative Responsibility	Provost and Vice-President (Academic)
The Purpose of the Proposal is <i>(please be specific)</i>	To introduce a new course designator, CCALS, as an identifier of English as Second Language courses related to all College programs and curriculum.
Executive Summary <i>(outline the specific item – and remember your audience)</i>	<p>This new CCALS designator will make it possible to better distinguish ESL courses at the Centre collégial de l'Alberta from the ALS (Anglais Langue Seconde) designator, which is set up specifically for students at the Faculté Saint-Jean.</p> <p>It is critical to have a unique identifier for CCA to clearly separate it from the FSJ courses for the following reasons:</p> <ul style="list-style-type: none"> - A unique designator, attached to the Centre Collégial de l'Alberta Programs will create better visibility and clarity for college students in terms of expected content - CCALS courses will be better align with CCA Programs and well integrated into their calendar requirements - The price of taking a course in English as Second Languages at CCA should be priced as a CCA normal course (the domestic tuition for a 3 credit CCA course is \$302.40) - Administration/ownership of this course will remain with CCA

Item No. 5

Supplementary Notes and context	<This section is for use by University Governance only to outline governance process.>
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Engagement and Routing (Include meeting dates)

Consultation and Stakeholder Participation (parties who have seen the proposal and in what capacity) <For information on the protocol see the Governance Resources section Student Participation Protocol >	<u>Those who are actively participating:</u> <ul style="list-style-type: none"> • FSJ Admission
	<u>Those who have been consulted:</u> <ul style="list-style-type: none"> • Anna Vocioni, Office of the Registrar • Heather Richholt, U of A Governance
	<u>Those who have been informed:</u> <ul style="list-style-type: none"> • FSJ Dean, Associate Dean, Faculty members and staff
Approval Route (Governance) (including meeting dates)	Centre Collégial de l'Alberta, Program Planning Committee (for recommendation) – December 11, 2020 Centre collégial de l'Alberta Executive Committee (Approval): December 17, 2020 GFC Programs Committee - April 15, 2021

Strategic Alignment

Alignment with <i>For the Public Good</i>	SUSTAIN Objective 21	
Alignment with Core Risk Area	Please note below the specific institutional risk(s) this proposal is addressing.	
	<input checked="" type="checkbox"/> Enrolment Management <input checked="" type="checkbox"/> Faculty and Staff <input type="checkbox"/> Funding and Resource Management <input type="checkbox"/> IT Services, Software and Hardware <input type="checkbox"/> Leadership and Change <input type="checkbox"/> Physical Infrastructure	<input checked="" type="checkbox"/> Relationship with Stakeholders <input checked="" type="checkbox"/> Reputation <input type="checkbox"/> Research Enterprise <input type="checkbox"/> Safety <input type="checkbox"/> Student Success
Legislative Compliance and jurisdiction	Post-Secondary Learning Act GFC Programs Committee Terms of Reference GFC Policy 37	

Attachments (each to be numbered 1 - <->)

1. Attachment 1 : List of proposed new courses with CCALS designator

Prepared by: Marie Simuong, CSJ Governance Coordinator, msimuong@ualberta.ca

Centre collégial de l'Alberta, Faculté Saint-Jean
Proposed University Calendar Changes for 2021/2022

CURRENT	PROPOSED
NEW	<p>CCALS 120 - Anglais intermédiaire *3 (fi 6) (l'un ou l'autre semestre,3-0-2)</p> <p>Étude des éléments et des structures complexes de l'anglais parlé et écrit. Note(s) : (1) Cours réservé aux étudiants du Centre Collégial de l'Alberta (2) Anciennement ANGL 113 et ALS 160. (3) Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour ESL ou EAP 140, 145, 150, ALS 120, 125, 160, ANGL 102 ou leurs équivalents. (4) Affectation par test de placement obligatoire ou préalable ALS 115. Veuillez consulter la section « Test obligatoire pour les étudiants ne présentant pas English 30 ou l'équivalent » de l'annuaire.</p>
NEW	<p>CCALS 125 - Anglais avancé *3 (fi 6) (l'un ou l'autre semestre,3-0-2)</p> <p>Vise à faire acquérir les compétences communicatives écrites nécessaires à l'expression courante de niveau universitaire. Note(s): (1) Cours réservé aux étudiants du Centre Collégial de l'Alberta. (2) Anciennement ANGL 102. (3) Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour ESL ou EAP 140, 145, 150, ALS 125, ALS 160, ANGL 102 ou leurs équivalents. (4) Affectation par test de placement obligatoire ou préalable ALS 120. Veuillez consulter la section « Test obligatoire pour les étudiants ne présentant pas English 30 ou l'équivalent » de l'annuaire.</p>

FINAL Item No. 6

Governance Executive Summary
Action Item

Agenda Title	Proposed New Graduate Certificate in Educational Studies, Faculty of Education and Faculty of Graduate Studies and Research
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Motion

<p>THAT GFC Programs Committee approve, with delegated authority from General Faculties Council, the new Graduate Certificate in Educational Studies (GCES), as submitted by the Faculty of Education, and as set forth in attachments 1 and 2, to take effect upon final approval.</p>

Item

Action Requested	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Recommendation
Proposed by	Douglas Gleddie, Associate Dean, Faculty of Education
Presenter(s)	Douglas Gleddie, Associate Dean, Faculty of Education Brooke Milne, Vice-Provost and Dean, FGSR

Details

Office of Administrative Responsibility	Faculty of Education
The Purpose of the Proposal is (<i>please be specific</i>)	The Graduate Certificate in Educational Studies (GCES) program in the Faculty of Education is for teaching professionals and other educational specialists seeking advanced professional education. The program consists of four courses (12 credits) selected from a list of approved courses which are clustered into thematic areas (interdisciplinary areas of focus - IAF) within the field of education.
Executive Summary (<i>outline the specific item – and remember your audience</i>)	<p>There are several reasons for developing this new certificate:</p> <ul style="list-style-type: none"> • The need to be responsive to the needs of teachers and educational leaders in the province of Alberta and beyond. Education professionals are required to maintain currency with respect to the knowledge, skills and attitudes. In Alberta, the Teaching Quality Standard (TQS), the Leadership Quality Standard (LQS) and the System Leadership Standard (SLQS) each call for education professionals to engage in continuous professional learning. • To satisfy this need for ongoing professional education, the Faculty of Education proposes this new certificate which will meet the immediate needs of education professionals (with a shorter program) and also allows a pathway into a Masters degree. • The new certificate is designed to address emergent educational needs in a multitude of areas. For example, immediate needs have been identified in the areas of early childhood education, Indigenous education, numeracy education, rural education, technology in education and wellness (IAFs). <p>The design of the GCES will allow the Faculty to be responsive to the emergent needs in the following ways:</p> <ol style="list-style-type: none"> 1. This will be a general credential. 2. The administration is organized around interdisciplinary areas of focus. These consist of groups of four courses within an area of focus or combinations of courses. These IAFs will be offered to particular groups of educators to address identified needs. 3. The certificate is developed with Alberta teachers in mind and using the Teacher Quality Standard and Leadership Quality Standard as

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	<p>guides for learning outcomes; however, the program will be attractive to educators across Canada and internationally.</p> <ol style="list-style-type: none"> 4. Learning outcomes (aligned with the above standards) are provided for the GCES as a whole and also for each IAF. 5. The course content comes from the expertise and guidance of faculty members in the departments of Elementary Education, Secondary Education, Education Policy Studies, and Educational Psychology. 6. The certificate will be administered by the Professional Learning Unit under the supervision of the Associate Dean, Graduate Studies. 7. The certificate is being developed primarily for asynchronous online delivery. However, there is also an appetite for offering programming in a blended-delivery mode or off-site in collaboration with school jurisdictions in Alberta, Canada or internationally.
Supplementary Notes and context	<This section is for use by University Governance only to outline governance process.>

Engagement and Routing (Include meeting dates)

<p>Consultation and Stakeholder Participation (parties who have seen the proposal and in what capacity)</p> <p><For information on the protocol see the Governance Resources section Student Participation Protocol></p>	<p><u>Those who are actively participating:</u></p> <ul style="list-style-type: none"> ● Faculty members from across departments in Education ● Dean’s Advisory Committee ● Graduate Academic Affairs Council ● Faculty Council ● Professional Learning Unit Director and Staff (Education) ● Alberta Teachers’ Association <p><u>Those who have been consulted:</u></p> <ul style="list-style-type: none"> ● School boards ● Superintendents ● School administrators ● Teachers (current and potential students in our program) ● FGSR Council <p><u>Those who have been informed:</u></p> <ul style="list-style-type: none"> ● Faculty Council (Education)
Approval Route (Governance) (including meeting dates)	<p>-Endorsed by the Faculty of Education Dean’s Advisory Committee on September 29th, 2020.</p> <p>-Brought forth as a notice of motion at the Faculty of Education’s <i>Graduate Academic Affairs Council</i> meeting on October 5th, 2020 to encourage additional departmental engagement and consultation.</p> <p>-Motion to approve the GCES was passed at the Faculty of Education’s <i>Graduate Academic Affairs Council</i> (delegated authority for Graduate Matters) meeting on November 2nd, 2020.</p> <p>-GCES proposal was endorsed by the Faculty of Education’s Faculty Council on November 3, 2020.</p> <p>-Presented to FGSR-PRC for discussion on November 4th, 2020 and for approval on December 2nd, 2020 (approved pending further discussion about ‘clusters’). A consequent discussion was held with Janice Causgrove Dunn, Andrea Patrick and Suzanne French where support</p>

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	<p>was expressed for the IAFs, learning outcomes within and future plans to enhance the GCES. Approved at the Jan. 6, 2021 PRC. -FGSR Council, January 20, 2021 -RACF, February 23, 2021 -GFC Programs Committee, April 15, 2021 (Tuition will be recommended by APC in June 2021)</p>
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Strategic Alignment

Alignment with <i>For the Public Good</i>	<p>Build: Objective 1, Strategy 1-3; Objective 4, Strategy 1 Experience: Objective 7, Strategy 1&3; Objective 10, Strategy 1&2 Excel: Objective 12, Strategy 1; Objective 14, Strategy 1-4 Engage: Objective 16, Strategy 1; Objective 17, Strategy 2 Sustain: Objective 20, Strategy 1</p>	
Alignment with Core Risk Area	Please note below the specific institutional risk(s) this proposal is addressing.	
	<input checked="" type="checkbox"/> Enrolment Management <input checked="" type="checkbox"/> Faculty and Staff <input type="checkbox"/> Funding and Resource Management <input type="checkbox"/> IT Services, Software and Hardware <input type="checkbox"/> Leadership and Change <input type="checkbox"/> Physical Infrastructure	<input checked="" type="checkbox"/> Relationship with Stakeholders <input checked="" type="checkbox"/> Reputation <input type="checkbox"/> Research Enterprise <input type="checkbox"/> Safety <input type="checkbox"/> Student Success
Legislative Compliance and jurisdiction	<p>General Faculties Council GFC Programs Committee Graduate Academic Affairs Council (Education) Faculty of Graduate Studies & Research</p>	

Attachments

1. GCES Proposal 03-25-2021.pdf
2. GCES - Calendar Language

Prepared by: Douglas Gleddie, Associate Dean (dgleddie@ualberta.ca)

Proposal Template: New Certificate and Diploma Programs and Specializations and Non-Credential Programming

SECTION 1: PROPOSAL OVERVIEW

1.1 Basic Information *(Complete the table below)*

Institution	University of Alberta
Program/Specialization Name	Educational Studies
Credential Awarded	Graduate Certificate
Proposed Effective Date	September 1, 2021

1.2 Type of Initiative

1.2.1. *This is a proposal for (check one):*

- new certificate*
- new diploma*
- new noncredential*
- new specialization (s) in existing program*

1.3 Nomenclature *(Answer the following questions)*

1.3.1 *What program and/or specialization name will appear on parchments and transcripts?*

Graduate Certificate in Educational Studies (GCES)

1.3.2 *Provide a brief rationale for the program and/or specialization name selected.*

Teachers and educational leaders are professionals with a responsibility to maintain currency with respect to the knowledge, skills and attitudes required for their positions. In Alberta, the [Teaching Quality Standard \(TQS\)](#), the [Leadership Quality Standard \(LQS\)](#) and the [System Leadership Standard \(SLQS\)](#) each call for education professionals to engage in continuous professional learning. To satisfy their need for ongoing professional education many teachers, policy makers and educational leaders choose graduate studies that lead to certificates, diplomas and degrees. The University continuously works to build a diverse, inclusive community of exceptional students, that experience lifelong, diverse and rewarding learning opportunities. In the Faculty of Education we work towards those goals by engaging the educational community from across Alberta, Canada and internationally (in part) with our programming for graduate studies.

Degree programs within the Faculty meet the needs of many education professionals, but there is a need for shorter programs, such as certificates, that enable teachers and educational leaders to stay current in the field so they can address emergent educational needs in a multitude of areas. For example, immediate needs have been identified in the areas of early childhood education, Indigenous education, numeracy education, rural education and technology in education. In order to address the needs of a diverse group of working professionals we are proposing a *Graduate Certificate in Educational Studies* (GCES). We are purposely general with the credential as indicated by its name, and deliberate in creating a minimum of four courses in particular thematic areas (Interdisciplinary Areas of Focus - IAF) that can be offered together.

The Graduate Certificate in Educational Studies will be composed of four courses selected from a list of courses. The GCES is designed so that four courses that are clustered into IAF will be offered to a particular cohort of educators to meet their specific needs. While other institutions have graduate certificates that address some areas of focus, the areas of early childhood education and rural education are underserved. The areas of Indigenous education, wellness, numeracy, literacy and technology in education are focus areas which are in critical demand in Alberta.

Although the GCES is developed with Alberta teachers in mind and using the Teacher Quality Standard and Leadership Quality Standard as guides for learning outcomes, the program will be attractive to educators across Canada and internationally.

The GCES proposal has been developed by the Associate Dean of Graduate Studies in collaboration with the Professional Learning Unit, with expertise and guidance from the five departments in the Faculty of Education: Elementary Education, Secondary Education, Education Policy Studies, Educational Psychology and the School of Library and Information Studies.

SECTION 2: OVERVIEW OF PROPOSED PROGRAM OF STUDY

2.1 Program Description (*Answer the following questions*)

2.1.1 *Provide a 3-4 sentence calendar description of the program*

The *Graduate Certificate in Educational Studies* program in the Faculty of Education is for teaching professionals and other educational specialists seeking advanced professional education. The program consists of four courses (12 credits) selected from a list of approved courses which may be clustered into Interdisciplinary Areas of Focus within the field of education. Students are required to complete four ★3 courses for a total of ★12. Normally, these courses are completed as part of a cohort and may consist of courses from one area of focus or a combination of several.

2.1.1a Attach a proposed program of study (including course names, descriptions, credits and prerequisites, by semester or year of study) as an appendix to this proposal.

Appendix I – attached.

2.1.2 List program learning outcomes.

The GCES provides graduate level study without requiring individuals to commit to a degree program. The overall learning outcomes for graduates of the proposed certificate program are:

1. Ability to manage their own learning
2. Deepen and extend knowledge and skills of specialized and evolving areas within the field of education and to appreciate the ambiguity and limits of knowledge
3. Describe and comment on current scholarly/practice issues in education
4. Apply educational research to improve professional practice and to school improvement
5. Devise and sustain arguments, solve problems topical to discipline
6. Integrate relevant local, provincial, national and international contexts and issues with educational research to address complex issues systematically and creatively
7. Collaborate with other educational professionals, including teachers, policy makers, curriculum developers, and paraeducational specialists to build personal and collective professional capacities and expertise
8. Communicate information, ideas, problem and solutions to non-specialist audiences
9. Build capacity to support learner success in formal and informal educational settings

Further learning outcomes tied to each IAF are shared in section 2.2.2. and connected to the above outcomes as well as the TQS below.

The learning outcomes of the proposed certificate program are aligned with the [Teacher Quality Standard](#) (TQS)

1. Foster effective relationships
2. Engage in career-long learning
3. Demonstrate a professional body of knowledge
4. Establish inclusive learning environments
5. Apply foundational knowledge about First Nations, Métis and Inuit
6. Understand and respond to the larger societal context
7. Develop leadership capacity

2.1.3 Does the program align with characteristics (e.g., credits, learning outcomes, etc.) associated with this credential? (Consult with the Ministry as necessary)

Yes; No; or NotApplicable

2.1.4 *Indicate where the program will be offered (i.e., campus locations and/or off-site locations) and how it will be delivered (i.e., face-to-face, online, or blended).*

This certificate is being developed primarily for asynchronous online cohort delivery. However, there is also an appetite for offering programming in a blended-delivery mode or off-site in collaboration with school jurisdictions in Alberta, Canada or internationally.

As such, there are a very select set of courses that are designed for synchronous or face to face delivery. Those courses are experiential in nature and require environments or equipment that are unique or not readily available to individuals (e.g. learning on the land, musical instruments).

2.1.5 *Identify any collaborations or potential collaborations with other post-secondary institutions or other organizations that this program respectively facilitates or provides for.*

There are two types of collaborators we anticipate working with: School Authorities and Post-secondary Institutions.

Potential collaborators include Alberta school jurisdictions and First Nations educational authorities. We imagine much of the programming will be collaborative as educational authorities identify areas of need. For example, Edmonton Catholic Schools would like to collaborate on a technology focused cohort. We are currently offering Master of Education programming in collaboration with Kee Tas Kee Now Educational Authority.

The Faculty of Education has successfully partnered in the past with tribal colleges including Blue Quills and Maskwacis.

2.1.6 *Indicate how the proposed FLE and load calculations align both with internal institutional practices and with similar Ministry-approved programs. (Consult with the Ministry as required)*

The enrollment numbers and credit load align with other graduate certificates at the University of Alberta including those in the Faculty of Kinesiology, Sport and Recreation (e.g. Indigenous Sport and Recreation Graduate Certificate - three, 4 credit courses) and the Faculty of Education (School Leadership - four, 3 credit courses). This proposal also aligns with the University of Calgary's Graduate Certificate within the Master of Education (Interdisciplinary Studies - four, 3 credit courses)

2.1.7 Document the CIP ([*Classification of Instructional Programs, Statistics Canada*](#)) code being proposed for this program and explain the rationale for its selection, if necessary (e.g., in the case of an interdisciplinary program).

The CIP code for the Graduate Certificate in LQS being proposed for this program is 13.1399.

2.2 Program Requirements (*Answer the following questions*)

2.2.1 List primary admission requirements for the proposed program.

Admission requirements are as follows:

- Bachelor of Education or Bachelor degree plus teaching experience or equivalent
- An admission GPA of 3.0
- ELP requirement for international students: 6.5 IETS, minimum 6.5 on each band; Test of English as a Foreign Language (TOEFL) 93 (internet-based) with a minimum of 24 on the Speaking and Writing Bands of the exam, minimum for the Reading and Listening bands of the TOEFL exam is 20, or equivalent.

2.2.2 List program completion requirements.

Program requirements include completion of four three credit courses taken from an approved list. Many of these courses have been piloted in the departments and we have expert faculty members across the faculty to teach in the IAF. We anticipate advertising for a specific topic focus using a cohort model. As such, we can attract a reasonably sized group of students who take the four courses together as a focus. In this way, we have a clear timetable for offerings, can plan for instructors and can schedule courses to meet student and faculty needs.

Approved courses four (*3) for a total of *12

Indigenous Education

Learning outcomes specific to Indigenous Education:

1. Deepen understanding of Indigenous foundational knowledge and knowing, and how we might express our understandings of those in institutional settings.
2. Deepen understanding of the potential of Indigenous knowledges, relational pedagogies, and autobiographical narrative inquiry for transforming understandings of literacy and how it is that we inspire and nurture literacy learners in our classrooms.
3. Support the holistic development and resilience of Indigenous students, and understand how reflecting on systemic racism, unconscious bias, and the social determinants of health can aid in establishing and maintaining inclusive, equitable, and strengths-based learning environments that uplift Indigenous students.

4. Reflect on their personal journey of reconciliation with Land and consider classroom applications and relationships with Indigenous families and communities.

EDU 560 Bringing Life to Literacy Experiences

EDU 561 Curriculum, Pedagogy, and Foundational Indigenous Knowledge and Knowing

EDU 562 Indigenous Land Teachings: Transitioning Towards Common Ground in Education

EDU 563 Supporting the Health and Wellbeing of Indigenous Students

EDU 564 Foundations of Engagement with Indigenous Epistemologies in Education

EDU 565 Contextualizing Indigenous Epistemologies in Education: Theory in Action (NOTE: EDU 564 pre-requisite)

EDU 566 Experiencing Indigenous Epistemologies on the Land: A Conference Course

EDU 567 Aligning School Leadership with Indigenous Epistemology

EDU 568 Anti-Racist Education & Aboriginal Schooling

Early Childhood Education

Learning outcomes specific to Early Childhood Education:

1. Deepen and extend knowledge and skills of specialized and evolving areas within the field of early childhood education based on the ability to critically analyse current scholarly/practice issues in the field at local, provincial, national and international contexts
2. Collaborate with other educational professionals, including policy makers, curriculum developers, and para-educational specialists to build personal and collective professional capacities and expertise in the area of early childhood education.
3. Build capacity to support young learners from diverse backgrounds in formal and informal educational settings and foster effective relationships with their families and communities.

EDU 540 Facilitating Young Children's Mathematical Understanding

EDU 541 Play and the Use of Playful Pedagogies in Early Childhood Education

EDU 542 Schools as Welcoming and Inclusive Environments for All Students

EDU 543 Supporting Languages and Literacies in Early Childhood for All Students

Math Education

Learning outcomes specific to Math Education:

1. Deepen and extend knowledge in mathematics education, recognizing the role of curriculum, historical and contemporary perspectives on learning,

opportunities for culturally responsive teaching, and contexts for playful interactions.

2. Describe and comment on current scholarly/practice issues in mathematics education grounded in research-based and collective experiences.
3. Apply education research to improve mathematics teaching and learning in PreK-12 classrooms, attending to conceptualizations of learning diversity of students while designing engaging opportunities to learn mathematics in varied contexts.

EDU 545 Culturally Responsive/Regenerative Mathematics

EDU 546 Numeracy Across the Curriculum

EDU 547 Perspectives on Mathematics Learners and Learning

EDU 548 Playful Places of Learning in Mathematics Education

Rural Education

Learning outcomes specific to Rural Education:

1. Apply theoretical and conceptual frameworks to critically assess rural schooling context.
2. Develop research literacy related to rural schooling.
3. Enhance professional practice through research-informed evaluation of rural schooling issues.

EDU 550 Rural Education Issues and Advantages

EDU 551 Working with Stakeholders in Rural Educational Contexts

EDU 552 Field Research in Rural Educational Contexts

EDU 553 Research Translation and Knowledge Mobilization in Rural Educational Contexts

Technology in Education

Learning outcomes specific to Technology in Education:

1. Facilitate safe, ethical and equitable access to technology-enhanced learning opportunities to meet the diverse needs of all students.
2. Critically assess and integrate current and emerging technologies into the design of authentic, engaging, and effective learning activities that align with content area standards.
3. Create and support learning opportunities that challenge students to use a design process and computational thinking to innovate and solve problems.

EDU 570 Ethical and Social Justice Issues for Technology in Education

EDU 571 Technologies for Teaching

EDU 572 Teaching Online – Theory and Practice

EDU 573 Computational Thinking in Teaching and Learning

Wellness Education

Learning outcomes specific to Wellness Education:

1. Synthesize the complex and crucial relationship between health and education.
2. Assess the value of health and physical education to the creation and support of healthy school communities.
3. Understand and apply key research in the areas of whole child development, health and physical literacy.

EDU 555 Foundations of Physical Literacy & Health Literacy

EDU 556 Health Promoting Schools

EDU 557 Inclusive Health and Physical Education

EDU 558 Teaching the Whole-Learner: Attending to the Physical, Mental, Social, and Emotional Domains

OTHER

EDU 595 Special Topics in Educational Theory and Practice

EDU 598 Guided Independent Study in Educational Theory and Practice

NOTE: Students are able to take one alternate, approved course as part of the certificate.

2.3 Work Integrated Learning Placements *(If applicable, answer the following questions)*

The focus of the certificate is for working professionals; there is no foreseeable need for an integrated placement.

2.3.1 *Identify the number of placements required in the proposed program (including type of work setting and duration/timing of activities).*

N/A

2.3.2 *Describe communications from employers (e.g., letters of support, minutes of program advisory committee meetings, etc.) that would indicate that sufficient placements will be available when needed.*

N/A

2.3.2a *Comment on whether/how work integrated learning placements in other programs (at the institution or at other Campus Alberta institutions) may be impacted as a result of this program.*

N/A

2.3.3 *Describe the student's role, if any, in securing placements.*

N/A

2.4 Endorsement of and/or Support for Program *(Indicate endorsement(s) from relevant professional organizations, regulatory bodies, advisory committees, employers, and/or industry, when applicable.)*

The development team of the GCES has been in conversations with the following organizations to determine appetite for such a program as well as to solicit support:

- ATA
- School Jurisdictions
- Tribal Councils and/ or First Nations Educational Authorities
- Ruperts Land Institute
- Alberta Education
- College of Alberta School Superintendents

SECTION 3: LABOUR MARKET DEMAND AND ENROLMENT PLANNING

3.1 Demand for Program *(Answer the following questions)*

3.1.1 *Describe anticipated employment outcomes (including entrepreneurial and/or self-employment paths) for program graduates.*

The courses proposed for the *Graduate Certificate in Educational Studies* are directly applicable for continuing employment as an educational professional: teacher, adult educator, post-secondary educator, curriculum designer, policy maker, school leader.

3.1.2 *Describe the labour market demand for the proposed program in the region that your institution serves, detailing how labour market demand was projected. (Append supporting documentation, as appropriate.)*

The demand for continuous professional learning is inherent in the [teacher quality standards](#), the [leadership quality standards](#) and the [system leader quality standards](#), as specified by the Government of Alberta. With some [35,000 FTE teachers](#) in the province there is an ongoing demand for professional development.

3.1.3 *In cases where labour market demand is not the primary driver for creating the program, comment on social and/or community benefits.*

The demand is not about the need for new teachers (satisfied by undergraduate programming) but about the need for continuous professional education for people in the education sector.

3.1.4 *Identify which stakeholder groups were consulted regarding demand/need for this program:*

October 7, 2019 - Rick Cusson, Superintendent, Northern Lights SD

October 7, 2019 - John Jagersma, Executive Director, Association of Independent Schools and Colleges of Alberta

October 9, 2019 - Terry Kortess, Manager, School Support and Training, Edmonton Public Schools

October 22, 2019 - Mark Swanson, Coordinator, Professional Development, Alberta Teachers Association

November 29, 2019 - Pierre Rousseau, Campus St. Jean

December 11, 2019 - Francoise Ruban, Alberta Teachers Association

December 16, 2019 - Mark Yurick, Alberta Teachers Association

January 23, 2020 - Mark Lockwood, Principal, International School of Macao

January 24, 2020 - Jairo Garzon, Principal, Canadian School Guadalajara

January 27, 2020 - Richard Vanderpyl, Principal, Christian Alliance International School

Multiple meetings - Tim Cusack, Deputy Superintendent, Edmonton Catholic Schools

Other (please identify)

3.1.4a *Discuss the results of these consultations and attach supporting documentation (e.g., minutes of meetings, letters of support, etc.), when available.*

Those who have been consulted:

- Faculty of Graduate Studies and Research (FGSR) May 4, 2020
- Provost and Vice President Academic (Programs) written feedback June 11, 2020
- Office of the Dean, Faculty of Education (ongoing)
- Department of Educational Policy Studies Council April 17, 2020
- Department of Educational Psychology Council May 21, 2020
- Department of Elementary Education Council May 1, 2020
- Department of Secondary Education Council April 24, 2020
- School of Library and Information Studies Academic Council
- Vice Provost (Indigenous Programming and Research) August 4, 2020
- Alberta Education - ongoing
- Alberta Teachers' Association - ongoing
- College of Alberta School Superintendents - ongoing
- Association of Independent Schools & Colleges in Alberta Portfolio Initiatives Manager

3.1.5 *Will this program target students from outside the institution's traditional catchment zone? (If yes, where will these students be targeted – i.e., which particular*

regions/jurisdictions within Alberta and Canada, foreign countries, and/or geographic regions?)

Targeted students for the proposed certificate will be Alberta educators who are in the traditional catchment zone of Central and Northern Alberta. Given this programming is offered online, students for cohorts will also be recruited from across Canada, and internationally.

Over the past three decades the Faculty of Education at the University of Alberta has provided in-service teacher professional development in: Mexico, Oman, China, Tanzania, Rwanda and South Africa. These international contexts are also potential sources for students.

3.1.6 *Comment on the overall sustainability of learner demand for this program over the longer term.*

The need for continuous professional learning is ongoing and education professionals seek out opportunities that result in university graduate level credentials. Hence, we anticipate this being a very sustainable program and one that will serve as a source of Master of Education students.

3.2 Projected Domestic Student Enrolment *(Complete the table below as applicable)*

(NB: Proposals for non-credentials do not complete anticipated no. of graduates line or divide enrolments by year of study.)

Proposed Enrolment	Year 1	Year 2	Year 3	Year 4	Annual Ongoing
Total headcount	0	0	0	0	0
• Year 1	22	44	66	66	66
• Year 2	0	0	0	0	0
• Year 3	0	0	0	0	0
Total FLE	0	0	0	0	0
• FLE Year 1	0	0	0	0	0
• FLE Year 2	0	0	0	0	0
• FLE Year 3	0	0	0	0	0
Anticipated No. of Graduates	20	40	60	60	60

3.3 Projected International Student Enrolment *(Complete the table below as applicable)*

International cohorts are expected every fourth year.

Proposed Enrolment	Year 1	Year 2	Year 3	Year 4	Annual Ongoing
Total headcount	0	0	0	22	6.5
• Year 1	0	0	0	22	6.5
• Year 2	0	0	0	0	0
• Year 3	0	0	0	0	0
Total FLE	0	0	0	0	0
• FLE Year 1	0	0	0	0	0
• FLE Year 2	0	0	0	0	0
• FLE Year 3	0	0	0	0	0
Anticipated No. of Graduates	0	0	0	20	20

3.4 Enrolment Planning Assumptions *(Answer the following questions)*

3.4.1 *Will total enrolment (as measured in FLEs) at your institution increase as a result of implementation of this proposed program?*

Yes.

3.4.1a *Identify enrolment impacts in similar programs or non-credential areas within your institution, when applicable.*

In the event that a potential student sees the four course requirement as attractive it may prevent them from registering for a Master of Education. However, we imagine that we are more likely to attract a greater number of master's students in the long term because we believe there are people who hesitate about graduate programming when the only choice is a master's degree. With the GCES, students will have the opportunity to ladder into MEd programs.

3.4.2 *How many cohorts or intakes of new students will occur per year, or is a continuous intake model used?*

The certificate will allow us to customize graduate learning for students through the IAF, in cohorts and to meet specific needs (i.e. a school district wants 24 teachers to take 2 courses from the Indigenous Education IAF and 2 from the Numeracy IAF). Therefore, a total of four intakes will be possible for this program (Fall, Winter, Spring, Summer); however, all intakes will be cohort based. In the first year of the certificate there will be only one intake; but on an ongoing basis, we will be able to manage three intakes per year depending on student demand.

3.4.3 *When applicable, provide rationale for how enrolment projections were established with regard to domestic/international student ratio.*

Rationale for the projected enrolment comes from expressed interest by regional school jurisdictions and international inquiries for programming focused in areas of concern: e.g. special education, numeracy, indigenous education, technology in education.

Two other factors are relevant: salary on the teacher qualification scale. Teachers move up the salary scale with education beyond the baccalaureate degree. 30 credit master's programs leave teachers up to 6 credits short of the maximum. The second factor is that the Teaching Quality Standard requires teachers to engage in continuous professional growth activities. These two factors point to an ongoing demand for graduate education for some 35,000 (FTE) teachers in Alberta alone.

3.4.4 *Explain assumptions regarding attrition and/or numbers of graduates.*

The students in this program are working professionals who have multiple life responsibilities (e.g., work and family) and will be working full time while participating in the Graduate Certificate in Educational Studies. For a variety of reasons, we anticipate, similar to our other graduate programs, an attrition rate of 2-5% per year.

3.4.5 *What is the minimum number of FLEs needed for this program to be viable (i.e., the "break-even" point)?*

We require a minimum of 22 students enrolled in each course section to be viable. Cohorts will only run with minimum enrollments.

SECTION 4: QUALITY CONSIDERATIONS

4.1 Quality Assurance Considerations *(If applicable, answer the following questions)*

(NB: non-credential programs complete 4.1.1 only.)

4.1.1 *What strategies did your institution use to foster program quality for the proposed program (e.g., curriculum mapping, use of expert panels, industry panels, or advisory panels, etc.)?*

General and IAF specific learning outcomes are aligned with TQS, LQS and SLQS. Each course specifies learning outcomes and is mapped onto the Teacher Quality Standard.

Each department council was consulted on the proposed programming.

Courses for each IAF are being developed by faculty members with research and teaching expertise in the area.

Discussions with stakeholders about the needs in the field of education for graduate level programming.

4.1.2 *Provide copy of independent academic expert review, when applicable.*

As this proposal is intended for working professionals (e.g. educators and administrators) and all courses were developed by Faculty members in Education, an independent academic expert review was not needed.

4.1.3 *Provide copy of institution's response to independent academic expert review, when applicable.*

N/A

4.1.4 *Describe the institutional quality assurance process(es) that will be used to ensure the continuing high quality of the proposed program.*

- Faculty members from across departments will oversee content development and delivery modes.
- Bi-annual review of course content will be conducted by faculty with feedback from contract instructors.
- The Associate Dean, Graduate Studies will provide oversight for the program.
- The Technology in Education unit will support the proposed program to create and maintain quality online courses that address universal design and best practices for online learning.
- An advisory committee will provide critical advice in regards to programming of the proposed certificate.
- The Graduate Academic Affairs Council of the Faculty of Education has authority for programming in the Faculty of Education. The committee includes Alberta Teachers Association and graduate student representation.
- The Faculty of Graduate Studies has authority for oversight of the graduate certificate.

SECTION 5: FINANCIAL VIABILITY AND SUSTAINABILITY

5.1 Annual Budget and Funding Sources *(Complete the table below)*

- *These are the proposed tuition rates and budget, pending approval of the Board of Governors.*
- *Identify annual and one-time expenditures and annual revenues for the program in the budget tables below.*
- *If program implementation will take place over more than one year, provide estimates for each year until full implementation.*

GCES - 22 students		Yr 1	Yr 2	Yr 3	Yr 4	Ongoing
Number of students		22	44	66	66	66
					(int) 22	7.26
REVENUES						
Domestic Tuition (1)		123,200	246,400	369,600	369,600	369,600
International Tuition (2)					126,820	41,851
External Funding		0	0	0	0	0
Internal Reallocation		0	0	0	0	0
By Product Sales/Services		0	0	0	0	0
Other Internal Sources		0	0	0	0	0
TOTAL REVENUE		123,200	246,400	369,600	496,420	411,451
OPERATIONAL COSTS						
Faculty Salary/Benefits		0	0	0	0	0
Service Teaching Costs (3)		41,501	83,002	124,504	166,005	138,199
Admin Costs (4)		35,200	70,400	105,600	140,800	116,800
Material/Contract Costs (5)		10,000	10,000	16,000	16,000	18,000
Other Direct Costs (6)		4,000	8,000	12,000	16,000	13,320
Subtotal		90,701	171,402	258,104	338,805	286,319
Indirect Costs - Faculty (7)		36,960	73,920	110,800	148,926	123,435
TOTAL OPER. COSTS		127,661	245,322	368,904	487,731	409,754
NET		-4,461	1,078	696	8,689	1,697
NET TO FACULTY		32,499	74,998	111,496	157,615	125,132

(1) Tuition is \$1400

(2) Int'l Tuition will be indexed to the standard graduate rate. We've used \$1865 as an example and plan on one cohort every three years

(3) Sessional Instructors at \$9022 plus 15%

(4) Cost per student/course at \$400

(5) Course development - \$2500/course and \$1500/refresh

(6) Guest lecturer, travel, recruitment, etc at \$1000/course

(7) Faculty Overhead at 30% based on revenue

5.2 Budgetary Assumptions *(Answer the following questions)*

5.2.1 *If revenue projections include internal reallocations, comment on institutional impacts for other programs/operations.*

With budget cuts to the Faculty of Education's operating grant, the Faculty must generate revenue from a multitude of sources. The programming proposed here will contribute additional revenue to the faculty with the inclusion of overhead costs (30%). As an alternative fee program, tuition is expected to cover all costs (administrative, academic, recruitment, facilities, and supplies.) There is to be no administrative impact for other programs/operations, as the program will be administered through the Professional Learning Unit in the Faculty of Education. (This unit is expected to generate revenue to cover all of its expenses.)

5.2.2 *If projected revenues include by-product sales/services as a result of delivery of the proposed program (e.g., salon services as part of a Hairstyling program), indicate the basis upon which prices were established.*

Projected revenues do not include by-product sales/services as a result of delivery of the proposed program. Such products and services are not expected.

5.2.3 *Provide staffing plan information to support faculty salaries/benefits projection.*

The cost of instructors and teaching assistants for all courses in the certificate will be funded through tuition revenues.

5.2.3a *In cases where service teaching costs are projected, indicate number of courses being purchased.*

Course development and monitoring will be led by tenured and tenured-track faculty members in the Faculty of Education.

5.2.4 *Identify what types of material costs and contracted services are projected.*

The proposed program will cover all costs for material and contracted services. Such services will include instructional design, video creation, and other teaching resources.

5.2.5 *Specify what direct costs include.*

Direct costs will include a set of instructor laptops, instructor copies of textbooks, recruitment booths at provincial teacher conferences, travel expenses and honoraria for elders and knowledge keepers and guest speakers. Direct costs also include costs for administering a student file within the Professional Learning Unit. This unit is funded exclusively with revenue generated within the unit.

5.2.6 Explain how indirect costs are projected and calculated (e.g., formula-driven, full-costing, etc.)

Indirect costs will be formula driven, as per financial services estimates. We used 30%.

5.2.7 Describe risk mitigation plans should revenue forecasts not be achieved or should costs exceed amounts budgeted.

The program will be one of four alternative fee programs in the Professional Learning Unit in the Faculty of Education (The other programs are: Master of Education in Educational Studies, Master of Education in Health Sciences Education, Graduate Certificate in School Leadership and Post-Bac. Certificate in Complex Communication Needs). All of these programs with the exception of the Graduate Certificate in School Leadership require minimum enrolment in a cohort to be offered. Considering the PLU as a totality, risk mitigation includes:

- The administrative costs associated with the PLU are spread across programs based on a per student cost.
- Cohorts require minimum enrolment. Without the minimum enrolment a cohort will be cancelled.
- We have confidence that with the flexible design of the certificate, it will be relevant and timely, hence well subscribed.
- As more cohorts are added, any single program with a negative net year will have less impact on the PLU and Faculty.
- In the event a program demonstrates inadequate enrolments in multiple years, the Faculty of Education will reassess the program.

5.3 Tuition and Student Cost Considerations (Answer the following questions)

5.3.1 Compare the proposed tuition rate (both domestic and international) with that of similar programs in the Campus Alberta system and in other relevant jurisdictions. (Consult with the Ministry as needed.)

The tuition fees are set to be consistent with other (similar) alternative fee programs at the University of Alberta. Tuition will be \$1400/3 credit course. Specifically, the most comparable program is the Graduate Certificate in School Leadership with tuition of \$1400/course (4 courses).

The Master of Education in Educational Studies is cost recovery programming running since 2004. Tuition is set at \$1635.20/course, total tuition of \$16,352/program (before fees). The program has a total of 10 half course credits.

Tuition comparison: other institutions (Canadian dollars unless otherwise noted)

Royal Roads	M.Ed.	\$24,770
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Royal Roads (Global Leadership) Master \$27,550
<https://www.royalroads.ca/prospective-students/master-arts-learning-and-technology>

Werklund School of Education, U of C Graduate certificate \$1296 / 3cr
<https://www.ucalgary.ca/pubs/calendar/current/p-1-2-1.html>

UBC	full-time	M.Ed.	\$2428/installment	min 6 installments
UBC	part-time	M.Ed.	\$1459	min 9 installments
UBC	counselling	M.Ed.	\$2428	min 3 installments?
UBC	counselling off campus	M.Ed.	\$2965	min 9 installments
UBC	off campus affiliate instit	M.Ed.	\$5147	min 3 installments
UBC	off campus	M.Ed.	\$2573	min 6 installments

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,266,773,1450>

Portland M.Ed. \$663 USD /cr hour 36 credit hours
<https://education.up.edu/graduate-programs/med-edmonton.html>
Note -they seem to give discounts if people register / apply early

5.3.2 Does the proposed program align with the Tuition Fee Regulation? Yes; or No

5.3.2a Please elaborate on above answer, if necessary.

5.3.3 List additional projected financial costs (e.g., fees, books, equipment, travel for WIL, etc.) for students.

Student financial costs beyond tuition are the same as what is normally required for students enrolled in a graduate program (e.g., fees, laptop, books, housing for out of town students in summer for face to face sessions)

SECTION 6: INSTITUTIONAL IMPACT

6.1 Institutional Capacity (Answer the following questions)

6.1.1 Describe how the proposed program builds on institutional strengths and/or builds institutional capacity.

Varied and diverse programs and learning opportunities in undergraduate and graduate education in the service of supporting lifelong learning (p. 8) is a core value of the Faculty of Education (Strategic Plan, 2019, p.8). With the GCES we will be able to extend our programmatic offerings within the faculty to engage the educational community in Alberta, Canada and internationally so that educationalists might experience diverse and rewarding learning opportunities (p.5).

The proposed GCES includes programming in the following areas: Early Childhood Education, Numeracy, Wellness, Rural Education, and Technology. With the certificate we are building interdepartmental relationships and programming as each of these IAF involves inter-departmental collaborations and work.

In each of these areas, there is a related Master of Education degree. Faculty members from each of these areas will have responsibility for the development of the course cluster. Specifically, Early Childhood Education is a specialization of the Department of Elementary Education, Numeracy is a specialization of the Department of Elementary Education and the Department of Secondary Education, Rural Education is a specialization in the Department of Educational Policy Studies, and Technology is a specialization in the Department of Educational Psychology.

Programming for an IAF specific to Indigenous education is a collaborative effort led by faculty in Indigenous People's Education, the Aboriginal Teacher Education program, and Indigenous scholars from across the Faculty of Education whose expertise includes indigenous education including but not limited to: history, policy, curriculum, ways of knowing, and anti-racist education.

Further, the Faculty of Education's goal to advance Indigenous education will be served not only with a specific area focus in Indigenous education but also with each thematic area infusing Indigenous ways of knowing into their content.

6.1.1a *Explain how the proposed program fits with existing programs at the institution.*

The GCES is a professional graduate certificate and is a stand alone program designed for educators in Alberta and beyond.

6.1.1b *Describe how the proposed program aligns with the institution's mandate and Comprehensive Institution Plan, and other planning documents.*

The proposed program aligns with the Comprehensive Institutional Plan (CIP) with respect to attracting and retaining talented students, providing access to an innovative learning opportunity, and advancing connections with the K-12 community, and education sector more broadly. The programming addresses the Faculty of Education's goal to have varied and diverse programs and learning opportunities in graduate education in the service of lifelong learning. (Faculty of Education, 2018, p. 8). More specifically, the GCES will prepare graduates to excel as critical, thoughtful and ethical citizens who work in and contribute to increasingly complex and diverse contexts locally, regionally, nationally and internationally (p. 10).

In addition, the proposed program is in alignment with the CIP in the following areas:

- Facilitate, build and support interdisciplinary cross-unit engagement and collaboration.

- Increase graduate access to and participation in a broad range of curricular experiential learning opportunities that are well-integrated with program goals and enrich their academic experience.
- Inspire, model and support excellence in teaching and learning.
- Foster, encourage and support innovation and experimentation in curriculum development, teaching and learning at the individual, unit and institutional levels.
- Enhance, increase, and sustain reciprocal, mutually beneficial community relations, community engagement, and community engaged research and scholarship that will extend the reach, effectiveness.
- Work closely with key provincial partners and government agencies.
- Development of mutually beneficial projects that strengthen reciprocal relationships with external stakeholders through community engagement.

6.1.2 *Comment on the facilities and equipment available at your institution to support the program.*

Digital platforms and resources available such as eClass are critical, as is the library's digital collection.

No new facilities will be required for the proposed program. Laptops will be purchased as loaners for online instructors.

6.1.3 *In cases where facilities and equipment are shared with other programs, identify impacts and/or mitigating strategies for other programs.*

Online courses will not impact facilities. Technology services will be contracted specifically for the program. The Faculty has a professional learning unit that will be used for administrative staff.

6.2 Internal Review and Approval *(Indicate which internal governance body recommended approval and specify date of approval.)*

1. Graduate Academic Affairs Council (Faculty of Education - approved November 2, 2020)
2. Faculty of Education Council (endorsed - November 3, 2020)
3. Program Review Committee - FGSR (January 6, 2021 - approved; December 2, 2020, approved pending revision; November 4, 2020 discussion)
4. Provost/ FGSR Discussion (Andrea Patrick, Suzanne French, Janice Causgrove-Dunn - December 14, 2020)
5. FGSR Council (approved - January 20, 2021)
6. RACF (February 23, 2021 - approved)
7. GFC Academic Standards Committee Sub-committee on Standards ()
8. GFC Academic Standards Committee ()

9. GFC Academic Planning Committee ()
10. Board Learning and Discovery Committee ()
11. Minister of AE ()

Proposals for freestanding certificates are submitted to IAE via the Provider and Program Registry System (PaPRS). This process is coordinated by the Office of the Provost and Vice-President (Academic).

SECTION 7: SYSTEM IMPACT

7.1 Program Duplication *(Answer the following questions)*

7.1.1 *Does the proposed program duplicate existing programming in Alberta?*

While there are similar certificates offered by the Werklund School of Education, University of Calgary, it is anticipated that the proposed program overlap with some of the topics, our programming will primarily serve teachers in the Greater Edmonton area and the Central and Northern Alberta catchment, as well as in international contexts where the U of Alberta Faculty of Education has been doing teacher in-service education. In addition, the themes we have identified: numeracy, early childhood and rural education are distinctive, and help set this certificate apart. In relation to the theme of Indigenous education, the Faculty of Education had the first and longest running program in Indigenous People's education and our indigenous scholars are internationally renowned for their scholarship in the area.

7.1.1a *If yes, list these programs (including those offered by private career colleges).*

The Werklund School of Education, University of Calgary offers a graduate certificate (interdisciplinary route) in the following thematic areas in 2020. Some of these cohorts are face to face and others are offered online:

- Advancing Healthy & Socially Just Communities & School
- Collaborative Creativity & Design Thinking for Innovation
- Curriculum as Divergence
- Indigenous Education: A Call to Action
- Leading with Heart
- Teaching Mathematics
- Educational Neuroscience: Applications for Teaching & Learning
- Foundations in School & Counselling Psychology
- Inclusive Education
- Leading & Learning in a Digital Age
- School Leadership
- Supporting & Enhancing Children's Mental Health

Teaching English as an Additional Language
Workplace & Learning in Diverse Contexts

7.1.2 *If proposed program does constitute program duplication, explain why such duplication is appropriate and beneficial in this circumstance.*

Duplication is appropriate as universities in Alberta provide both access and choice for students with their programming. The duplication is similar to the duplication that exists for Bachelor of Education degrees and Master of Education degrees.

7.2 Learner Pathways *(Answer the following questions)*

7.2.1 *Which programs or learning activities in the Alberta adult learning system ladder/transfer into this proposed program or non-credential?*

Laddering/transfer into this program does not apply.

7.2.2 *Into which programs in the Alberta adult learning system does this proposed program or non-credential ladder, transfer, or otherwise provide the necessary conditions for admission?*

The proposed program will be accepted as a ladder into some of the Faculty of Education's course-based Master of Education degree programs. Laddering is new for the Faculty of Education graduate programs. The Departments of Elementary and Secondary Education are currently through governance with their laddering proposals.

SECTION 8: OTHER CONSIDERATIONS

Are there other considerations that you believe that the Ministry should take into account when reviewing this proposal?

The need to be responsive and timely to emergent needs in the education sector is critical. With a general Educational Studies certificate, the Faculty of Education, University of Alberta will be able to address the expressed needs of educators and school jurisdictions to provide current and rigorous graduate level programming for teachers, policy makers, and curriculum specialists in a timely manner.

RECOMMENDATION (FOR DEPARTMENT USE)

Recommendation(s):

Rationale for Recommendation:

Reviewer(s):

APPENDIX 1:

Course Title and Descriptions

EDU 540 Facilitating Young Children’s Mathematical Understanding

★3 (fi 6) (either term, 3-0-0)

This course examines current research, practices, policies, and curricula related to the learning and teaching of mathematics with young children. The course also emphasizes pedagogy relevant to young children’s learning of mathematics, including the role of playful pedagogies, and connection to other curriculum areas.

EDU 541 Play and the Use of Playful Pedagogies in Early Childhood Education

★3 (fi 6) (either term, 3-0-0)

This course examines the concept of play as a pedagogical approach in early childhood education settings in relation to cultural, philosophical, and historical traditions, current practices and recent research. The course examines the concept of play as a pedagogical approach in early childhood education settings in relation to cultural, philosophical, and historical traditions, current practices and recent research.

EDU 542 Schools as Welcoming and Inclusive Environments for All Students

★3 (fi 6) (either term, 3-0-0)

This course explores the complex issues of diversity and ideologies of difference as they relate to multiculturalism, inclusion, and Indigenous issues in early childhood education, through a variety of theoretical perspectives. It also investigates markers of difference, the right to be different, and agentive possibilities for creating teaching and learning contexts that position concerns of social justice, care and equity as central to early childhood education.

EDU 543 Supporting Languages and Literacies in Early Childhood for All Students

★3 (fi 6) (either term, 3-0-0)

This course focuses on oral language development, and teaching and learning of language literacy in Early Childhood settings. The course explores instructional strategies, and resources for creating language and literacy rich learning environments, and the complex ways that young children develop oral language and early literacy skills.

EDU 545 Culturally Responsive/Regenerative Mathematics

★3 (fi 6) (either term, 3-0-0)

This course examines and develops culturally responsive teaching practices and explores regenerative mathematics in PreK-12 mathematics by drawing on perspectives and examples from Indigenous traditions and peoples, wisdom traditions, and mathematics education for social justice.

EDU 546 Numeracy Across the Curriculum

★3 (fi 6) (either term, 3-0-0)

This course develops concepts of numeracy in content areas across the PreK-12 curriculum. Mathematics, pedagogy and learning are explored through the research and professional literature, experiential learning, and reflection. Course includes cross-curricular mathematical topics.

EDU 547 Perspectives on Mathematics Learners and Learning

★3 (*fi 6*) (either term, 3-0-0)

This course explores how teachers' implicit assumptions about learning influence their decisions about the tasks chosen, questions asked, tools available, classroom setup, and assessments posed. In this course, teachers will be asked to examine their assumptions about mathematics learning alongside historical and contemporary research and perspectives on learning.

EDU 548 Playful Places of Learning in Mathematics Education

★3 (*fi 6*) (either term, 3-0-0)

This course will examine and critique the design, implementation and assessment of places for learning in mathematics education with the intention of bringing forth playful (inter)actions among teachers/learners/mathematics/materiality. Exploration will include the qualities of playful engagement, and characteristics of tasks that encourage play in PreK-12 mathematics classrooms and beyond.

EDU 550 Rural Education Issues and Advantages

★3 (*fi 6*) (either term, 3-0-0)

This course focuses on continuing and emerging educational issues and advantages unique to teaching and learning, and leadership and management in rural contexts. Students will have an opportunity to explore topics related to professional practice using empirical research and theoretical perspectives.

EDU 551 Working with Stakeholders in Rural Educational Contexts

★3 (*fi 6*) (either term, 3-0-0)

This course focuses on empirical and theoretical work concerned with stakeholder engagement. Content areas include conceptualizing stakeholder engagement in rural educational contexts, including working with community organizations, non-teaching professionals, parents, and First Nations and Métis communities. Theoretical perspectives in stakeholder engagement, collaboration, community relations, and citizen participation will be explored in relation to enduring and evolving characteristics of rural education.

EDU 552 Field Research in Rural Education

★3 (*fi 6*) (either term, 3-0-0)

This course introduces students to field research and affords the opportunity to develop an inquiry related to rural education. Students will be mentored through a small-scale research study relevant to their professional practice.

EDU 553 Research Translation & Knowledge Mobilization in Rural Educational Contexts

★3 (*fi 6*) (either term, 3-0-0)

This course focuses on conceptual foundations of knowledge translation and mobilization. Students will apply their theoretical understanding of sharing research findings and design an appropriate approach for translating academic research for the academic context.

EDU 555 Foundations of Physical Literacy & Health Literacy

★3 (*fi 6*) (either term, 3-0-0)

This course is designed to develop an in-depth understanding of Physical Literacy and Health Literacy within the school context. Physical Literacy & Health Literacy Praxis is an examination of

the theory and practice of physical and health literacy in education.

EDU 556 Health Promoting Schools

★3 (*fi 6*) (either term, 3-0-0)

This course examines current literature with a view to developing a critical assessment of the types of approaches used in comprehensive school health promotion strategies, identifying what works, what doesn't, and why certain approaches may or may not be effective for particular health issues.

EDU 557 Inclusive Health and Physical Education

★3 (*fi 6*) (either term, 3-0-0)

This course will advance students' knowledge and understanding regarding inclusion in HPE by exploring theoretical perspectives and relevant literature on inclusion. An emphasis will be placed on unpacking practitioner assumptions, negotiating inclusion in current school contexts, and confronting issues related to inclusion.

EDU 558 Teaching the Whole-Learner: Attending to the Physical, Mental, Social, and Emotional Domains

★3 (*fi 6*) (either term, 3-0-0)

This course explores the connections between health and education, including the impact of student health on learning across all subject areas, theoretical frameworks, and the implications of whole-student education and wellbeing within schools.

EDU 560 Bringing Life to Literacy Experiences

★3 (*fi 6*) (either term, 3-0-0)

This course is designed to transform understandings of Indigenous ways of nurturing literacy learning. Students will have the opportunity to participate in diverse experiences designed to deepen understanding of the potential of Indigenous knowledges, relational pedagogies, and autobiographical narrative inquiry for transforming understandings of Literacy and how we can inspire and nurture literacy alongside our next generations of children and youth.

EDU 561 Curriculum, Pedagogy, and Foundational Indigenous Knowledge and Knowing

★3 (*fi 6*) (either term, 3-0-0)

This course provides opportunities for students (as individuals and as part of a collective learning community) to dwell with the key concepts and frameworks that inform current understandings of Indigenous curriculum and pedagogy. Particular attentiveness will be given to the idea of *foundational Indigenous knowledge and knowing*—what those might be and how we might express our understandings of those in contemporary educational contexts.

EDU 562 Indigenous Land Teachings: Transitioning Towards Common Ground in Education

★3 (*fi 6*) (either term, 3-0-0)

This course will bring educators together on the Land to grow knowledge of traditional Indigenous laws and precepts. Indigenous ecological relational knowledge is based on interdependent relationships and 'Land as teacher'. An experiential process of reconciliation with Land is realized through respectful and relational ways of being. Educators will explore opportunities for children and youth to learn from the Land alongside Indigenous families and communities in schools.

EDU 563 Supporting the Health and wellbeing of Indigenous Students

★3 (*fi 6*) (either term, 3-0-0)

This course is directed towards teachers who expect to work with Indigenous children and youth. It is designed to provide learners with a broad introduction to child and adolescent development from Indigenous perspectives, as well as promising practices for helping Indigenous students to reach their full potential.

EDU 564 Foundations of Engagement with Indigenous Epistemologies in Education

★3 (*fi 6*) (either term, 3-0-0)

This course introduces and works with students to establish and participate in effective discourse and engagement with the concept of Indigenous epistemologies. Students will be encouraged to identify principles and values that underpin various epistemologies. Through critical reflection and analyses, students will acquire an enhanced understanding of Indigenous epistemologies, and a deeper comprehension of the epistemological bases of personal and social issues.

EDU 565 Contextualizing Indigenous Epistemologies in Education: Theory in Action

★3 (*fi 6*) (either term, 3-0-0)

Pre-requisite EDU 564

This course is designed as the experiential component that will follow EDU 564: Foundations of Engagement with Indigenous Epistemologies. The course will provide guided/mentored opportunities for students to participate in learning experiences situated within or derived from two distinct and separate epistemologies. One learning experience will take place within an arts-based research process, termed a “post-modern epistemology” (Vaughan, 2005), and the second experience will take place within a learning process situated within an Indigenous epistemology. Through this course, students will gain deepened understanding of Indigenous knowledge systems.

EDU 566 Experiencing Indigenous Epistemologies on the Land: A Conference Course

★3 (*fi 6*) (either term, 3-0-0)

The course will provide guided/mentored opportunities for students to participate in learning experiences situated within or derived from two distinct and separate epistemologies. One learning experience will take place within an arts-based research process, termed a “post-modern epistemology” (Vaughan, 2005), and the second experience will take place within a learning process situated within an Indigenous epistemology. Through this course, students will gain deepened understanding of Indigenous knowledge systems.

EDU 567 Aligning School Leadership with Indigenous Epistemology

★3 (*fi 6*) (either term, 3-0-0)

This course will support educators in acquiring knowledge for effective administration, programming, school management, and community engagement and relationships. Course content will focus on a strength-based model that emphasizes the use and enhancement of Indigenous epistemology. The overview will include a critical analysis of the historical, social and educational contexts within which the development of legal, financial and policy aspects of educational leadership, administration and governance occur.

EDU 568 Anti-Racist Education & Aboriginal Schooling

★3 (*fi 6*) (either term, 3-0-0)

The course is designed to support educators address and better understand anti-Aboriginal racism and its implications in education systems. Theories and practices of integrative anti-racist education are explored, including its applications in both schools and a variety of workplaces. The

course will engage with a wide range of perspectives, knowledge and strategies in realizing anti-racism.

EDU 570 Technology, Ethics, and Social Justice in Education

★3 (*fi 6*) (either term, 3-0-0)

The course explores ethical and social justice issues involving technology in education such as digital equity and access, digital participation and citizenship, algorithmic bias, artificial intelligence, extended cognition, privacy, security and surveillance. Students will examine digital technology integration from various philosophical, theoretical and social science perspectives, and will consider some of the ethical and social justice implications for teacher practice and educational policy, including addressing the TRC calls to action.

EDU 571 Technologies for Teaching

★3 (*fi 6*) (either term, 3-0-0)

This course focuses on the selection and use of technologies to support and enhance personal, professional, and teaching and learning situations. Students will engage in experiences to explore how hands-on, technology-enhanced activities can promote communication, collaboration, critical thinking and problem solving.

EDU 572 Teaching Online – Theory and Practice

★3 (*fi 6*) (either term, 3-0-0)

This course addresses the theory and practice of teaching and learning in blended and fully online learning environments in both synchronous and asynchronous formats. This course explores topics such as pedagogical frameworks, instructional design, virtual learning communities, technologies to support online teaching, and approaches to online assessment. Students will investigate how to deal with changing technological environments that mediate the delivery of instruction.

EDU 573 Computational Thinking in Teaching and Learning

★3 (*fi 6*) (either term, 3-0-0)

This course explores the role of Computational Thinking (CT) to enhance teaching, learning, and problem-solving. Students will examine the historical development of the role of CT in education; the core elements of CT (e.g., abstraction, pattern recognition, decomposition, algorithms); the rationale for including CT as part of the curriculum; research-based best practices for the integration of CT within and between the curriculum across various subject areas; the multidimensional relationship between CT, computing science, coding, problem-solving approaches in the sciences and social sciences; and, the implications for educational policy, including addressing the TRC calls to action.

EDU 595 Special Topics in Educational Theory and Practice

★3 (*fi 6*) (either term, 3-0-0)

Content varies from term to term. Topics announced prior to registration period. The student's transcript carries title descriptive of content. May be repeated.

EDU 598 Guided Independent Study in Educational Theory and Practice

★3 (*fi 6*) (either term, 3-0-0)

Directed reading or research in an area related to educational theory and practice.

APPENDIX 2
Letters of Support

November 24, 2020

Dr. Jennifer Tupper
Dean of Education
University of Alberta

Dear Dr. Tupper,

My name is Mark Yurick and I am the Alberta Teachers' Association's representative on the Graduate Academic Affairs Council. At the past meeting it was shared with the group the University of Alberta is considering offering a Graduate Certificate in Educational Studies. I just wanted to send you this brief e mail indicating the profession's support of this program being implemented.

In my opinion the proposed program offers the accessibility and flexibility to graduate study that teachers and school/jurisdiction leaders appreciate and require as often times they are completing post graduate work while continuing with their full time work. The flexibility in content as well as the opportunity to ladder these courses as credit towards further graduate studies is a win-win situation for individual and the university. The structure of the program lends itself to be responsive to issues and topics most relevant to teachers and school/jurisdiction leaders in their current context. Further, the plan to work with jurisdictions individually or as part of a collective to develop district/area cohorts where possible and applicable will offer opportunities for individuals to work together in geographic communities of practice in programs that may be partially or fully supported by their jurisdiction. These things are all good for members of the profession and lead me to communicate unequivocal support for the program.

Dr. Tupper, I do apologize for sending this to you through e mail. In normal times you would be receiving this correspondence on letterhead complete with my signature. As you probably know too well, working at home does have its benefits and challenges. That said, I do hope this e mail suffices in formally communicating the profession's support of the proposed program.

In closing, I wanted to share with you I have the privilege of representing the Association on many faculty committees. In each instance I have been tremendously impressed at the care and commitment your colleagues continually display towards the students during these difficult times, both with Covid 19 and the restructuring that is occurring. That is what teachers do and your students certainly have fine role models.

Take care and I hope you stay well.

Sincerely,

Mark Yurick, EdD

Mark P Yurick

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Dr. Jennifer Tupper

Dean, Faculty of Education University of Alberta

30 November 2020

Re: Letter of Support for Graduate Certificate in Educational Studies

Dear Dean Tupper,

I am writing to provide a letter of support for the proposed Graduate Certificate in Educational Studies. Currently, Edmonton Catholic School Division (ECSD) is partnered with the University of Alberta in a four-course certificate program in school-based leadership. My observations, predicated upon feedback from 21 ECSD participants, is that this professional learning opportunity is well received and is deepening professional knowledge, particularly in the Alberta Leader Quality Standard. What I am also hearing, is that there is appetite for some participants to ladder into a full Master of Education program.

I am aware that the proposed Graduate Certificate in Educational Studies would offer additional opportunity for educators to explore topics of interest within education e.g. technology, indigenous education, early childhood education, math education, rural education, and wellness. I further understand that the certificate program would allow for the ability to add new clusters as needs are identified. The proposed 4-course clusters clearly are appealing as they allow educator voice and choice in discerning a pathway that could, if desired, ladder into the MEd program. I therefore believe the flexibility of focus clusters inherent to this model would be very enticing for educators.

I understand that the process to approve this certificate program has passed Faculty of Education governance but now moves through university governance. My hope is that the Graduate Certificate in Educational Studies come to fruition. This opportunity would provide a rich and flexible professional learning experience for current and aspiring school-based leaders. The topics covered are truly relevant and meaningful in seeking to foster and realize greater leadership efficacy. The inherent benefits of this level of training and professional learning to the education system are many!

I commend the University of Alberta for this innovating offering and fully support this opportunity moving forward. I would be happy to discuss this further should you have any questions.

With gratitude,

Tim Cusack Ed.D

Deputy Superintendent Edmonton Catholic Schools Timothy.Cusack@ecsd.net



November 30, 2020

Faculty of Education
University of Alberta
11210 – 87 Avenue
Edmonton, AB T6G 2G5

To Whom It May Concern:

I would like to indicate my support for the proposed Graduate Certificates in Educational Studies that the University of Alberta Faculty of Education is proposing. The need and desire of rural teachers is for shorter programs that will allow them to remain current in the research and new teaching strategies in the various areas that impact teaching and learning. By implementing shorter Graduate Certificates, it will encourage teachers to take courses when they may not be willing to commit to an entire Master's Degree.

The ability to later add courses on top of this certificate to complete the Master's Degree is also an excellent and well thought out approach. Once into their courses teachers may decide to continue with the complete Degree, so having the Certificate feed into the Degree is important for them.

I would like show my support of these programs and commend the University of Alberta Faculty of Education for their progressive thinking. Please contact me if you require any more information.

Sincerely,

Scot Leys
Assistant Superintendent of Operations

FORT VERMILION SCHOOL DIVISION
"Our Children, Our Students, Our Future"

P.O. BAG NO. 1, 5213 RIVER ROAD, FORT VERMILION, ALBERTA T0H 1M0 . TELEPHONE 780-927-3766 . FAX 780-927-4625

December 1, 2020

Dr. Jennifer Tupper, Dean, Faculty of Education University of Alberta

Dear Jennifer,

Re: The Graduate Certificate in Educational Studies

Please accept this letter as an expression of support from Northern Lights Public Schools (NLPS) for the Graduate Certificate in Educational Studies (GCES) being proposed by the Faculty of Education at the University of Alberta.

NLPS provides quality education with enhanced learning opportunities to approximately 5600 students in 22 schools in north-eastern Alberta. We currently have approximately 325 teachers on staff who demonstrate a high commitment to professional development and additional course work available at the university level. In the past five years, we have run two masters cohorts with universities across Canada. We have had approximately 32 individuals who have successfully completed their Masters Programs through these opportunities. We have also recently entered an agreement with the University of Alberta to facilitate a Numeracy Academy in which approximately 20 teachers will engage in professional learning that will result in university credit.

The GCES aims to meet the needs of educational professionals who desire shorter programs that enable teachers and educational leaders to address emergency educational needs in a multitude of areas by staying current in the field. It would be extremely beneficial to rural school divisions if there was overlap between the GCES and the coursework required to enable individuals to qualify for a certificate in leadership (the LQS) which would allow them to become principals in the province of Alberta.

If you have any questions or concerns please do not hesitate to contact me. Sincerely,

Rick Cusson Superintendent

Tel: 780-623-4414 • Fax: 780-623-4041 • Address: Box 870, Lac La Biche, AB T0A 2C0 Web: nlpsab.ca • Social Media: nlpsab

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 www.gradstudies.ualberta.ca

**2021-2022 University of Alberta Proposed Calendar Graduate
 Program Changes:**

Current	Proposed
<p>Graduate Programs</p> <p style="text-align: center;">NEW</p>	<p>Graduate Programs</p> <p><u>The Graduate Certificate in Educational Studies offered by the Faculty of Education is designed around a cohort model and is for teaching professionals seeking specialization in school leadership. The focus of this certificate is enhancing educators' leadership knowledge, skills and attitudes.</u></p> <p><u>Entrance Requirements</u></p> <hr/> <p><u>The Faculty's admission requirements are a Bachelor of Education degree with an admission GPA of at least 3.0 on the 4-point scale from the University of Alberta, or an equivalent qualification and standing from a recognized institution. The admission GPA will be calculated on the last ★60 of graded coursework completed, or on the equivalent of the last two years of full-time graded coursework.</u></p> <p><u>Teacher certification or two years of teaching experience are also required.</u></p> <p><u>Where applicable, applicants must provide proof of English Language Proficiency (refer to English Language Requirement). Any one of the following is acceptable:</u></p> <ul style="list-style-type: none"> <u>IELTS minimum overall score of 6.5 with a minimum of 6.5 on each band;</u> <u>TOEFL minimum score of 93 (internet-based) with a minimum of 24 on the Speaking and</u>

Writing Bands, and a minimum of 21 on the Reading and Listening bands, or equivalent

Applicants who do not meet the minimum AGPA requirement but have considerable relevant professional experience may also be admissible. Individuals who feel that this situation applies to them are encouraged to contact the Associate Dean, Graduate Studies, Faculty of Education to discuss their status.

Program Requirements

Students are required to complete four ★3 courses for a total of ★12. ~~Normally~~ These courses are completed as part of a cohort and may consist of courses from one area of focus or a combination of several.

Required Courses (★12)

Early Childhood Education

EDU 540 (*New Course) Facilitating Young Children's Mathematical Understanding

EDU 541 (*New Course) Play and the Use of Playful Pedagogies in Early Childhood Education

EDU 542 (*New Course) Schools as Welcoming and Inclusive Environments for All Students

EDU 543 (*New Course) Supporting Languages and Literacies in Early Childhood for All Students

Math Education

EDU 545 (*New Course) Culturally Responsive/Regenerative Mathematics

EDU 546 (*New Course) Numeracy Across the Curriculum

EDU 547 (*New Course) Perspectives on Mathematics Learners and Learning

EDU 548 (*New Course) Playful Places of Learning in Mathematics Education

Rural Education

EDU 550 (*New Course) Rural Education Issues and Advantages

EDU 551 (*New Course) Working with Stakeholders in Rural Educational Contexts

EDU 552 (*New Course) Field Research in Rural Education

EDU 553 (*New Course) Research Translation & Knowledge Mobilization in Rural Educational Contexts

Wellness Education

EDU 555 (*New Course) Foundations of Physical & Health Literacy

EDU 556 (*New Course) Health Promoting Schools

EDU 557 (*New Course) Inclusive Health and Physical Education

EDU 558 (*New Course) Teaching the Whole-Learner: Attending to the Physical, Mental, Social, and Emotional Domains in a Classroom

Indigenous Education

EDU 560 (*New Course) Bringing Life to Literacy Experiences

EDU 561 (*New Course) Curriculum, Pedagogy, and Foundational Indigenous Knowledge and Knowing

EDU 562 (*New Course) Indigenous Land Teachings: Transitioning Towards Common Ground in Education

EDU 563 (*New Course) Supporting the Health and Wellbeing of Indigenous Students

EDU 564 (*New Course) Foundations of Engagement with Indigenous Epistemologies in Education

EDU 565 (*New Course) Contextualizing Indigenous Epistemologies in Education: Theory in Action

EDU 566 (*New Course) Experiencing Indigenous Epistemologies on the Land: A Conference Course

EDU 567 (*New Course) Aligning School Leadership with Indigenous Epistemology

EDU 568 (*New Course) Anti-Racist Education & Aboriginal Schooling

Technology in Education

EDU 570 (*New Course) Technology, Ethics, and Social Justice in Education

EDU 571 (*New Course) Technologies for Teaching

EDU 572 (*New Course) Teaching Online – Theory and Practice

EDU 573 (*New Course) Computational Thinking in Teaching and Learning

Other

EDU 595 (*New Course) Special Topics in Educational Theory and Practice

EDU 598 (*New Course) Guided Independent Study in Educational Theory and Practice

NOTE: Students are able to take one alternate, approved course as part of the certificate.

Length of Program

All components of the certificate must be completed within 4 years of enrollment from first registration for the certificate.

Laddering

Students who complete the certificate in good standing may be able to use the courses from the certificate to receive advanced standing in selected course-based Master of Education programs in the Faculty of Education. Completion of the certificate does not guarantee admission to a master's degree program. The certificate may be used for both the basis of admission and laddered into the course-based master degree. Details on laddering can be found in the Calendar under Regulations of the Faculty of Graduate Studies and Research.

Justification: The above content has been adapted from the current calendar wording for the Graduate Certificate in School Leadership.

https://calendar.ualberta.ca/preview_program.php?catoid=33&poid=37992&hl=%22graduate+certificate+in+school+leadership%22&returnto=search

Approved: November 2, 2020 by the Faculty of Education Graduate Academic Affairs Council (GAAC)

