



UNDERGRADUATE EDUCATION COMMITTEE (UEC) MEETING
October 26, 2018 - 10:00 AM
A235

AGENDA

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**1. APPROVAL OF THE AGENDA**

**2. APPROVAL OF UEC MINUTES**

3 - 7      **2.1.** UEC draft minutes: September 28, 2018

**3. UEC SUBCOMMITTEES**

8 - 11      **3.1. Membership on UEC Subcommittees:**

- Admissions Subcommittee
- Transfer Credit Subcommittee
- Policy Subcommittee
- Screening Subcommittee

**4. COURSES AND PROGRAMS**

12 -      **4.1. Chemistry: Course outlines**

30      Review with changes including prerequisites: CHEM 221, 241  
Review with changes including credits, title, and prerequisites: CHEM 412  
Regularization of special topics course: CHEM 444  
Review with changes including prerequisites: CHEM 451

MOTION: To approve the CHEM course outlines as presented.

31 -      **4.2. Social Work and Human Services: Course outlines**

35      New course: SOWK 302, Interdisciplinary Collaborative Practice: Working with Families

MOTION: To approve the new SOWK 302 course outline as presented.

36 -      **4.3. Social Work and Human Services: Program changes**

38      Change to program requirements: Bachelor of Social Work

MOTION: To approve the changes to the Bachelor of Social Work as

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presented.

**5. OTHER BUSINESS/DISCUSSION ITEMS**

**5.1. Admissions Subcommittee report**

**5.2. Transfer Credit Subcommittee report**

**5.3. Policy Subcommittee report**

**5.4. Senate report**

**6. INFORMATION ITEMS**

**6.1. Minor course changes** (outlines will be available at  
[www.ufv.ca/calendar/courseoutlines](http://www.ufv.ca/calendar/courseoutlines))  
BIO 111  
CHEM 214, 311, 408, 409

39 - **6.2. Procedures for membership on standing committees**  
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50 - **6.4. Revision to Procedures for Undergraduate Program and Course Approval**  
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**7. ADJOURNMENT**



## **UNDERGRADUATE EDUCATION COMMITTEE (UEC) MEETING**

September 28, 2018  
10:00 AM - A225  
Abbotsford Campus

### **DRAFT MINUTES**

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**PRESENT:** Adrianna Bakos, Courtney Boisvert, Heather Compeau, Rajdeep Dhaliwal, Peter Geller, Ceilidh Hart, Esther Jimenez Atochero, David Johnston, Gilmour Joep, Bruce Kirkley, Samantha Patridge, Teresa Piper, Kirsten Robertson, Mary Saudelli, Eric Spalding, and Ben Vanderlei  
**ABSENT:** Donna Alary, Sue Brigden, Vlad Dvoracek, Shirley Hardman, Bobby Jaswal, Amber Johnston, David McGuire, and Elaine Newman  
**GUESTS:** Paul Gumphrich, Wayne Henry, Seonaigh MacPherson, Curtis Magnuson, Marlene Murray, Corinne Richardson, Shellie Steidle, Lee-Anne Stephen, and Melissa Walter  
**RECORDER:** Amanda Grimson

#### **1. APPROVAL OF THE AGENDA**

#### **2. APPROVAL OF UEC MINUTES**

##### **2.1. UEC draft minutes: August 30, 2018**

**MOTION:**

To approve the draft minutes as presented.

CARRIED

#### **3. COURSES AND PROGRAMS**

##### **3.1. Health Sciences: Course outlines**

Change to prerequisites: NURS 203

Changes including prerequisites: NURS 490, 491

The inclusion of ENGL 105 in the prerequisites for NURS 203 was discussed, as the primary rationale given was to control when students take ENGL 105 in the program. L. Stephen and S. Steidle (Nursing representatives) agreed to provide additional information clarifying that there are also written assignments in this course.

The hours for NURS 490 (45 hours of self-directed learning) were also queried. Nursing representatives indicated that 15 hours of seminar/presentation should be added, for a total of 60 hours.

NURS 490 and 491 outlines indicate that students can only receive credit for one of these, but there is no overlap in course content. This note has been included because only one course can be applied to the BSN program. The notes will be removed, and replaced with a note in the program calendar copy.

**MOTION:**

To approve the NURS 203, 490, and 491 course outlines as amended:

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- NURS 203: statement added to evaluation: "As part of the clinical component of this course, students are required to write two critical reflections and an analysis of a patient's physiological presentation while utilizing academic writing standards."
- NURS 490: 15 hours added to "seminar/presentation", total hours changed to 60.
- NURS 490 and 491: removal of notes that students can only take one of these for credit.

CARRIED

**3.2. Adult Education: Course outlines**

Change to prerequisites and pre/corequisites: TESL 433

**MOTION:**

To approve the TESL 433 course outline as presented.

CARRIED

**3.3. Adult Education: Program proposal**

New program: Integrated Learning Design associate certificate

**MOTION:**

To recommend the new Integrated Learning Design associate certificate as presented.

CARRIED

**3.4. Agriculture Technology: Course outlines**

Changes including pre/corequisites: AGRI 192

Changes including prerequisites: AGRI 292

**MOTION:**

To approve the AGRI course outlines as presented.

CARRIED

**3.5. Agriculture Technology: Program changes**

Changes to name and program requirements: Milker Technician associate certificate (formerly Milker Technician certificate)

**MOTION:**

To recommend the changes to the Milker Technician certificate including a name change to Milker Technician associate certificate as presented, effective January 2019.

CARRIED

**3.6. Business: Course outlines**

Review with changes including title and prerequisites: BUS 377

Changes including equivalent courses: BUS 478

UEC will request that the School of Business forward a copy of the guidelines that are referred to in the course memos, so that they can be referred to when future courses are submitted.

**MOTION:**

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To approve the BUS course outlines as presented.  
CARRIED

**3.7. English: Course outlines**

Changes including title and prerequisites: ENGL 104

Cross-listing as ENGL 253: THEA 250

New cross-listed course: ENGL 203/MACS 203

New course: ENGL 223

New course: ENGL 271

New course: ENGL 390

Discontinuation: ENGL 298

Discontinuation: ENGL 225, 267, 275, 293, 294, 375

Discontinuation: ENGL 317, 377

Vice Chair D. Johnston chaired the discussion of ENGL 203/MACS 203.

**MOTION:**

To approve the ENGL 104 course outline as presented.  
CARRIED

**MOTION:**

To approve the cross-listing of THEA 250 as ENGL 253 as presented.  
CARRIED

**MOTION:**

To approve the ENGL 203/MACS 203 course outline as presented.  
CARRIED

**MOTION:**

To approve the new ENGL 223, 271, and 390 course outlines as amended:

- ENGL 233 prerequisites: "...B or better in one of ~~the following:~~ ENGL 108, 115, 120, 130, 150 or 170"

CARRIED

**MOTION:**

To approve the discontinuation of ENGL 298 as presented.  
CARRIED

**MOTION:**

To approve the discontinuation of ENGL 225, 267, 275, 293, 294, and 375 as presented.  
CARRIED

**MOTION:**

To approve the discontinuation of ENGL 317 and 377 as presented.  
CARRIED

**3.8. English: Program changes**

Changes to elective options: English programs:

- English major, English Literature
- English major, Creative Writing concentration
- English major, Drama concentration

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- English major, Writing and Rhetoric concentration
- English Honours, Creative Writing
- Creative Writing extended minor
- Creative Writing minor

**MOTION:**

To approve the changes to the English programs as presented, effective January 2019.

CARRIED

**3.9. Social Work and Human Services: Course outlines**

New course: SOWK 297, Introduction to Mental Health and Substance Use

Discontinuation: HSER 250, Integration of Social Services Theory and Practice

**MOTION:**

To approve the new SOWK 297 as presented.

CARRIED

**MOTION:**

To approve the discontinuation of HSER 250 as presented.

CARRIED

**3.10. Social Work and Human Services: Program changes**

Change to program requirements: Social Services diploma and Social Services diploma - First Nations option

**MOTION:**

To approve the changes to the Social Services diploma and Social Services diploma - First Nations option as presented, effective January 2019.

CARRIED

**3.11. Philosophy: Course outline**

New course: PHIL 495, Honours Tutorial

**MOTION:**

To approve the new PHIL 495 course outline as presented.

CARRIED

**3.12. Philosophy: Program proposal**

New program: Philosophy Honours

Note that this will be referred to BA with Philosophy Honours, rather than Philosophy Honours degree

**MOTION:**

To recommend the new Philosophy Honours as presented.

CARRIED

**3.13. Graphic and Digital Design: Course outlines**

Changes including learning outcomes: GD 202

Changes including learning outcomes: GD 358

New course: GD 254, Typography II

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New course: GD 302, Interactive Design III: Applied Web  
New course: GD 403, Dynamic Media III: Titling and Video  
New course: GD 450, Design Systems I: Experiential Graphic Design  
New course: GD 460, Design Systems II: Transmedia Solutions

**MOTION:**

To approve the GD 202 and 358 course outlines as presented.  
CARRIED

**MOTION:**

To approve the new GD course outlines as presented.  
CARRIED

**3.14. Graphic and Digital Design: Program proposal**

New program: Graphic and Digital Design major

**MOTION:**

To recommend the new Graphic and Digital Design major as presented.  
CARRIED

**3.15. Arts: Program changes**

Change to program requirements: Liberal Arts diploma

Change to program requirements: Bachelor of Arts

**MOTION:**

To recommend the changes to the Bachelor of Arts degree and Liberal Arts diploma, effective January 2019.  
CARRIED

**4. OTHER BUSINESS/DISCUSSION ITEMS**

**4.1. Membership on UEC Subcommittees:**

- Admissions Subcommittee
- Transfer Credit Subcommittee
- Policy Subcommittee
- Screening Subcommittee

This item was postponed, but will be addressed first on next month's agenda.

**5. INFORMATION ITEMS**

**5.1. Minor course changes** (outlines will be available at

[www.ufv.ca/calendar/courseoutlines](http://www.ufv.ca/calendar/courseoutlines))

BIO 420; BUS 477; CMNS 353; GEOG 117, 302, 453

**5.2. Universal Design for Learning links:**

<http://www.udlcenter.org/>

<http://www.cast.org/>

<http://www.accessiblecampus.ca/tools-resources/educators-tool-kit/>

**6. ADJOURNMENT**



## **UEC ADMISSIONS SUBCOMMITTEE**

### **TERMS OF REFERENCE**

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The UEC Admissions Subcommittee (UECAS) is a subcommittee of the Undergraduate Education Committee.

#### **Purpose**

The purpose of the subcommittee is to:

- Make decisions on special admissions requests and waivers of the language proficiency requirement for individual students.
- Advise UEC on issues related to admissions or language policy.

### **PROCEDURES**

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#### **Process**

- Students requesting special admission are required to submit the special admission request form, provide transcripts of courses and grades related to their program admission requirements, and all other requirements specified on the form.
- Requests for variation of language entrance proficiency requirements must be made in writing, and must include evidence of test scores, transcripts of courses completed, and/or writing samples.
- Additional supporting documents may be requested by the Associate Registrar, Deputy Registrar, Admissions coordinator, or the committee.
- Decisions may be made in a formal meeting, or through an email vote. For email votes, members will have a minimum of five business days to respond.
- Decisions require a decision of the majority of the members in attendance at the meeting or who participate in an email vote (minimum 3 in favour), however, if two or more members express strong opposition to the decision, or the committee is unable to decide, the decision will be referred to UEC.
- UECAS may make recommendations to UEC for changes to admissions policy or language policy, or to the language proficiency standards.

#### **Reporting**

- The chair will retain a record of all decisions made.

### **COMPOSITION**

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#### **Membership**

- Registrar or designate
- Two UEC members
- One International Education representative
- Two additional members, including at least one advisor

#### **Chair**

The UECAS will determine a chair each September.



## **UEC TRANSFER CREDIT SUBCOMMITTEE**

### **TERMS OF REFERENCE**

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The UEC Transfer Credit Subcommittee (TCS) is a subcommittee of the Undergraduate Education Committee.

#### **Purpose**

The purpose of the subcommittee is to make decisions on transfer credit recommendations for specific courses or programs from institutions or programming not recognized under Transfer credit policy, and that do not qualify for exemption from UEC approval. These might include, but not be limited to, courses from private post-secondary institutions, education or training provided by a non-post-secondary institution or organization, and formal non-credit education from any source.

The committee will not evaluate prior learning obtained other than through formal courses or programs.

### **PROCEDURES**

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#### **Process**

- The TCS will make decisions on specific transfer recommendations made or signed off by the department head for the most closely related discipline. If UFV does not offer a related discipline, the decisions should be approved by the dean or designate for the most closely related faculty.
- The TCS may request additional information or clarification from the person who evaluated the course or program.
- For precedent-setting decisions, the TCS will consider the degree of confidence in the consistency of standards at the sending institution.
- Transfer credit decisions may be made in a formal meeting, or through an email vote. For email votes, members will have a minimum of five business days to respond.
- Transfer credit decisions require a decision of the majority of the members in attendance at the meeting or who participate in an email vote (minimum 3 in favour), however, if two or more members express strong opposition to the decision, or the committee is unable to decide, the decision will be referred to UEC.
- The TCS will advise UEC on other transfer credit issues.

#### **Reporting**

- The chair will retain a record of all decisions made.

### **COMPOSITION**

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#### **Membership**

- Registrar or designate
- Two UEC members
- At least two additional faculty (as diverse a representation as possible)
- One advisor

#### **Chair**

The TCS will determine a chair each September.



## **UEC POLICY SUBCOMMITTEE**

The UEC Policy Subcommittee is a subcommittee of the Undergraduate Education Committee.

### **PURPOSE**

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The purpose of the subcommittee is to suggest new policies or revisions to policies that fall under Items 2 and 4 of the UEC Terms of Reference:

2. Advise Senate on policies, procedures, and criteria for the admission, evaluation, withdrawal, and promotion of undergraduate students.
4. Advise Senate on policies and procedures for review and approval of new and existing courses, programs, or curricular changes.

### **TERMS OF REFERENCE**

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1. Review Senate Governance Committee requests for policy reviews.
2. Consult with relevant stakeholders where necessary to draft policy revisions.
3. Bring policy drafts to UEC for discussion, approval, or recommendation to Senate.
4. Identify policies in need of revision and propose policy reviews when appropriate.
5. Initiate policy reviews when directed by UEC to do so.

### **COMPOSITION**

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#### **Membership**

- One UEC Chair
- Registrar (or designate)
- Two UEC Faculty members\*
- One UEC Advisor\*
- One IR representative
- One Dean
- One UEC at large member\*

\* Two-year term, renewable.

As needed, the committee will consult specific areas (International Education, Graduate Studies Committee, Continuing Education, specific disciplinary or Faculty areas not otherwise included in the committee, etc.)



## **UEC SCREENING SUBCOMMITTEE**

### **TERMS OF REFERENCE**

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1. Review all course and program proposals for clarity, completeness, and adherence to procedures.
2. Confirm whether a change is minor or major.
3. Determine whether proposals are consistent with current academic policies.
4. Ensure all potentially impacted areas have been consulted.
5. Approve minor course changes for publication in the calendar. Approve all other proposals for submission to CWC.

### **PROCEDURES**

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1. Review all course and program proposals according to the Terms of Reference.
2. Proposals requiring revision, additional information, or further consultation will be returned to the proponent (with a copy to Faculty Council) with a brief description of any required or suggested changes. Revised proposals are to be resubmitted to Faculty Council and then the UEC Screening Subcommittee for further review. Minor editorial changes will be made at the discretion of the UEC Screening Subcommittee and communicated to the proponent and Faculty Council.
3. After proposals have been approved by the UEC Screening Subcommittee, they will be posted for Campus-Wide Consultation.

Quorum will consist of four members. The committee will meet once a month or bi-weekly as required, at the discretion of the committee.

Implementation date: September 2014

### **COMPOSITION**

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#### **Membership**

- One UEC Chair
- Registrar (or designate)
- UEC Assistant
- UEC Faculty member\*
- UEC Advisor\*\*
- CFO/SBC representative

\* Two-year term, renewable. Please note that in the first year of this subcommittee, the UEC Faculty member will have a one-year term to ensure staggered rotation of members.

\*\*Two-year term, renewable.

**Memo for Course Changes**

To: UEC

From: Cory Beshara, Chemistry Department Head

Date: 2018 May 18

**Subject: Proposal for revision of CHEM 221 (Inorganic Chemistry)**

1. Summary of changes (select all that apply):

- ☒ Six-year review
- ☐ Number and/or course code
- ☐ Credits and/or total hours
- ☐ Title
- ☒ Calendar description
- ☐ Prerequisites and/or co-requisites
- ☐ Frequency of course offering
- ☒ Learning outcomes
- ☐ Delivery methods and/or texts and resource materials
- ☐ PLAR options, grading system, and/or evaluation methods
- ☐ Discontinuation of course
- ☐ Other – Please specify:

2. Rationale for change:

- **Course outline better reflects how the course is currently delivered.**

3. If there are substantial changes to the learning outcomes, explain how they align with the learning outcomes of the program(s):

- **Course outlines have been modernized and better aligned with program outcomes.**

4. Is this course required by any program beyond the discipline? If so, how will this change affect that program or programs?

- No

5. Which program areas have been consulted about the change(s)?

- None

6. What consideration has been given to indigenizing the curriculum?

- **Indigenization is encouraged at the program level through breadth/elective requirements where students can choose from courses where indigenization is appropriate to the course content and discipline.**

7. If this course is not eligible for PLAR, explain why:

- n/a

8. If any of the following items on the official course outline have changed, explain how the change will affect the budget for your area or any other area:
  - a. Credit value
  - b. Class size limit
  - c. Frequency of offering
  - d. Resources required (labs, equipment)
9. Are field trips required for this course? (Field trip requirements must be announced in the timetable.) How are the trips funded?  
n/a
10. Estimate of the typical costs for this course, including textbooks and other materials:
  - **\$160 for textbook**

**CWC comments and responses:**

- Memo response to question #6 may not be sufficient. (“Indigenization is encouraged at the program level thru breath/elective requirements where students can choose from courses where indigenization is appropriate to the course content and discipline.”) Suggest consulting with the Indigenous Affairs Office.

*This answer has been given in many recent course updates put through by the Math Department (Math 416), where the above answer is provided and approved. Biology 420 has also used the above sentence. This is not meant to be just a “they did it too” answer—though I also admit that it is that—but it does accurately reflect the ability of the chemistry department to indigenize the content as we understand it. We will seek further consultation with the Indigenous Affairs Office if need be, but apart from a student taking the initiative to undertake an exploration relevant to his or her cultural interests through a chemistry lens, it may not be possible to further indigenize this content. We do have some upper level courses that would explicitly allow this kind of exploration, and this is highly encouraged and desirable for us—and underscores the truth, as we currently see it, behind the statement used to answer this question. I think the faculty of science as a whole may be wrestling with this, and the “they did too” statement expressly highlights this. I am very serious about meeting chemistry’s requirements in this area, and I am currently serving on the Senate Indigenization Committee to further learn about this issue, but the first meeting is not until Oct 23, and an improvement will not be a rapid one if we wait on this alone. I am open to suggestions, and love to learn new things, anyone who reads this is welcome to send me their input.*

- The original calendar description may have been somewhat more accessible/appealing to students. Screening will not insist on changes, but suggests that the department consider revisiting this.

*The suggested changes are more descriptive of the course, and more informative for the student, who will understand it more than you are currently giving them credit for. When a student takes inorganic chemistry, seeing the list of topics as it is will not be anything other than a source of excitement. In addition, this course is becoming **more** popular due to the efforts of the professor who teaches this (Linus Chiang), and the course description is unlikely to overpower student word-of-mouth that generally dominates the reasons behind student selection of a chemistry course (chemistry is a scary word, even among science students).*

- Why are the hours being changed for this course but not for CHEM 241?

*These are two different courses that demonstrate two very different disciplines. Inorganic chemistry (221) requires more time to prepare an experiment, wait for a reaction, isolate a crude mixture, purify the crude, and characterize the purified product—it is labour intensive. Analytical chemistry (241) generally involves quantification of an already prepared sample (as it would in a real job). There are certainly further sample prep requirements, but this tends to be less labour intensive, and therefore less time-demanding. This very different need for CHEM 221 required more laboratory time for student success.*

- Course content includes inconsistent capitalization. Please check to ensure that only proper names are capitalized.

*Capitalization has been checked and determined to be consistent with what one would see in a text book within the discipline.*



ORIGINAL COURSE IMPLEMENTATION DATE: June 1994  
 REVISED COURSE IMPLEMENTATION DATE: September 2019  
 COURSE TO BE REVIEWED (six years after UEC approval): October 2022  
 Course outline form version: 10/27/2017

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------|--|-----------------------------|----|--------------------------------------------------------------|--|------------------------------|--|----------------------|--|--------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Course Code and Number:</b> CHEM 221                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           | <b>Number of Credits:</b> 4 <a href="#">Course credit policy (105)</a>                                                                                                                                                                                                                                                                                                                                                                         |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Course Full Title:</b> Inorganic Chemistry<br><b>Course Short Title:</b><br><i>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Faculty:</b> Faculty of Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           | <b>Department (or program if no department):</b> Chemistry                                                                                                                                                                                                                                                                                                                                                                                     |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Calendar Description:</b><br>Exploring chemistry of the elements and their inorganic compounds through fundamental concepts: periodicity of properties, molecular orbitals, valence, ionization potential, electron affinity, electronegativity, oxidation states, bonding and structures of inorganic solids, and coordination complexes.                                                                                                                                                                                                                                                                                                                                        |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Prerequisites (or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           | CHEM 114.                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Pre/corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i><br>Former course code/number:<br>Cross-listed with:<br>Dual-listed with:<br>Equivalent course(s):<br><i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>                                                                                                                                                                                                                                                               |           | <b>Special Topics</b><br>This course is offered with different topics:<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(Double-click on box to select it as checked.)</i><br>If yes, different lettered courses may be taken for credit:<br><input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit<br><i>(The specific topic will be recorded when offered.)</i> |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Typical Structure of Instructional Hours</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Lecture/seminar hours</td> <td style="text-align: center;">45</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td style="text-align: center;">45</td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td style="text-align: right;"><b>Total hours</b></td> <td style="text-align: center;"><b>90</b></td> </tr> </table> |           | Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                          | 45 | Tutorials/workshops |  | Supervised laboratory hours | 45 | Experiential (field experience, practicum, internship, etc.) |  | Supervised online activities |  | Other contact hours: |  | <b>Total hours</b> | <b>90</b> | <b>Transfer Credit</b><br>Transfer credit already exists: (See <a href="#">bctransferguide.ca</a> )<br><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes<br>Submit outline for (re)articulation:<br><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i> |  |
| Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 45        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| Tutorials/workshops                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| Supervised laboratory hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 45        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| Experiential (field experience, practicum, internship, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| Supervised online activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| Other contact hours:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Total hours</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>90</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           | <b>Grading System</b><br><input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           | <b>Expected Frequency of Course Offerings:</b><br>Annually<br><i>(Every semester, Fall only, annually, every other Fall, etc.)</i>                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Department / Program Head or Director:</b> Dr. Cory Beshara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           | <b>Date approved:</b> May 18, 2018                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Faculty Council approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                                        |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Dean/Associate VP:</b> Dr. Lucy Lee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                                        |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Campus-Wide Consultation (CWC)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           | <b>Date of posting:</b> October 19, 2018                                                                                                                                                                                                                                                                                                                                                                                                       |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |
| <b>Undergraduate Education Committee (UEC) approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           | <b>Date of meeting:</b> October 26, 2018                                                                                                                                                                                                                                                                                                                                                                                                       |    |                     |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                          |  |

**Learning Outcomes:**

Upon successful completion of this course, students will be able to:

1. Describe periodic trends (i.e., radii, ionization energy, electronegativity) observed across the periodic table.
2. Apply theories of bonding to describe the properties of inorganic molecules and materials.
3. Describe and predict ionic solid structures based on the periodic trends of the constituent atoms.
4. Apply Crystal Field Theory to rationalize the geometric and electronic structures of transition metal complexes.
5. Correlate experimental results (i.e., photoelectron, UV-Vis spectroscopies, magnetism) with the electronic structure of an inorganic compound.
6. Perform the synthesis and characterization of inorganic compounds in a laboratory safely with care and precision.
7. Interpret laboratory results to establish a connection between experimental and theoretical science.

**Prior Learning Assessment and Recognition (PLAR)**

☒ Yes      ☐ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (*Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.*)

The course material will be delivered through in-person lectures, in-class problem solving exercises, and out-of-class problem sets and assignments. Weekly laboratory sessions provide hands-on training in inorganic synthetic and characterization techniques.

**NOTE:** The following sections may vary by instructor. Please see course syllabus available from the instructor.

**Typical Text(s) and Resource Materials** (*If more space is required, download Supplemental Texts and Resource Materials form.*)

|    | Author (surname, initials)     | Title (article, book, journal, etc.) | Current ed.                         | Publisher | Year |
|----|--------------------------------|--------------------------------------|-------------------------------------|-----------|------|
| 1. | Housecroft, C.E., Sharpe, A.G. | Inorganic Chemistry                  | <input checked="" type="checkbox"/> | Pearson   |      |
| 2. |                                | UFV Lab Manual                       | <input type="checkbox"/>            |           |      |
| 3. |                                |                                      | <input type="checkbox"/>            |           |      |
| 4. |                                |                                      | <input type="checkbox"/>            |           |      |
| 5. |                                |                                      | <input type="checkbox"/>            |           |      |

**Required Additional Supplies and Materials** (*Software, hardware, tools, specialized clothing, etc.*)

Laboratory supplies required.

**Typical Evaluation Methods and Weighting**

|                |     |              |     |                   |   |            |      |
|----------------|-----|--------------|-----|-------------------|---|------------|------|
| Final exam:    | 40% | Assignments: | 10% | Field experience: | % | Portfolio: | %    |
| Midterm exam:  | 30% | Project:     | %   | Practicum:        | % | Other:     | %    |
| Quizzes/tests: | %   | Lab work:    | 20% | Shop work:        | % | Total:     | 100% |

**Details (if necessary):**
**Typical Course Content and Topics**

1. Electronic structure of Atoms – Atomic orbitals, effective nuclear charge
2. Theories of Atomic Structure and Periodic Trends (i.e., Atomic radii, ionization energy, electronegativity)
3. Covalent bonding and molecular structures – Valence bond theory, VSEPR Theory, Orbital hybridization
4. Molecular Orbital (MO) Theory – Homonuclear diatomics, heteronuclear diatomics, polyatomics
5. Photoelectron Spectroscopy
6. Ionic Solids – Structures, lattice energy calculation
7. Chemistry of Hydrogen
8. Coordination Chemistry – Coordination Number, nomenclature, electronic configuration of transition metal complexes, spin states
9. Crystal Field Theory – Optical (UV-Vis) spectroscopy, magnetism

**Typical Laboratory Experiments**

1. Qualitative Analysis: Reactions of Transition Metals
2. Infrared Spectroscopy: Coordination by Polyatomic Ions
3. Coordination Chemistry – Werner Complexes
4. Coordination Chemistry – Linkage Isomers
5. Preparation of Compounds with Unusual Oxidation States
6. Synthesis of an Electron-deficient Compound
7. Preparation of an Organosilicon Polymer

**Memo for Course Changes**

To: UEC

From: Coy Beshara, Chemistry Department Head

Date: 2018 May 18

**Subject: Proposal for revision of CHEM 241 (Analytical Chemistry)**

1. Summary of changes (select all that apply):

- ☒ Six-year review
- ☐ Number and/or course code
- ☐ Credits and/or total hours
- ☐ Title
- ☒ Calendar description
- ☒ Prerequisites and/or co-requisites
- ☐ Frequency of course offering
- ☐ Learning outcomes
- ☐ Delivery methods and/or texts and resource materials
- ☐ PLAR options, grading system, and/or evaluation methods
- ☐ Discontinuation of course
- ☒ Other – Please specify: Course Content

2. Rationale for change:

- Course outline better reflects how the course is currently delivered.
- CHEM 113 is being removed from the prerequisites, as it is already a prerequisite for CHEM 114, and it is redundant to restate it.

3. If there are substantial changes to the learning outcomes, explain how they align with the learning outcomes of the program(s):

- Course outlines have been modernized and better aligned with program outcomes.

4. Is this course required by any program beyond the discipline? If so, how will this change affect that program or programs?

- No affect anticipated

5. Which program areas have been consulted about the change(s)?

- n/a

6. What consideration has been given to indigenizing the curriculum?

- Indigenization is encouraged at the program level thru breath/elective requirements where students can choose from courses where indigenization is appropriate to the course content and discipline.

7. If this course is not eligible for PLAR, explain why:
  - n/a
8. If any of the following items on the official course outline have changed, explain how the change will affect the budget for your area or any other area:
  - a. Credit value
  - b. Class size limit
  - c. Frequency of offering
  - d. Resources required (labs, equipment)
9. Are field trips required for this course? (Field trip requirements must be announced in the timetable.) How are the trips funded?
  - no
10. Estimate of the typical costs for this course, including textbooks and other materials:
  - \$110 for textbook

**CWC comments and responses:**

- Memo response to question #6 may not be sufficient. ("Indigenization is encouraged at the program level thru breath/elective requirements where students can choose from courses where indigenization is appropriate to the course content and discipline.") Suggest consulting with the Indigenous Affairs Office.

*See response on memo for CHEM 221.*

- Learning outcomes #1 and #2 seem vague. Can these be made more specific?

*Those learning outcomes are **explicit** not vague: students will learn to identify all four types of error described. There are certainly examples of each type of error but providing an example may be misleading in that students may only expect to cover the example.*



**ORIGINAL COURSE IMPLEMENTATION DATE:** September 2000  
**REVISED COURSE IMPLEMENTATION DATE:** September 2019  
**COURSE TO BE REVIEWED (six years after UEC approval):** October 2022  
**Course outline form version:** 10/27/2017

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------------------------------|--|-----------------------------|----|--------------------------------------------------------------|--|------------------------------|--|----------------------|--|--------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Course Code and Number:</b> CHEM 241                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | <b>Number of Credits:</b> 4 <a href="#">Course credit policy (105)</a>                                                                                                                                                                                                                                                                                                                                                                         |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Course Full Title:</b> Analytical Chemistry<br><b>Course Short Title:</b><br><i>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Faculty:</b> Faculty of Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           | <b>Department (or program if no department):</b> CHEMISTRY                                                                                                                                                                                                                                                                                                                                                                                     |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Calendar Description:</b><br>An introduction to analytical chemistry with an emphasis on analysis of solutions. Lecture material includes handling and interpreting of experimental measurements, equilibrium, principles of titrimetry, electrochemical methods, statistical analysis, analytical separation and chromatography. Laboratory experiments illustrate lecture materials.                                                                                                                                                                                                                                                                                                                |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Prerequisites (or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | CHEM 114.                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |           | None                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Pre/corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           | None                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i><br>Former course code/number:<br>Cross-listed with:<br>Dual-listed with:<br>Equivalent course(s):<br><i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>                                                                                                                                                                                                                                                                                   |           | <b>Special Topics</b><br>This course is offered with different topics:<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(Double-click on box to select it as checked.)</i><br>If yes, different lettered courses may be taken for credit:<br><input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit<br><i>(The specific topic will be recorded when offered.)</i> |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Typical Structure of Instructional Hours</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td>Lecture/seminar hours</td> <td style="text-align: right;">45</td> </tr> <tr> <td>Tutorials/workshops/Seminars</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td style="text-align: right;">39</td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td style="text-align: right;"><b>Total hours</b></td> <td style="text-align: right;"><b>84</b></td> </tr> </table> |           | Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                          | 45 | Tutorials/workshops/Seminars |  | Supervised laboratory hours | 39 | Experiential (field experience, practicum, internship, etc.) |  | Supervised online activities |  | Other contact hours: |  | <b>Total hours</b> | <b>84</b> | <b>Transfer Credit</b><br>Transfer credit already exists: (See <a href="http://bctransferguide.ca">bctransferguide.ca</a> )<br><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes<br>Submit revised outline for rearticulation:<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i> |  |
| Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 45        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| Tutorials/workshops/Seminars                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| Supervised laboratory hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 39        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| Experiential (field experience, practicum, internship, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| Supervised online activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| Other contact hours:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Total hours</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>84</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| Labs to be scheduled independent of lecture hours: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           | <b>Grading System</b><br><input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit                                                                                                                                                                                                                                                                                                                           |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | <b>Expected Frequency of Course Offerings:</b><br>Annually<br><i>(Every semester, Fall only, annually, every other Fall, etc.)</i>                                                                                                                                                                                                                                                                                                             |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Department / Program Head or Director:</b> Cory Beshara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           | <b>Date approved:</b> April 13, 2018                                                                                                                                                                                                                                                                                                                                                                                                           |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Faculty Council approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                                        |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Dean/Associate VP:</b> Greg Schlitt (Acting)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                                        |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Campus-Wide Consultation (CWC)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           | <b>Date of posting:</b> October 19, 2018                                                                                                                                                                                                                                                                                                                                                                                                       |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Undergraduate Education Committee (UEC) approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | <b>Date of meeting:</b> October 26, 2018                                                                                                                                                                                                                                                                                                                                                                                                       |    |                              |  |                             |    |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |  |

**Learning Outcomes:**

Upon successful completion of this course, students will be able to:

- Identify absolute and relative errors.
- Identify random and systematic errors.
- Present results, and test for precision and accuracy.
- Prepare standard solutions and use appropriate calibration methods.
- Use Microsoft Excel to perform scientific calculations and produce graphs.
- Use volumetric glassware correctly to prepare solutions and perform titrations.
- Perform a back titration and analyse data.
- Use pH meter and ion-selective electrodes correctly to perform a redox titration.
- Describe basic concepts of analytical separation.
- Describe basic concepts of precipitation and perform a precipitation titration.
- Describe basic chromatographic theory (HPLC and GC).

**Prior Learning Assessment and Recognition (PLAR)**

☒ Yes      ☐ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (*Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.*)

Lectures, labs, group problem-solving sessions.

**NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.**

**Typical Text(s) and Resource Materials** (*If more space is required, download Supplemental Texts and Resource Materials form.*)

| Author (surname, initials) | Title (article, book, journal, etc.)               | Current ed.                         | Publisher      | Year |
|----------------------------|----------------------------------------------------|-------------------------------------|----------------|------|
| 1. Harris, D.C.            | Quantitative Chemical Analysis, 9 <sup>th</sup> ed | <input checked="" type="checkbox"/> | Freeman and Co | 2016 |
| 2.                         |                                                    | <input type="checkbox"/>            |                |      |
| 3.                         |                                                    | <input type="checkbox"/>            |                |      |

**Required Additional Supplies and Materials** (*Software, hardware, tools, specialized clothing, etc.*)

**Typical Evaluation Methods and Weighting**

|                |     |              |     |                   |   |            |      |
|----------------|-----|--------------|-----|-------------------|---|------------|------|
| Final exam:    | 40% | Assignments: | 5%  | Field experience: | % | Portfolio: | %    |
| Midterm exam:  | 30% | Project:     | 5%  | Practicum:        | % | Other:     | %    |
| Quizzes/tests: | %   | Lab work:    | 20% | Shop work:        | % | Total:     | 100% |

**Details (if necessary):**

**Typical Course Content and Topics**

- Statistics
- Method Validation
- Chemical Equilibrium
- Titrations
- Fundamentals of Electrochemistry
- Electrodes and Potentiometry
- Redox Titrations
- Introduction to Analytical Separations
- Gas Chromatography (GC) and High-Performance Liquid Chromatography (HPLC)

**LABORATORY EXPERIMENTS**

Representative experiments for this course:

- Introduction to Microsoft Excel and graphing with Microsoft Excel
- Dilution and calibration curve
- Precipitation and K<sub>sp</sub>
- Fajans titration
- Wine titration
- pH meter and galvanic cell
- Redox titration
- HPLC



**ORIGINAL COURSE IMPLEMENTATION DATE:** September 2001  
**REVISED COURSE IMPLEMENTATION DATE:** September 2019  
**COURSE TO BE REVIEWED** (six years after UEC approval): October 2022  
**Course outline form version:** 10/27/2017

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------|--|-----------------------------|--|--------------------------------------------------------------|--|------------------------------|--|---------------------------|--|--------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Course Code and Number:</b> CHEM 412                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | <b>Number of Credits:</b> 3 <a href="#">Course credit policy (105)</a>                                                                                                                                                                                                                                                                                                                                                                      |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Course Full Title:</b> Special Topics in Chemistry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Course Short Title:</b><br>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Faculty:</b> Faculty of Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           | <b>Department (or program if no department):</b> CHEMISTRY                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Calendar Description:</b><br>Designed for students who wish to examine in greater depth a particular topic in chemistry. It will be offered either as an individual reading course or as a seminar, depending on student and faculty interest.<br><br>Note: This course will be offered under different letter designations (e.g. C-Z) representing different topics. This course may be repeated for credit provided the letter designation differs.                                                                                                                                                                                                 |           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Prerequisites (or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | Any two 300-level CHEM courses.                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |           | NONE                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Pre/corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           | NONE                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Antirequisite Courses</b> (Cannot be taken for additional credit.)<br>Former course code/number:<br>Cross-listed with:<br>Dual-listed with:<br>Equivalent course(s):<br>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)                                                                                                                                                                                                                                                 |           | <b>Special Topics</b><br>This course is offered with different topics:<br><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Double-click on box to select it as checked.)<br>If yes, different lettered courses may be taken for credit:<br><input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input checked="" type="checkbox"/> Yes, no limit<br>(The specific topic will be recorded when offered.) |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Typical Structure of Instructional Hours</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Lecture/seminar hours</td> <td style="text-align: center;">45</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td></td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Student directed learning</td> <td></td> </tr> <tr> <td style="text-align: right;"><b>Total hours</b></td> <td style="text-align: center;"><b>45</b></td> </tr> </table> |           | Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                       | 45 | Tutorials/workshops |  | Supervised laboratory hours |  | Experiential (field experience, practicum, internship, etc.) |  | Supervised online activities |  | Student directed learning |  | <b>Total hours</b> | <b>45</b> | <b>Transfer Credit</b><br>Transfer credit already exists: (See <a href="#">bctransferguide.ca</a> )<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes<br>Submit outline for (re)articulation:<br><input type="checkbox"/> No <input type="checkbox"/> Yes (If yes, fill in transfer credit form.) |  |
| Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 45        |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Tutorials/workshops                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Supervised laboratory hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Experiential (field experience, practicum, internship, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Supervised online activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Student directed learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Total hours</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>45</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | <b>Grading System</b><br><input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit                                                                                                                                                                                                                                                                                                                        |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | <b>Expected Frequency of Course Offerings:</b><br>Every year. (Every semester, Fall only, annually, every other Fall, etc.)                                                                                                                                                                                                                                                                                                                 |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Department / Program Head or Director:</b> Dr. Cory Beshara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           | <b>Date approved:</b> May 18, 2018                                                                                                                                                                                                                                                                                                                                                                                                          |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Faculty Council approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                                     |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Dean/Associate VP:</b> Dr. Lucy Lee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                                     |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Campus-Wide Consultation (CWC)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           | <b>Date of posting:</b> October 19, 2018                                                                                                                                                                                                                                                                                                                                                                                                    |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Undergraduate Education Committee (UEC) approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | <b>Date of meeting:</b> October 26, 2018                                                                                                                                                                                                                                                                                                                                                                                                    |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |

**Learning Outcomes:**

Upon successful completion of this course, students will be able to:

1. Describe the key areas of content for the topic at hand.
2. Apply background concepts and techniques (from lower level courses) to the area of specialization.
3. Critically evaluate research papers and/or review articles from the area of specialization.
4. Discuss specific relevant topics in an oral presentation and/or written paper.

**Prior Learning Assessment and Recognition (PLAR)**

☒ Yes      ☐ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (*Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.*)

Presentation of the course material will be through two 80 minute lectures per week. Students will be encouraged to make use of online materials, relevant software, and scientific literature (usually involving online research journals). Student presentations will complement or extend material covered by the instructor.

**NOTE:** The following sections may vary by instructor. Please see course syllabus available from the instructor.

**Typical Text(s) and Resource Materials** (*If more space is required, download Supplemental Texts and Resource Materials form.*)

Depending on topics to be covered, students may be required to purchase textbooks or specialized monographs. Extensive use will be made of journals, particularly those which contain review articles.

Additional Support Materials:

- Chemical Reviews
- Accounts of Chemical Research
- Chemical and Engineering News
- Other journals and monographs as required.

**Required Additional Supplies and Materials** (*Software, hardware, tools, specialized clothing, etc.*)

Chemicals and glassware for the laboratory component of the course will be supplied.

**Typical Evaluation Methods and Weighting**

|                  |     |                  |     |                     |     |             |      |
|------------------|-----|------------------|-----|---------------------|-----|-------------|------|
| Final Report:    | 10% | Assignments:     | 10% | Field experience:   | %   | Portfolio:  | %    |
| Midterm exam(s): | 30% | Project:         | %   | Practicum:          | %   | Final Exam: | 40%  |
| Quizzes/tests:   | %   | Student Proposal | %   | Oral Presentations: | 10% | Total:      | 100% |

**Details (if necessary):**

Will depend upon the exact nature of the topics taught, but will could include a seminar and/or poster presentation and/or a major term paper, assigned problems, a mid-term examination, and a final examination.

**Typical Course Content and Topics**

Will depend on topics selected.

**Memo for New Course**

To: UEC

From: Cory Beshara, Chemistry Department Head

Date: 2018 May 18

**Subject: Proposal for new course CHEM 444 (Medicinal Chemistry)**

1. Rationale for new course:

**To regularize the course, as offering it as a special topic course has been successful thus far.**

2. How this new course fits into program(s):

**This course would provide an elective that is accessible to any student who has previously taken CHEM 213 and will utilize various chemical concepts through which we view other seemingly far off disciplines. Using chemistry as a lens in this way, CHEM 444 will demonstrate how versatile the field of chemistry can be and allow students to use their imaginations with respect to what they are able to do with a degree in chemistry.**

*Note: Adding this course to a program will usually require a program change request.*

3. Explain how the course learning outcomes align with the learning outcomes of the program(s):

**The course learning outcomes make connections to other disciplines using principles discussed in chemistry classes thus far.**

4. Will this course be required by any program beyond the discipline? If so, how will this course affect that program or programs?

**No**

5. Which program areas have been consulted about the course? **Chemistry**

6. If a new discipline designation is required, explain why: **n/a**

7. What consideration has been given to indigenizing the curriculum? **Indigenous medicine (herbal) has a rich history and will be addressed whenever a student desires to explore this area.**

8. If this course is not eligible for PLAR, explain why: **n/a**

9. Explain how each of the following will affect the budget for your area or any other area:

- a. Credit value - **decrease the enrolment revenue (4 credits to 3)**
- b. Class size limit - **unchanged**
- c. Frequency of offering - **unchanged**
- d. Resources required (labs, equipment) – **no lab (no expenses incurred as a result of offering a lab)**

10. Are field trips required for this course? (Field trip requirements must be announced in the timetable.) How are the trips funded? **no**

11. Estimate of the typical costs for this course, including textbooks and other materials:

**\$200 primary text book. Material from secondary texts books is provided under the auspices of fair use and copy right regulations followed by UFV, including putting material on reserve in the library.**

**CWC comments and responses:**

- Memo response to question #7 may not be sufficient. ("Indigenous medicine (herbal) has a rich history and will be addressed whenever a student desires to explore this area.") Could these topics not be included in the regular course content (perhaps with guest lectures if the expertise isn't in the department)?

*I am the only person who teaches this and it is currently the intent of the course to present the western model as it is the only model in which "medicinal chemistry" exists. But students are responsible for exploring a medication of their choice, and this exploration does not have to occur within the western model, which is important as it opens the course to other experiences and sources of knowledge. Certainly I am open to guest lectures but would wonder how easily that would occur as medicinal chemistry is NOT medicine.*

- Calendar description: suggest changing "utility" to either "use" or "utilization".

*Utility is the best word in this case. Utilization would also work but use is clearly insufficient.*



ORIGINAL COURSE IMPLEMENTATION DATE: September 2019  
 REVISED COURSE IMPLEMENTATION DATE:  
 COURSE TO BE REVIEWED (six years after UEC approval): October 2022  
 Course outline form version: 10/27/2017

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------|--|-----------------------------|--|--------------------------------------------------------------|--|------------------------------|--|----------------------|--|--------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course Code and Number:</b> CHEM 444                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Number of Credits:</b> 3 <a href="#">Course credit policy (105)</a>                                                                                                                                                                                                                                                                                                                                                                                    |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Course Full Title:</b> Medicinal Chemistry<br><b>Course Short Title:</b><br><i>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Faculty:</b> Faculty of Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Department (or program if no department):</b> CHEMISTRY                                                                                                                                                                                                                                                                                                                                                                                                |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Calendar Description:</b><br>Medicinal chemistry involves the search, discovery, optimization, and utility of molecules to treat human disease. An introduction to key biological concepts and pharmacological concepts required to explore medicinal chemistry. Case studies will be included.<br>Note: Students with credit for CHEM 412D cannot take this course for further credit.                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Prerequisites (or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CHEM 213.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NONE                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Pre/corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CHEM 350 or BIO 320.                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i><br>Former course code/number: CHEM 412D<br>Cross-listed with:<br>Dual-listed with:<br>Equivalent course(s):<br><i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>                                                                                                                                                                                                                                                                                                                                                            | <b>Special Topics</b><br>This course is offered with different topics:<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(Double-click on box to select it as checked.)</i><br>If yes, different lettered courses may be taken for credit:<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit<br><i>(The specific topic will be recorded when offered.)</i> |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Typical Structure of Instructional Hours</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td>Lecture/seminar hours</td> <td style="text-align: center;">45</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td></td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td style="text-align: right;"><b>Total hours</b></td> <td style="text-align: center;"><b>45</b></td> </tr> </table> Labs to be scheduled independent of lecture hours: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes | Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                                     | 45 | Tutorials/workshops |  | Supervised laboratory hours |  | Experiential (field experience, practicum, internship, etc.) |  | Supervised online activities |  | Other contact hours: |  | <b>Total hours</b> | <b>45</b> | <b>Transfer Credit</b><br>Transfer credit already exists: (See <a href="http://bctransferguide.ca">bctransferguide.ca</a> )<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes<br>Submit revised outline for rearticulation:<br><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i> |
| Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 45                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| Tutorials/workshops                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| Supervised laboratory hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| Experiential (field experience, practicum, internship, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| Supervised online activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| Other contact hours:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Total hours</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>45</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Grading System</b><br><input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Expected Frequency of Course Offerings:</b><br>Every other year<br><i>(Every semester, Fall only, annually, every other Fall, etc.)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Department / Program Head or Director:</b> Dr. Cory Beshara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Date approved:</b> March 9, 2018                                                                                                                                                                                                                                                                                                                                                                                                                       |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Faculty Council approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                                                   |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Dean/Associate VP:</b> Dr. Lucy Lee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                                                   |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Campus-Wide Consultation (CWC)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Date of posting:</b> October 19, 2018                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Undergraduate Education Committee (UEC) approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Date of meeting:</b> October 26, 2018                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                      |  |                    |           |                                                                                                                                                                                                                                                                                                                                                                        |

**Learning Outcomes:**

Upon successful completion of this course, students will be able to:

1. Describe aspects of chemistry that affect other disciplines (especially biology)
2. Illustrate chemical concepts from earlier courses "in action."
3. Explore various career paths which utilize chemistry.
4. Make connections between molecular structure and medicinal function.
5. Extrapolate simple protein-molecule interaction paradigms such as lock-and-key to more contemporary models such as conformational selection.
6. Explore important biological concepts (eg. DNA → RNA → Protein) with chemistry majors who have little previous exposure.
7. Explore molecular geometry to explore how changing a drug will effect a change in molecular recognition between protein and drug.
8. Relate protein structure/function with disease state and how a particular drug attenuates the effect of a genetic (or acute) condition.
9. Write an in-depth paper in a chemistry discipline.
10. Explain a topic of their choice to an audience utilizing an instructor approved method: ie. presentation; activities, mixture of methods.
11. Make connections between areas of knowledge that could, until now, be categorized and regarded as separate (eg. organic synthesis, molecular interactions, and genetics).

**Prior Learning Assessment and Recognition (PLAR)**

☒ Yes      ☐ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (*Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.*)

Presentation of the course material will be through two 80-minute lectures each week. Lectures will be mixed traditional and flipped so that students can actively explore concepts after a brief introduction. Extensive use of library facilities and available online databases will be required, including access to research journals. Students will be encouraged to explore a drug of their choice within the bounds of the course, which will include aspects such as (but not limited to): drug-drug interactions, drug optimization, lead compound identification, ethical practices in the pharmaceutical industry.

**NOTE:** The following sections may vary by instructor. Please see course syllabus available from the instructor.

**Typical Text(s) and Resource Materials** (*If more space is required, download Supplemental Texts and Resource Materials form.*)

| Author (surname, initials)           | Title (article, book, journal, etc.)                                                                                                                   | Current ed.                         | Publisher          | Year |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------|------|
| 1. Patrick, G. L.                    | An introduction to Medicinal Chemistry, 6 <sup>th</sup> ed.                                                                                            | <input checked="" type="checkbox"/> | Oxford Univ. Press | 2017 |
| 2. Williams, D.A.                    | Foye's Principles of Medicinal Chemistry, 7 <sup>th</sup> ed.                                                                                          | <input checked="" type="checkbox"/> | Wolters Kluwer     | 2012 |
| 3. Silverman, R.B. and M.W. Holladay | The Organic Chemistry of Drug Design and Drug Action                                                                                                   | <input checked="" type="checkbox"/> | Academic Press     | 2014 |
| 4.                                   | NOTE: additional textbooks are made available through the library and are intended to be supplemental. Students are directed to these texts as needed. | <input type="checkbox"/>            |                    |      |
| 5.                                   |                                                                                                                                                        | <input type="checkbox"/>            |                    |      |

**Required Additional Supplies and Materials** (*Software, hardware, tools, specialized clothing, etc.*)

N/A

**Typical Evaluation Methods and Weighting**

|                  |     |              |     |                   |     |            |      |
|------------------|-----|--------------|-----|-------------------|-----|------------|------|
| Final exam:      | %   | Assignments: | %   | Field experience: | %   | Portfolio: | %    |
| Midterm exam:    | %   | Project:     | %   | Practicum:        | %   | Other:     | %    |
| Quizzes/tests: 4 | 50% | Term Paper:  | 35% | Presentation:     | 15% | Total:     | 100% |

**Details (if necessary):**
**Typical Course Content and Topics**

This will depend largely on the topics selected by individual students.

The introduction to the course will include the following topics from the first text book:

- (1) Drugs and drug targets: An overview (This includes an overview of weak non-bonding interactions)
- (2) Protein structure and function
- (3) Receptors: Structure and Function (note, enzymes are covered in another course)
- (4) Receptors and signal transduction
- (5) (From Foye's) Pharmacology (pharmacokinetics and pharmacodynamics)
- (6) Highlight of two drugs within the above framework
- (7) Individual student topics (discussed with and approved by professor) using the above framework

**Memo for Course Changes**

To: UEC

From: Coy Beshara, Chemistry Department Head

Date: 2018 May 18

**Subject: Proposal for revision of CHEM 451 (Bio-inorganic Chemistry)**

1. Summary of changes (select all that apply):

- ☒ Six-year review
- ☐ Number and/or course code
- ☐ Credits and/or total hours
- ☐ Title
- ☐ Calendar description
- ☒ Prerequisites and/or co-requisites
- ☐ Frequency of course offering
- ☐ Learning outcomes
- ☒ Delivery methods and/or texts and resource materials
- ☐ PLAR options, grading system, and/or evaluation methods
- ☐ Discontinuation of course
- ☐ Other – Please specify:

2. Rationale for change:

- **Six year review, and correction of one of the prerequisite course numbers.**

3. If there are substantial changes to the learning outcomes, explain how they align with the learning outcomes of the program(s):

- **No changes**

4. Is this course required by any program beyond the discipline? If so, how will this change affect that program or programs?

- n/a

5. Which program areas have been consulted about the change(s)?

- n/a

6. What consideration has been given to indigenizing the curriculum?

- **Indigenization is encouraged at the program level through breadth/elective requirements where students can choose from courses where indigenization is appropriate to the course content and discipline.**

7. If this course is not eligible for PLAR, explain why:

- 

8. If any of the following items on the official course outline have changed, explain how the change will affect the budget for your area or any other area:

- a. Credit value
  - b. Class size limit
  - c. Frequency of offering
  - d. Resources required (labs, equipment)
9. Are field trips required for this course? (Field trip requirements must be announced in the timetable.) How are the trips funded?
- n/a
10. Estimate of the typical costs for this course, including textbooks and other materials:
- **\$100-\$200**

**CWC comment and response:**

- “Bioinorganic” appears to now be acceptable as a compound word, rather than the hyphenated “bio-inorganic”.

*Both are in use and either is correct. We prefer bio-inorganic.*



**ORIGINAL COURSE IMPLEMENTATION DATE:** September 1997  
**REVISED COURSE IMPLEMENTATION DATE:** September 2019  
**COURSE TO BE REVIEWED** (six years after UEC approval): October 2022  
**Course outline form version:** 10/27/2017

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------|--|-----------------------------|--|--------------------------------------------------------------|--|------------------------------|--|---------------------------|--|--------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Course Code and Number:</b> CHEM 451                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | <b>Number of Credits:</b> 3 <a href="#">Course credit policy (105)</a>                                                                                                                                                                                                                                                                                                                                                           |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Course Full Title:</b> Bio-inorganic Chemistry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Course Short Title:</b><br>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Faculty:</b> Faculty of Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           | <b>Department (or program if no department):</b> CHEMISTRY                                                                                                                                                                                                                                                                                                                                                                       |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Calendar Description:</b><br>Bio-inorganic chemistry is a rapidly expanding area and provides an important bridge between chemistry and biology. Students will study a variety of biological systems involving both main-group and transition metals.                                                                                                                                                                                                                                                                                                                                                                                                 |           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Prerequisites (or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | CHEM 221 and one of the following: CHEM 320, CHEM 341, CHEM 350, or BIO 320.                                                                                                                                                                                                                                                                                                                                                     |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |           | NONE                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Pre/corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           | NONE                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Antirequisite Courses</b> (Cannot be taken for additional credit.)<br>Former course code/number:<br>Cross-listed with:<br>Dual-listed with:<br>Equivalent course(s):<br>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)                                                                                                                                                                                                                                                 |           | <b>Special Topics</b><br>This course is offered with different topics:<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Double-click on box to select it as checked.)<br>If yes, different lettered courses may be taken for credit:<br><input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit<br>(The specific topic will be recorded when offered.) |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Typical Structure of Instructional Hours</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Lecture/seminar hours</td> <td style="text-align: center;">45</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td></td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Student directed learning</td> <td></td> </tr> <tr> <td style="text-align: right;"><b>Total hours</b></td> <td style="text-align: center;"><b>45</b></td> </tr> </table> |           | Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                            | 45 | Tutorials/workshops |  | Supervised laboratory hours |  | Experiential (field experience, practicum, internship, etc.) |  | Supervised online activities |  | Student directed learning |  | <b>Total hours</b> | <b>45</b> | <b>Transfer Credit</b><br>Transfer credit already exists: (See <a href="#">bctransferguide.ca</a> )<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes<br>Submit outline for (re)articulation:<br><input type="checkbox"/> No <input type="checkbox"/> Yes (If yes, fill in transfer credit form.) |  |
| Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 45        |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Tutorials/workshops                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Supervised laboratory hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Experiential (field experience, practicum, internship, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Supervised online activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Student directed learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Total hours</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>45</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| Labs to be scheduled independent of lecture hours: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           | <b>Grading System</b><br><input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit                                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | <b>Expected Frequency of Course Offerings:</b><br>every second year<br>(Every semester, Fall only, annually, every other Fall, etc.)                                                                                                                                                                                                                                                                                             |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Department / Program Head or Director:</b> Cory Beshara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           | <b>Date approved:</b> March 9, 2018                                                                                                                                                                                                                                                                                                                                                                                              |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Faculty Council approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                          |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Dean/Associate VP:</b> Greg Schlitt (Acting)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | <b>Date approved:</b> September 7, 2018                                                                                                                                                                                                                                                                                                                                                                                          |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Campus-Wide Consultation (CWC)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           | <b>Date of posting:</b> October 19, 2018                                                                                                                                                                                                                                                                                                                                                                                         |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |
| <b>Undergraduate Education Committee (UEC) approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | <b>Date of meeting:</b> October 26, 2018                                                                                                                                                                                                                                                                                                                                                                                         |    |                     |  |                             |  |                                                              |  |                              |  |                           |  |                    |           |                                                                                                                                                                                                                                                                                                                        |  |

**Learning Outcomes:**

Upon successful completion of this course, students will be able to:

1. Describe the properties of biological molecules (proteins, nucleic acids, and other metal-binding biomolecules) that contain metal ions.
2. Describe critically the type of information relating to metal ions that can be obtained from certain physical methods, such as X-ray diffraction, NMR and EPR, Mossbauer spectroscopy, FT-IR spectroscopy, circular dichroism, and UV-Visible spectroscopy.
3. Describe the choice, uptake, and assembly of metal-containing units in biology.
4. Explain the means by which organisms regulate metal ion concentrations in the cell.
5. Summarize the involvement of metal ions in determining the correct folding and cross-linking of biomolecules.
6. Discuss critically the factors that determine the binding of metal ions and complexes to proteins and nucleic acids.
7. Explain the role of metals in electron-transfer proteins.
8. Outline the role of metal ions in specific enzyme reactions involving non-redox reactions, and atom- and group-transfer reactions.
9. Expound upon several examples by which proteins tune the properties of metals to achieve specific functions.

**Prior Learning Assessment and Recognition (PLAR)**

☒ Yes      ☐ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (*Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.*)

Presentation of the course will be by interrelated theory classes ("lectures"), and discussion periods ("seminars"). Audio visual aids will be used where appropriate, and students will be expected to use the UFV library for literature research. Students may be required to present seminars or research papers.

**NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.**

**Typical Text(s) and Resource Materials** (*If more space is required, download Supplemental Texts and Resource Materials form.*)

| Author (surname, initials)                         | Title (article, book, journal, etc.)                                | Current ed.              | Publisher               | Year |
|----------------------------------------------------|---------------------------------------------------------------------|--------------------------|-------------------------|------|
| 1. Lippard, S.J. and J.M. Berg                     | Principles of Bioinorganic Chemistry                                | <input type="checkbox"/> |                         |      |
| 2. Wolfgang Kaim, Brigitte Schwederski, Axel Klein | Bioinorganic Chemistry, Inorganic Elements in the Chemistry of Life | <input type="checkbox"/> | Wiley                   | 2013 |
| 3. Dieter Rehder                                   | Bioinorganic Chemistry                                              | <input type="checkbox"/> | Oxford University Press | 2014 |
| 4.                                                 |                                                                     | <input type="checkbox"/> |                         |      |
| 5.                                                 |                                                                     | <input type="checkbox"/> |                         |      |

**Typical Evaluation Methods and Weighting**

|                  |     |                                        |     |                     |   |            |      |
|------------------|-----|----------------------------------------|-----|---------------------|---|------------|------|
| Final exam       | 40% | Assignments and seminar presentations: | 20% | Field experience:   | % | Portfolio: | %    |
| Midterm exam(s): | 40% | Project:                               | %   | Practicum:          | % | Other:     | %    |
| Quizzes/tests:   | %   | Student Proposal                       | %   | Oral Presentations: | % | Total:     | 100% |

**Details (if necessary):**

**Typical Course Content and Topics**

The course will be based on the required text. The course will also make use of reprint materials.

1. **Introduction** - Essential and non-essential elements. Cycles of macronutrients and trace elements. Biological ligands and ligand specificity. Hard and soft acids and bases. Stability constants. Kinetics of aquo exchange processes. Binding residues in amino acids.
2. **Phosphorus Chemistry** - Transport enzymes involving ATP. Kinases, role of group IA and IIA cations. Cell membranes.
3. **Review of Protein Structure, Enzymes, Coenzymes.**
4. **Metals in Photosynthesis** - Role of magnesium and manganese.
5. **Dioxygen Carriers and Storage** - Hb Mb Hc and Hr and O<sub>2</sub> binding. Synthetic models for oxygen-binding proteins. O<sub>2</sub> activation. Monooxygenases. Cytochrome P450. Tyrosinase. Methene mono-oxygenase. Role of copper. Dioxygenases and oxidases. Superoxide Dismutase. Horse Radish Peroxidases. Catalase.
6. **Electron Transfer Processes** - Cytochrome a, b and c. Blue copper protein. Fe-S protein. Molybdoenzymes and cobalamins.
7. **Non-Redox Metalloenzymes.**
8. **Nitrogen Fixation** - Nitrogenases. Nitrate reductase. Fe and Mo proteins and enzymes.
9. **Pharmaceuticals** - Therapeutic activity of chelating agents. Platinum complexes in chemotherapy. Biological chemistry of gold complexes. Radiopharmaceuticals.
10. **Toxicity of Heavy Metals and Other Elements** - Toxicity of Cu, Cd, Pb, Hg, Se, As, Be, V, Cr, Mn, Ni.
11. **Physical Methods** - Illustrative examples involving.

**Memo for New Course**

To: Professional Studies Faculty Council

From: Margaret Coombes, Director of School of SWHS

Date: February 23, 2018

**Subject: Proposal for new course SOWK 302 – Interdisciplinary Collaborative Practice: Working with families experiencing mental health issues, interpersonal violence, and substance misuse)**

1. Rationale for new course: the course was developed to address a community need identified by the Safe Relationships Safe Children's provincial initiative. The course offers a multidisciplinary approach to learning collaborative skills, knowledge of community providers and the impact of substance misuse, interpersonal violence, and mental health issues on families and the community.
2. How this new course fits into program(s): The course aligns with the SWHS mission to work collaboratively with individuals, families, groups, and communities in diverse and cross-cultural environments with the SWHS goal to contribute to social work knowledge development through research, the promotion of scholarly activities and collaborative community work. It will be added as a SOWK elective option to the Bachelor of Social Work degree.

***Note:** Adding this course to a program will usually require a **program change request**.*

3. Explain how the course learning outcomes align with the learning outcomes of the program(s):  
Students will demonstrate a range of generalist social work intervention including engagement and collaborative skills in individual, group, non-traditional settings.
4. Will this course be required by any program beyond the discipline? If so, how will this course affect that program or programs? **No**
5. Which program areas have been consulted about the course? **Criminology, and Child, Youth, and Family Studies, and Psychology**
6. If a new discipline designation is required, explain why: **None**
7. What consideration has been given to indigenizing the curriculum? **This course will focus on non-traditional settings and service delivery to vulnerable populations such as Indigenous people experiencing intergenerational trauma, racism, sexism and so forth.**
8. If this course is not eligible for PLAR, explain why: PLAR cannot be awarded for this course because student must demonstrate skills in community group activities and classroom settings.
9. Explain how each of the following will affect the budget for your area or any other area: **None**
  - a. Credit value
  - b. Class size limit
  - c. Frequency of offering
  - d. Resources required (labs, equipment)

10. Are field trips required for this course? (Field trip requirements must be announced in the timetable.) How are the trips funded? **No**

11. Estimate of the typical costs for this course, including textbooks and other materials:

**Student course material may range from \$75.00 to 150.00 for textbooks.**

**CWC comments and responses:**

- Prerequisites: it seems unusual not to have any course prerequisites included for a course of this nature. Will, a student who has never taken a SOWK course to be able to be successful in this course?

Yes.



ORIGINAL COURSE IMPLEMENTATION DATE: May 2019  
 REVISED COURSE IMPLEMENTATION DATE:  
 COURSE TO BE REVIEWED (six years after UEC approval): October 2022  
 Course outline form version: 10/27/2017

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------|----|---------------------|--|-----------------------------|--|--------------------------------------------------------------|----|------------------------------|--|-----------------------------------------------|---|--------------------|-----------|
| <b>Course Code and Number:</b> SOWK 302                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Number of Credits:</b> 3 <a href="#">Course credit policy (105)</a>                    |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Course Full Title:</b> Interdisciplinary Collaborative Practice: Working with Families<br><b>Course Short Title:</b> Collaborative Practice<br><i>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Faculty:</b> Faculty of Professional Studies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Department (or program if no department):</b> School of Social Work and Human Services |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Calendar Description:</b><br>Instructors from multiple disciplines will teach students the impact of substance misuse, interpersonal violence, and mental health issues on families and the community. Students will learn family-focused collaborative interventions involving services and programs offered by providers including government agencies and community organizations.                                                                                                                                                                                                                                                                                                                                                |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Prerequisites (or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 60 university-level credits or instructor's permission.                                   |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | None                                                                                      |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Pre/corequisites (if applicable, or NONE):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | None                                                                                      |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i><br>Former course code/number: <b>N/A</b><br>Cross-listed with:<br>Dual-listed with:<br>Equivalent course(s):<br><i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>                                                                                                                                                                                                                                                                                                       |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Special Topics</b><br>This course is offered with different topics:<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(Double-click on box to select it as checked.)</i><br>If yes, different lettered courses may be taken for credit:<br><input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit<br><i>(The specific topic will be recorded when offered.)</i>                                                                                                                                                                                                                                                                                          |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Transfer Credit</b><br>Transfer credit already exists: (See <a href="#">bctransferguide.ca</a> )<br><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes<br>Submit revised outline for rearticulation:<br><input type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i>                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Typical Structure of Instructional Hours</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Lecture/seminar hours</td> <td style="text-align: center;">25</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td></td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td style="text-align: center;">14</td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Other contact hours: Group and portfolio work</td> <td style="text-align: center;">6</td> </tr> <tr> <td style="text-align: right;"><b>Total hours</b></td> <td style="text-align: center;"><b>45</b></td> </tr> </table> |                                                                                           | Lecture/seminar hours | 25 | Tutorials/workshops |  | Supervised laboratory hours |  | Experiential (field experience, practicum, internship, etc.) | 14 | Supervised online activities |  | Other contact hours: Group and portfolio work | 6 | <b>Total hours</b> | <b>45</b> |
| Lecture/seminar hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 25                                                                                        |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| Tutorials/workshops                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| Supervised laboratory hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| Experiential (field experience, practicum, internship, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 14                                                                                        |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| Supervised online activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| Other contact hours: Group and portfolio work                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6                                                                                         |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Total hours</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>45</b>                                                                                 |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Grading System</b><br><input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Expected Frequency of Course Offerings:</b><br>Annually<br><i>(Every semester, Fall only, annually, every other Fall, etc.)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| Labs to be scheduled independent of lecture hours: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                           |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Department / Program Head or Director:</b> Margaret Coombes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Date approved:</b> April 13, 2018                                                      |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Faculty Council approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Date approved:</b> June 1, 2018                                                        |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Dean/Associate VP:</b> Dr. Tracy Ryder-Glass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Date approved:</b> June 1, 2018                                                        |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Campus-Wide Consultation (CWC)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Date of posting:</b> September 14, 2018                                                |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |
| <b>Undergraduate Education Committee (UEC) approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Date of meeting:</b> October 26, 2018                                                  |                       |    |                     |  |                             |  |                                                              |    |                              |  |                                               |   |                    |           |

## Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Differentiate between the various systems' mandates, role of providers, service orientation, and expectations that connect with families who experience interpersonal violence, mental health concerns, and substance misuse issues.
- Analyze how service providers share critical information and examine how confidentiality is linked to personal, professional and family safety.
- Assess safety and crisis (physical, mental health, emotional) for individuals and families.
- Determine available community resources while creating team, individual and family safety plans.
- Evaluate service delivery to vulnerable populations, including but not limited to Indigenous Peoples experiencing intergenerational trauma, racism, and sexism.
- Manage personal and professional ethics and boundaries while partnering with families and services in a collaborative interdisciplinary environment.
- Identify a "personal best practice approach" that works within complex interdisciplinary environments and respects differences.
- Demonstrate collaborative skills in individual, group, and non-traditional settings.

## Prior Learning Assessment and Recognition (PLAR)

☐ Yes ☒ No, PLAR cannot be awarded for this course because student must demonstrate skills in community group activities and classroom settings.

## Typical Instructional Methods (Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.)

Lectures, guest lectures, presentations and group activities.

**NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.**

## Typical Text(s) and Resource Materials (If more space is required, download Supplemental Texts and Resource Materials form.)

| Author (surname, initials)                                       | Title (article, book, journal, etc.)                                                                                      | Current ed.                         | Publisher                                                  | Year |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------|------|
| 1. Campbell, M., Hilton, N.Z., Kropp, P.R., Dawson, M., Jaffe, P | Domestic violence risk assessment: Informing safety planning & risk management                                            | <input checked="" type="checkbox"/> | Canadian Domestic Homicide Prevention Initiative           |      |
| 2. Community Coordination for Women's Safety (CCWS)              | Interagency case assessment teams best practices: Working together to reduce the risk of domestic violence                | <input checked="" type="checkbox"/> | Community Coordination for Women's Safety (CCWS)           |      |
| 3. Menzies, P., & Lavalley, F. L.                                | Aboriginal people with addiction and mental health issues – what health, social service and justice workers need to know. | <input checked="" type="checkbox"/> | Centre for Addiction and Mental Health. Journey to Healing |      |

## Typical Evaluation Methods and Weighting

|                |   |              |     |                   |   |            |      |
|----------------|---|--------------|-----|-------------------|---|------------|------|
| Final exam:    | % | Assignments: | 30% | Field experience: | % | Portfolio: | 50%  |
| Midterm exam:  | % | Project:     | 20% | Practicum:        | % | Other :    | %    |
| Quizzes/tests: | % | Lab work:    | %   | Shop work:        | % | Total:     | 100% |

**Details (if necessary):** Portfolio will be individualized and will identify a "personal best practice approach".

## Typical Course Content and Topics

- Overview of the course syllabus, introduce experiential learning in groups and personal portfolios.
  - Reflective group exercise: Relevance of a collaborative community approach to debunk societal myths and stereotypes
- Review the roles and mandates of community providers, emergency responders, and government systems. Review case scenarios for each module, and group projects.
- Explore each agencies' capacity to assess, intervene, and support families experiencing mental health, interpersonal violence, and drug misuse.
  - Group activity tip sheet (family and provider questions and facts).
- Review of substance misuse assessments, safety issues, community interventions, and the relationship between providers and families.
  - Students to organize a panel of community experts.
- Review of mental health assessments, safety issues, and effects on the community. What is trauma?
- Introduction to interdisciplinary and community view of violence, from a practice and research perspective while assessing safety, cultural, social dynamics and safe relationships.
- Learn how safe communities are formed using collaborative responses, sharing critical information, and the types and use of confidentiality.
- Differentiate between best practice and evidence-based interventions and community activities that demonstrate engagement and partnerships with families and services (Group exercise using case scenarios)

**SOWK 302****University of the Fraser Valley Official Undergraduate Course Outline**

Page 3 of 3

- Understand and critically evaluate various service delivery models.
  - Create a wrap-around response that includes supports, services and safety plans for a team, a family, or an individual. (Group exercise using case scenarios)
- Resolve ethical dilemmas while maintaining personal and professional ethics and boundaries. Reflection of one's personal practice, collaborations, and use of self with families.
- Identify strengths and gaps in services, propose modifications and implications of changes. (Group exercise using case scenarios)
- Portfolio presentations
- Debrief student learning, including the opportunity for student feedback about course

**Memo for Program Changes**

To: UEC

From: Margaret Coombes, Director, School of Social Work and Human Services

Date: April 27, 2018

**Subject: Program change (Bachelor of Social Work and Human Services – Addition of SOWK 302 as Group A elective)**

1. Summary of changes (select all the apply):

- ☐ Program revision that requires new resources
- ☒ Addition of new course options or deletion or substitution of a required course
- ☐ Change to the majority of courses in an approved program
- ☐ Change to the duration, philosophy, or direction of a program
- ☐ Addition of a new field of specialization, such as a concentration
- ☐ Change in requirements for admission
- ☐ Change in requirements for residency or continuance
- ☐ Change in admission quotas
- ☐ Change which triggers an external review
- ☐ Deletion of a program not included in the Program Discontinuance policy
- ☐ Other – Please specify:

2. Rationale for change(s):

SOWK 302 was developed to address a community need from the Safe Relationships Safe Children's provincial initiative to develop a course that has multidisciplinary approach and teaches collaborative skills and knowledge of how to work with community providers and families impacted by substance misuse, interpersonal violence, and mental health concerns.

SOWK 302 will be added to the GROUP A elective option for the BSW program.

3. If program outcomes are new or substantially changed, explain how they align with the Institutional Learning Outcomes:

No changes

4. What consideration has been given to indigenizing the curriculum?

Indigenization is embedded in the course content.

5. Will additional resources be required? If so, how will these costs be covered?

No additional resources required.

6. How will students be impacted? (Indicate the projected number of students impacted.) Is the change expected to increase/decrease enrolment in the program?

More course options for students and no impact on enrolment.

7. Does the number of required core or elective credits from the program-specific discipline change? If so, will this change the total number of courses to be offered within the discipline?

No change.

8. Identify any available resources that will be used to accommodate the program changes. (Eg. seats in existing classes, conversion of sections, timetabling changes, deletion of courses, etc.)

Not applicable.

9. Is the number of required or elective courses from other disciplines in the program changing? If so, what is the estimated impact to enrolments in these courses? Provide a memo from the respective dean(s) of the impacted faculty to confirm if budgetary implications have been considered and addressed.

No changes.

10. Provide a memo from the program's dean to confirm that budgetary implications of the proposed changes have been considered and will be addressed within the faculty budget.

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## **ACADEMIC CALENDAR CHANGES**

### **BACHELOR OF SOCIAL WORK**

[https://www.ufv.ca/calendar/current/ProgramsR-Z/SWHS\\_BSW.htm](https://www.ufv.ca/calendar/current/ProgramsR-Z/SWHS_BSW.htm)

#### **Electives**

BSW students are required to complete a total of six SOWK electives (see below) and two upper-level Arts and Science electives.

#### **SOWK Group A electives**

Students must complete a minimum of two SOWK Group A electives:

| <b>Course</b>   | <b>Title</b>                                    | <b>Credits</b> |
|-----------------|-------------------------------------------------|----------------|
| SOWK 301        | Social Work Practice with Groups                | 3              |
| <u>SOWK 302</u> | <u>Interdisciplinary Collaborative Practice</u> | <u>3</u>       |
| SOWK 380        | Social Work and Community Development           | 3              |
| SOWK 483        | Family Centred Social Work                      | 3              |



Office of Dean, Tracy Ryder Glass  
Faculty of Professional Studies  
Phone: 604-851-6341  
Email: tracy.ryderglass@ufv.ca

## **Memo**

**To:** Senate Budget Committee

**From:** Tracy Ryder Glass, Dean – Faculty of Professional Studies

**Re:** Proposed changes to the Bachelor of Social Work & Human Services – Addition of SOWK 302 as a Group A elective)

**Date:** May 1, 2018

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The School of Social Work & Human Resources proposes the addition of SOWK 302 as a Group A elective.

There are no budgetary implications for this proposed revision within the School of Social Work & Human Services, and the Faculty of Professional Studies budgets.

A handwritten signature in black ink, appearing to be "T. Ryder Glass".



## **Procedures for Membership on Senate Standing Committees**

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These procedures apply to Senate standing committees that have positions filled by expressions of interest. These procedures will also be followed by other bodies requiring representation from Senate.

The overall objective of these procedures is to produce committees that will responsibly carry out the trust that Senate has placed in them. These procedures are maintained and supported by the University Secretariat office.

### **1. DEFINITIONS**

1. "Faculty member" means an employee of UFV who works as an instructor, lecturer, assistant professor, associate professor, professor, or in an equivalent position designated by the Senate.
2. "Support staff" means an employee of UFV who is not (a) an officer of the university, or (b) a faculty member.
3. "Student" means a person who is presently enrolled at UFV in a credit course or who is designated by resolution of the Senate as a student.
4. "Officer of the University" is the president, a vice-president, an associate vice-president, a dean, an associate dean, an executive director, an associate director, a director (excluding directors of schools within a faculty who are voting faculty members), university secretary, chief information officer, legal counsel, university librarian, and the registrar.
5. "Employee of UFV" refers to a person who has a permanent or continuing employment contract with UFV.
6. "Other" refers to community members or other designated representatives as required in any standing committee's terms of reference.

### **2. TERMS OF OFFICE**

As defined in the standing committees of Senate rules for the conduct of business:

The terms of Senate members on Senate standing committees shall be the balance of the members' terms on Senate, renewable for additional terms, subject to being re-elected to Senate, except in the case of students, whose terms shall be a maximum of three years, subject to being annually re-elected to Senate.

Non-Senate members on standing committees shall have two-year terms. This does not apply to ex officio members. Membership for non-members of Senate on the standing committees may be renewed for additional terms.

Terms begin August 1<sup>st</sup>.

**2.1. Persons not eligible**

The following persons are not eligible to be or to remain as members of a Senate standing committee:

- A person who is a member of a Board or Senate at another post-secondary institution.
- A member of a Senate standing committee who ceases to be eligible during his or her term of office immediately ceases to be a member of the Senate standing committee.

**3. PROCEDURES FOR EXPRESSIONS OF INTEREST**

The call for expressions of interest will be open for three weeks. If no expressions of interest are received, the call may be extended for two weeks. If no expressions of interest are submitted during the second call, the call will remain indefinitely extended until an expression of interest is received and accepted.

**3.1. Annual call for expressions of interest**

A notice of the regular annual call for expressions of interest shall be widely distributed.

**3.2. Order of priority for expressions of interest****3.2.1. Faculty positions:**

Expressions of interest will first be sought from faculty members of Senate for membership on standing committees.

Expressions of interest will then be sought from non-Senate faculty members.

**3.2.2. Staff positions:**

Expressions of interest will first be sought from staff members of Senate for membership on standing committees.

Expressions of interest will then be sought for non-Senate staff.

**3.2.3. Student positions:**

Expressions of interest will first be sought from student members of Senate for membership on standing committees.

Expression of interest will then be sought from non-Senate undergraduate and graduate students.

**3.2.4. Other positions:**

Expressions of interest will be sought from community and other designated representatives for membership, as set out in the standing committee's terms of reference.

Candidates who are not members of Senate will be required to submit an expression of interest form, including the accompanying information sheet.

**3.3. Recommendations**

- 3.3.1. Expressions of interest from Senate members will be reviewed at Senate where final recommendations for membership on standing committees will be made.
- 3.3.2. Expressions of interest from non-Senate members will be reviewed by the Senate Governance Committee (SGC) who will then recommend nominees to Senate for approval. The following guidelines will be used:
- SGC is responsible for ensuring the broadest possible base of representation, given the available pool of nominees;
  - SGC will make every effort to ensure that committee composition considers the experience and interest of candidates and the diversity of disciplines at the University;
  - Notwithstanding the guidelines outlined above, SGC must exercise its best judgment, and do so with consideration of the best interests of UFV;
  - SGC will provide a report to Senate with its recommendations for membership on standing committees.
- 3.3.3. Additional nominations may be submitted on the floor by members of Senate. To be considered, nominees must agree to stand for nomination.

**4. PROCEDURES FOR VACANCIES**

Upon identification of a vacancy, the chair of the standing committee will notify the Secretariat office. (Attendance requirements for the standing committees are specified in the Rules for the Conduct of Business).

If three or fewer months are remaining in the term of office, the position will remain vacant until the regular call for expressions of interest is made. Otherwise, the list of candidates who had expressed an interest in the committee when the original appointments for that term were made, may be canvassed to identify a replacement to recommend to Senate for approval.

If there are no suitable candidates, the following procedures will be carried out in a timely manner:

**4.1. Order of Priority for expressions of interest****4.1.1. Faculty vacancies:**

Faculty members of Senate will be given priority for vacant positions.

If no expressions of interest are received at Senate, expressions of interest will be sought from non-Senate faculty members.

**4.1.2. Staff vacancies:**

Staff members of Senate will be given priority for vacant positions.

If no expressions of interest are received at Senate, expressions of interest will be sought from non-Senate staff.

**4.1.3. Student (undergraduate or graduate) vacancies:**

Student members of Senate will be given priority for vacant positions.

If no expressions of interest are received at Senate, a request for expressions of interest will be sought from non-Senate students.

**4.1.4. Other vacancies:**

Expressions of interest will be sought from community and other designated representatives for membership, as set out in the standing committee's terms of reference.

Candidates who are not members of Senate will be required to submit an expression of interest form, including the accompanying information sheet.

**4.2. Recommendations**

Expressions of interest from non-Senate members will be reviewed by the Senate Governance Committee, who will make recommendations to Senate for approval. The Senate Governance Committee will follow the guidelines outlined in section 3.3.2 in making its recommendations.

**4.3. Terms of office**

A vacancy will be filled as a new term for the position on the standing committee. The term, however, may be shorter than the usual term so that it may end on July 31, in keeping with term ends for other positions on standing committees.

**5. CHANGES TO THE PROCEDURES**

The University Secretary will review the procedures and make recommendations for changes to the Senate Governance Committee.

**From:** Frank Ulbrich

**Sent:** September-28-18 5:02 PM

I am happy to provide the information requested.

To add some background to how we handle OCO revisions, our curriculum committee met with Maureen Wideman in late 2014 to develop some guidelines and best practices for populating OCOs. Our original intention was to:

- Have clear learning outcomes
- Show how learning activities link to the learning outcomes
- Indicate how the various learning outcomes are assessed

In consultation with Maureen we developed a sample OCO (a commented version of BUS 143) that we currently use as a guideline together with a checklist for course coordinators to make sure that the OCOs are populated appropriately.

I spoke to our curriculum committee chair (Kevin deWolde) and both he and I recall that we subsequently were commended for how we have improved the OCOs and that it could serve as good example for all academic units at UFV.

We have been following that best practice since then.

If some of the comments from course coordinators or myself were perceived as confrontational, I apologize. We were under the impression that we were following best practice in our OCOs as indicated by the positive UEC comments in the past.

Please find our sample OCO and OCO checklist attached.

Regards,

Frank

## School of Business Checklist for Updating Official Course Outline (OCO)

This checklist must be completed and submitted along with the Official Course Outline Template.

| Template Item                                                                                                                                                                                                                                                                                                                                                                                  | Completed?               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <b>General</b>                                                                                                                                                                                                                                                                                                                                                                                 |                          |
| Verify you are using the latest version of outline form (otherwise it will get rejected)                                                                                                                                                                                                                                                                                                       | <input type="checkbox"/> |
| <b>ENABLED TRACK CHANGES</b> in the Review tab in Word?                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> |
| <b>Course Number:</b> Use existing number                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> |
| <b>Number of credit:</b> Use 3 for most courses                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/> |
| <b>Course Title:</b> Is the course full title > 30 characters? If yes, enter a short name less than 30 characters.                                                                                                                                                                                                                                                                             | <input type="checkbox"/> |
| <b>Faculty:</b> Faculty of Professional Studies                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/> |
| <b>Department (or program if no department):</b> School of Business                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/> |
| <b>Calendar description:</b>                                                                                                                                                                                                                                                                                                                                                                   |                          |
| 40-50 words (do not repeat course title in description)                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> |
| Answers why this course is relevant and thus entice students to take it.                                                                                                                                                                                                                                                                                                                       | <input type="checkbox"/> |
| Written in active voice.                                                                                                                                                                                                                                                                                                                                                                       | <input type="checkbox"/> |
| <b>Prerequisites</b>                                                                                                                                                                                                                                                                                                                                                                           |                          |
| <b>Prerequisites:</b> Lists all courses or credits required <u>before</u> the course                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> |
| <b>Corequisites:</b> Lists of all courses that <u>must</u> be taken <u>concurrently</u> .<br><br><b>Note: BEFORE YOU CHOOSE THIS OPTION,</b> you MUST work with the course coordinator to ensure the timing of necessary topics covered in the co-requisite course align with topics in this course AND you must work with timetabling to ensure that both courses are scheduled concurrently. | <input type="checkbox"/> |
| <b>Pre/Corequisites:</b> List all courses or credit which may be taken prior to <u>OR</u> at the same as the course.<br><br><b>Note: BEFORE YOU CHOOSE THIS OPTION,</b> you MUST work with the course coordinator to ensure the timing of necessary topics covered in the co-requisite course align with topics in this course.                                                                | <input type="checkbox"/> |
| <b>Equivalent course</b>                                                                                                                                                                                                                                                                                                                                                                       |                          |
| Ensure all courses and cross listings are provide.                                                                                                                                                                                                                                                                                                                                             | <input type="checkbox"/> |
| Any equivalent courses listed in Course Description also.                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> |
| List any previous course numbers used including any Selected Topics courses.                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> |

### School of Business Checklist for Updating Official Course Outline (OCO)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <b>If this course is cross listed:</b> Course outline for cross listed course is completed as a separate document                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/> |
| <b>Transfer Credit:</b> Major change to the learning outcomes, course number or name change? Resubmit to BCCAT for transfer credit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> |
| <b>Instructional Hours:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |
| Total of 45 hours for a 3 unit course? Total of 60 hours for 4 unit course?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/> |
| <p>ALL 45 (or 60) hours assigned"</p> <p><b>Lecture hours:</b> How much traditional classroom time?</p> <p><b>Seminars/tutorials/workshops:</b> Is someone other than the instructor offering an hours in lieu of the regular class or learning activities and exercises done within the class itself? List those hours. .</p> <p><b>Laboratory hours:</b> Are there any lab hours required in addition to the regular classroom hours?</p> <p><b>Field experience:</b> Any one time field trips?</p> <p><b>Experiential:</b> Any semester long field activities, not one offs?</p> <p><b>Online learning activities:</b> Any activities where they replace the regular 3 contact hour class (not online homework in addition to a 3 hour class)?</p> <p><b>Other:</b> Any contact hours not fitting above but are normally scheduled?</p> | <input type="checkbox"/> |
| <b>Maximum Enrollment:</b> 36 is the max. If less than 36, be prepared to justify this number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <input type="checkbox"/> |
| <b>Frequency of course offerings:</b> How often is the course offered? Every semester, annually, every other year, etc?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> |
| <b>Department / Program Head or Director:</b> Dr. Frank Ulbrich                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/> |
| <b>Dean/Associate VP:</b> Dr. Tracy Ryder Glass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/> |
| <b>Learning Outcomes:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |
| Meet Bloom's Taxonomy expectations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> |
| Each outcome is numbered (LO1, LO2, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <input type="checkbox"/> |
| Each outcome can be demonstrated and is measurable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> |
| Each outcome begins with a verb.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> |
| Each outcome uses only one verb.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> |
| Outcomes use a variety of verbs (i.e. do not to use the same verb for different outcomes).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> |
| Upper level courses list more complex outcomes than lower level courses (eg intro vs intermediate vs advanced courses). Bloom's taxonomy provides excellent examples of verbs illustrating different levels of expectations for the different levels of our courses. See also the document "Writing Learning Outcomes" on the UEC website.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> |
| <b>Typical Text(s) and Resource Materials:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |

**School of Business Checklist for Updating Official Course Outline (OCO)**

|                                                                                                                                                                                                                                         |                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Ensure Author, Title, and Publisher provided.                                                                                                                                                                                           | <input type="checkbox"/> |
| Do you want a specific edition? If not, click "Current edition" box and leave the year blank                                                                                                                                            | <input type="checkbox"/> |
| <b>Required Additional Supplies and Materials:</b> Any additional resources e.g. licenses for online homework, an approved calculator etc.? Listed her                                                                                  | <input type="checkbox"/> |
| <b>Typical Evaluation Methods and Weighting:</b>                                                                                                                                                                                        |                          |
| Adds up to 100%                                                                                                                                                                                                                         | <input type="checkbox"/> |
| Do you an evaluation method which does not fit into the boxes provided? Customize the "Other". Do NOT change the listed items.                                                                                                          | <input type="checkbox"/> |
| <b>Typical Course Content and Topic:</b>                                                                                                                                                                                                |                          |
| Focus on Themes or Modules (NOT week by week or chapter by chapter).                                                                                                                                                                    | <input type="checkbox"/> |
| Provide more details as to course content and subject matter.                                                                                                                                                                           | <input type="checkbox"/> |
| All learning outcomes are covered in listed topics. I                                                                                                                                                                                   | <input type="checkbox"/> |
| All assessments are listed in this section.                                                                                                                                                                                             | <input type="checkbox"/> |
| All assessments listed are linked back to the learning outcomes they are assessing e.g. Midterm Covering Modules 1-2 (LO1-LO3) <b>and</b> all learning outcomes have been linked to assessments. (This is important for accreditation). | <input type="checkbox"/> |



ORIGINAL COURSE IMPLEMENTATION DATE: Fall 1994  
 REVISED COURSE IMPLEMENTATION DATE: September 2015  
 COURSE TO BE REVIEWED: (six years after UEC approval) September 2021  
 Course outline form version: 09/15/14

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------------------------------|---|------------------|---|------------------------|--|--------------------------------------------|--|----------------------------|--|-------------------------|----|--------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course Code and Number: BUS 143                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Number of Credits: 3 <a href="#">Course credit policy (105)</a>                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Course Full Title: Accounting I<br>Course Short Title (if title exceeds 30 characters):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Faculty: Faculty of Professional Studies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Department (or program if no department): Business                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Calendar Description:</b><br><p>Financial statements tell the story of a business' life and it is critical that business stakeholders are able to understand that story. Business 143 introduces the basic principles, concepts, and applications of financial accounting. This course emphasizes the practical applications of accounting and includes the following topics: nature and purpose of accounting; the balance sheet; income and owner's equity statements; the accounting cycle; internal control; accounting for assets including cash, receivables, inventories, and capital assets; focuses on the accounting cycle and accounting for assets.</p> <p>Note: Credit cannot be received for both BUS 143 and BUS 339 or BUS 145.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Prerequisites (or NONE):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BUS 100 and the prerequisites for MATH 141                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Corequisites (if applicable, or NONE):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Pre/corequisites (if applicable, or NONE):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Equivalent Courses (cannot be taken for additional credit)</b><br>Former course code/number:<br>Cross-listed with:<br>Equivalent course(s): BUS 339, BUS 145<br><p><i>Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.</i></p>                                                                                                                                                                                                                                                                                                                                                                         | <b>Transfer Credit</b><br>Transfer credit already exists: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Transfer credit requested (OReg to submit to BCCAT):<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (if yes, fill in transfer credit form)<br>Resubmit revised outline for articulation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>To find out how this course transfers, see <a href="#">bctransferguide.ca</a> . |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Total Hours: 45</b><br><b>Typical structure of instructional hours:</b> <table border="1"> <tr> <td>Lecture hours</td> <td>25</td> </tr> <tr> <td>Seminars/tutorials/workshops</td> <td>2</td> </tr> <tr> <td>Laboratory hours</td> <td>0</td> </tr> <tr> <td>Field experience hours</td> <td></td> </tr> <tr> <td>Experiential (practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Online learning activities</td> <td></td> </tr> <tr> <td>Other contact hours: 15</td> <td>15</td> </tr> <tr> <td><b>Total</b></td> <td><b>45</b></td> </tr> </table>                                                                                                                                                                                    | Lecture hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 25 | Seminars/tutorials/workshops | 2 | Laboratory hours | 0 | Field experience hours |  | Experiential (practicum, internship, etc.) |  | Online learning activities |  | Other contact hours: 15 | 15 | <b>Total</b> | <b>45</b> | <b>Special Topics</b><br>Will the course be offered with different topics?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>If yes, different lettered courses may be taken for credit:<br><input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit<br><p><i>Note: The specific topic will be recorded when offered.</i></p> |
| Lecture hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Seminars/tutorials/workshops                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Laboratory hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Field experience hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Experiential (practicum, internship, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Online learning activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Other contact hours: 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>45</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Maximum enrolment (for information only): 36</b><br><b>Expected frequency of course offerings (every semester, annually, every other year, etc.):</b> Every semester                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Department / Program Head or Director: Don Miskiman Frank Ulbrich                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Date approved:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Faculty Council approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Date approved:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Campus-Wide Consultation (CWC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Date of posting:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Dean/Associate VP: Rosetta Khalideen Tracy Ryder-Glass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Date approved:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Undergraduate Education Committee (UEC) approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Date of meeting: April 26, 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                              |   |                  |   |                        |  |                                            |  |                            |  |                         |    |              |           |                                                                                                                                                                                                                                                                                                                                                                                                         |

**Commented [KD1]:** When editing course outlines YOU MUST ENABLE TRACK CHANGES in the Review tab in Word.

**Commented [KD2]:** UEC will update these dates

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**Commented [KD3]:** Use the latest outline form otherwise it will get rejected

**Commented [KD4]:** Keep the calendar description to a maximum of 40 words, do not repeat the course name. Course details can be provided below. Write with an active voice, be concise. Sentence fragments can be used, avoid redundancy.

**Commented [KD5]:** Prerequisites are required before the course. Corequisites must be taken at the same time as the course. Pre/Corequisites may be taken prior to or at the same time as the course.

**Commented [KD6]:** Equivalent course should also be added to the Calendar Description

**Commented [KD7]:** Provide a breakdown of your various instructional methods, lecture versus problem solving activities, etc. The total should equal 45 hours for a 3 credit course and 60 hours for a 4 credit course.

**Commented [KD8]:** Update the director and dean information.

**[COURSE]BUS 143**

University of the Fraser Valley Official Undergraduate Course Outline

Page 2 of 3

## Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Complete all the functions of the accounting cycle.
2. Recognize when transactions need to be recorded in the life of a business.
3. Measure the value of all transactions.
4. Prepare financial statements.
5. Perform basic analysis of financial statements.
6. Differentiate Evaluate current and long-term assets.
- 6-7. Account for changes in inventory, cash, receivables, capital assets and intangible assets.

**Commented [KD9]:** Students must be able to successfully demonstrate the learning outcomes to pass the course so ensure that they are measurable. Make them active by beginning each one with a verb. Use only one verb in each outcome. Try not to use the same verb for different outcomes if possible. Upper level courses should require more complex outcomes than lower level courses (eg intro vs intermediate vs advanced courses). Bloom's taxonomy provides excellent examples of verbs illustrating different levels of expectations for the different levels of our courses. See also the document "Writing Learning Outcomes" on the UEC website.

## Prior Learning Assessment and Recognition (PLAR)

☒ Yes ☐ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion)  
Lecture, discussion, and problem solving.

**Grading system:** Letter Grades: ☒ Credit/No Credit: ☐ Labs to be scheduled independent of lecture hours: Yes ☐ No ☒

**NOTE:** The following sections may vary by instructor. Please see course syllabus available from the instructor.

## Typical Text(s) and Resource Materials (if more space is required, download Supplemental Texts and Resource Materials form)

| Author (surname, initials)                                              | Title (article, book, journal, etc.) | Current ed.                         | Publisher                    | Year |
|-------------------------------------------------------------------------|--------------------------------------|-------------------------------------|------------------------------|------|
| 1. Horngren, C., Harrison, W., Olver, M.S., Norwood, P., & Johnston, J. | Accounting Volume 1                  | <input checked="" type="checkbox"/> | PearsonPearson/Prentice Hall | 2011 |
| 2.                                                                      |                                      | <input type="checkbox"/>            |                              |      |
| 3.                                                                      |                                      | <input type="checkbox"/>            |                              |      |
| 4.                                                                      |                                      | <input type="checkbox"/>            |                              |      |
| 5.                                                                      |                                      | <input type="checkbox"/>            |                              |      |

**Commented [KD10]:** Unless you want a specific edition used for the course, tick the "Current edition" box.

## Required Additional Supplies and Materials (software, hardware, tools, specialized clothing, etc.)

Use this section for supplies and materials for all sections of this course. My Accounting Lab license for online homework is required and comes with a new textbook purchase or can be purchased directly from the publisher. A business calculator.

## Typical Evaluation Methods and Weighting

|                |       |                     |       |                   |       |            |       |
|----------------|-------|---------------------|-------|-------------------|-------|------------|-------|
| Final exam:    | 6050% | Online Assignments: | 1010% | Midterm exam:     | 2525% | Practicum: | %     |
| Quizzes/tests: | %     | Lab work:           | %     | Field experience: | %     | Shop work: | %     |
| Term Test #2:  | 1010% | Case Study:         | 55%   | Other:            | %     | Total:     | 0100% |

**Commented [KD11]:** Additional resources must be listed here, for example licenses for online homework so that students are not surprised when they buy a used textbook only.

Details (if necessary):

## Typical Course Content and Topics

Unit/Week 1: Accounting and the Business Environment Chapter 1  
Week 2: Recording Business Transactions Chapter 2  
Week 3: Measuring Business Income: The Adjusting Process Chapter 3  
Week 4: Completing the Accounting CycleThe Accounting Cycle  
- Recording business transactions and adjustments.  
- Preparing financial statements  
- Test #1 (LO 1, 2, 3, 4) Chapter 4  
Week 5: Test #1Unit 2: Accounting for Inventory  
- Account for the purchase and sales of inventory  
- Measure the value of inventory  
- Test #2 (LO 2, 3, 5, 7)  
Week 6: Merchandising Operations and the Accounting Cycle Chapter 5  
Week 7: Accounting for Merchandising Inventory Chapter 6  
Week 8: Test #2  
Week 9: Accounting Information Systems Chapter 7  
Week 10: Internal Control and Cash Chapter 8  
Week 11: Receivables Chapter 9  
Week 12: Capital Assets and Intangible Assets Chapter 10  
Week 13: ReviewUnit 3: Accounting for Cash, Receivables, Capital Assets and Intangible Assets

**Commented [KD12]:** Here you can provide more details as to course content and subject matter. Focus on topics, ensuring that all the learning outcomes are covered. This can be done by units, themes or weeks. Include your assessments and link them back to the learning outcomes they are assessing. (This is important for accreditation. The UVF template is fixed, so this cannot be done in the Evaluation Methods section above.) Do not reference specific chapters (eg Chapter 4) from textbooks but focus on themes.

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- Record cash transactions
  - Reconcile cash and bank accounts
  - Measure value of receivables
  - Allocate cost of capital and intangible assets
  - Differentiate between current and long-term assets
  - Analyze financial statements with ratio analysis
- Comprehensive final exam (LO 1-7)
- Together with BUS 144, this course is recognized by CPA as meeting their PREP Module 1.

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# MEMO



To: UEC Chair, Vice-Chair and Assistant  
From: Bruce Kirkley, Program Development and Quality Assurance Coordinator  
CC: Amara Wong, Program Development and Quality Assurance Assistant; Peter Gellar  
Date: September 6, 2018  
Re: Clarification to procedures on how CWC fits into the new program approval process

---

The PDQA Office recently requested clarification on the time period that new program proposals need to be posted for CWC prior to moving forward for UEC review. Amanda Grimson, UEC Assistant, provided an informative response (see appended email) informing us that new program proposals don't, in fact, need to be posted to CWC for a defined period of time, and are submitted for information only.

In reviewing the Undergraduate Program and Course Approval Procedures (November 2017), PDQA notes that the final sentence in section 4, "UEC Screening Subcommittee," of the Program and Course Approval Procedures (p. 17) generates some ambiguity, since it currently reads: "During CWC, developers must respond to all comments submitted and include this response in the program proposal." This sentence conveys the impression that an unstated period of time for CWC is still a required part of the process.

Given this, PDQA proposes a re-wording of section 4 above to clarify the role of CWC, as follows:

"The UEC Screening Subcommittee reviews the proposal and verifies that all appropriate internal consultation has taken place. Notice of proposals is submitted to Campus-Wide Consultation (CWC) for information only. Since internal consultation will have already occurred during the program development process, new program proposals are not required to remain at CWC for a specific period of time; however, developers must nonetheless respond to any comments received from CWC and, where applicable, include any responses in the program proposal."

(Revised Procedures showing track changes attached.)

PDQA also suggests deleting the final phrase "... and include this response in the program proposal." There are several potential responses to CWC comments, ranging from providing a rationale that results in no changes to the program proposal, all the way to making relatively substantial changes. Hence, the procedure only needs to state that developers must respond to any CWC feedback to cover the range of responses sufficiently.

Based on Policy 21, a revision of this nature requires unanimous approval from the Chair, Vice-Chair and UEC Assistant, and would then go to UEC for information.

**From:** Amanda Grimson  
**Sent:** July-25-18 3:50 PM  
**To:** Bruce Kirkley  
**Cc:** Amara Wong  
**Subject:** RE: Question on CWC for New Program Proposals

Hi Bruce,

The requirement that new program proposals go to CWC was actually removed in 2015, which is why the current procedures only specify that “notice of proposals is submitted to Campus-Wide Consultation (CWC) for information”. This was done at Sylvie’s request (see attached email) and approved at UEC on May 22, 2015 (item 5.2: <https://www.ufv.ca/media/assets/senate/uec/2014-15/UEC-Approved-Minutes-2015-05-22.pdf>). I am attaching the 2014 version of the procedures document for comparison.

As far as the time periods (2 weeks, etc.), we have altered these over the years. Prior to the creation of the UEC Screening Subcommittee, we used to specify how long each type of change had to stay at the CWC stage. (I am attaching the 2012/13 procedures document as well; search for “weeks”.) Now that Screening is part of the process, the only thing we require is that major program proposals be at CWC for a minimum of two weeks, and that other changes (new courses, major course changes, minor program changes) be sent to CWC prior to UEC. The CWC period for major program proposals was shortened from four to two weeks in 2015. I believe this was because there hadn’t been a case where it had been useful to have such a long time period, so it was seen to be slowing down the approval process unnecessarily.

I don’t believe there has really been a “maximum” time period specified by UEC; in practice, items generally get to UEC for the next meeting following CWC, as long as all comments have been addressed. (For instance, discussion could take place at the CWC stage for six weeks or more, but that’s rare.)

I hope that helps and all makes sense. The procedures always seem to be a work in progress as we figure out what is and isn’t working, so if PDQA would prefer to specify that new program proposals go to CWC for a set period of time, I can’t imagine UEC would have an issue with that.

Amanda

# Procedures

## for Undergraduate Program and Course Approval

Appendix to Policy 21

Last revised: ~~November 2017~~ October 2018

**ufv.ca**



## Introduction

UFV's Undergraduate Course and Program Approval policy (21) grants the Undergraduate Education Committee (UEC) the authority to develop procedures for the approval of new and revised courses and programs.

All new and revised courses and programs will follow a specific approval process. This process include a series of structured consultations and approvals that give the UFV community an opportunity to examine a program or course in terms of the quality of the curriculum, consistency of standards, attention to student needs, and adherence to UFV's strategic plan, mandate, and institutional learning outcomes.

This document outlines the procedures in effect as of June 2016. The policy can be found at [www.ufv.ca/policies](http://www.ufv.ca/policies).

## Submission guidelines

Items submitted to faculty council and subsequent committees should be formatted appropriately, and should include all relevant documents.

Course proposals should include an updated course outline on the current course outline form, and a memo created with the official Memo Template. Both forms can be found on the UEC websites, at [www.ufv.ca/senate/uec/uec-resources](http://www.ufv.ca/senate/uec/uec-resources). A Word version of the current official course outline should be requested from the UEC Assistant, and whenever possible, Word's track changes feature should be used to highlight any revisions being made to the course outlines. The UEC Assistant can provide assistance with this feature. (Requests to discontinue a course do not need to be accompanied by a course outline.)

Program proposals should include all relevant attachments (rationale memo, budget information, etc.). Program changes should be accompanied by calendar copy with changes tracked.

## Additional resources

Forms, templates, and other resources for the development of new programs can be found on the Program Development Office (PDO) website, [www.ufv.ca/pdo](http://www.ufv.ca/pdo).

Resources for new courses, revisions to existing courses, major and minor changes to existing programs, and general information on the approval process can be found on the UEC website, [www.ufv.ca/senate/uec](http://www.ufv.ca/senate/uec).

The UEC Assistant and the Program Development Office can also be contacted directly with any questions.

## Terms and definitions

**Academic unit:** Includes but is not limited to faculties, schools, libraries, programs, centres, departments, and institutes.

**Academic Planning and Priorities Committee (APPC):** Senate standing committee responsible for advising Senate on the mission, goals, objectives, strategies, and priorities of the university (see APPC Terms of Reference).

**Campus-Wide Consultation (CWC):** An opportunity for other academic units and service areas (e.g., Office of the Registrar, Library, Student Services) to review and provide feedback about the course or program submission. Developers must respond to all comments submitted and include this response with the submission to UEC.

**Lower-level course:** First- or second-year course, generally numbered in the 100s and 200s.

**Major course change:** A change to a course that affects the nature or focus of a course, options for students, or budget. A more detailed breakdown of major course changes is available on page 9.

**Major program change:** A modification to a program that affects the nature or focus of the program, options for students, or budget. A more detailed breakdown of major program changes is available on page 10.

**Minor course change:** A change to a course that has no effect on the nature or focus of a course, options for students, or budget. A more detailed breakdown of minor course changes is available on page 9.

**Minor program change:** Any change which is not major, as described above. A more detailed breakdown of minor program changes is available on page 10.

**Official course outline:** Legal document used for calendar copy, articulation, and official documentation purposes. The official course outline is used as a guideline for the syllabus that instructors develop and provide to students.

**Program:** Collection of courses and associated requirements offered as a credential or an option within a credential. This includes, but is not limited to, a certificate, diploma, minor, extended minor, major, honours, degree, specialization, option, or concentration.

**Program budget analysis:** Summary of the budget implications of a proposed new program or revisions to an existing program. This should be attached to all new and revised program proposals when submitted to Senate and its standing committees.

**Program Committee:** Approved by dean(s) to oversee the implementation and administration of a program and its courses.

**Program concept paper:** Brief summary of a proposed new program prepared using a standard template provided by the Program Development Office.

**Program Development Office (PDO):** Facilitates and assists with the development of academic programs, and in matters related to academic quality assurance, curriculum design, and programming.

**Program proposal:** Detailed description for a new program prepared on a standard template provided by the Program Development Office.

**Program Report and Plan:** Submitted annually to the Board, includes Concept Papers recommended by Senate for approval.

**Program Working Group (PWG):** Group formed by the dean(s) to proceed in the development of a new program.

**Senate Budget Committee (SBC):** Senate standing committee responsible for advising Senate on the university's annual budget, budgetary policies, guidelines, processes, and models (see SBC Terms of Reference).

**Undergraduate Education Committee (UEC):** Senate standing committee responsible for advising Senate on all matters related to the undergraduate educational programs of the university, including policies, practices, and criteria for admission, evaluation, and promotion of undergraduate students (see UEC Terms of Reference).

**Undergraduate Education Committee (UEC) Screening Subcommittee:** UEC standing subcommittee responsible for reviewing all course and program proposals for clarity, completeness, and consistency with current academic policies and practices.

**Upper-level course:** Third- or fourth-year course, generally numbered in the 300s and 400s.

## Timelines

### Calendar deadlines

The academic calendar ([ufv.ca/calendar](http://ufv.ca/calendar)) is the official source for all approved courses and programs. All changes and new courses and programs should be published in the calendar prior to implementation. A new calendar comes into effect in April (Fall calendar) and October (Winter/Summer calendar) of each year. The draft calendar is updated regularly and is available through a link on the calendar home page. Changes should be submitted as far in advance as possible to avoid missing the calendar deadlines.

**Major program changes** must be approved by the January UEC meeting to be included in the Fall calendar, or by the June UEC meeting to be included in the Winter/Summer calendar. (Subsequent approval by Senate, and in some cases by SBC, is also required).

**Minor program changes and major and minor course changes** must be approved by UEC's February meeting to be included in the Fall calendar, or by the September meeting to be included in the Winter/Summer calendar.

### Minimum timelines

Due to the need for quality assurance, the following are the approximate **minimum** lengths of time that the approval processes take from recommendation by faculty/college council to final approval.

#### Courses

- New course: 4-5 months
- Major changes: 4-5 months
- Minor changes: 2-3 months

**Note:** Changes to prerequisites that are more restrictive require 6 months' notice in the academic calendar (see [policy 84](#)).

#### Programs

- New program (including concept paper)\*: approximately two academic years, following the optimal timeline:
  - Year 1, September-February: development of concept paper
  - Year 1, March-June: review and approval of concept paper
  - Year 2, September-December: development of full program proposal
  - Year 2, January-June: internal review and approval of full program proposal
  - External review and approval: 2-3 months for certificates and diplomas; depending on Ministry timelines for degrees.
- Major changes: 7-8 months
- Minor changes: 4-5 months

\* Does not apply to programs approved under the expedited approval process.

**Note:** Changes that make entrance requirements more restrictive must be published in the academic calendar at least 12 months prior to the start of the semester, unless they are necessary to maintain the program's accreditation (see [policy 80](#)).

## Course Approval Processes

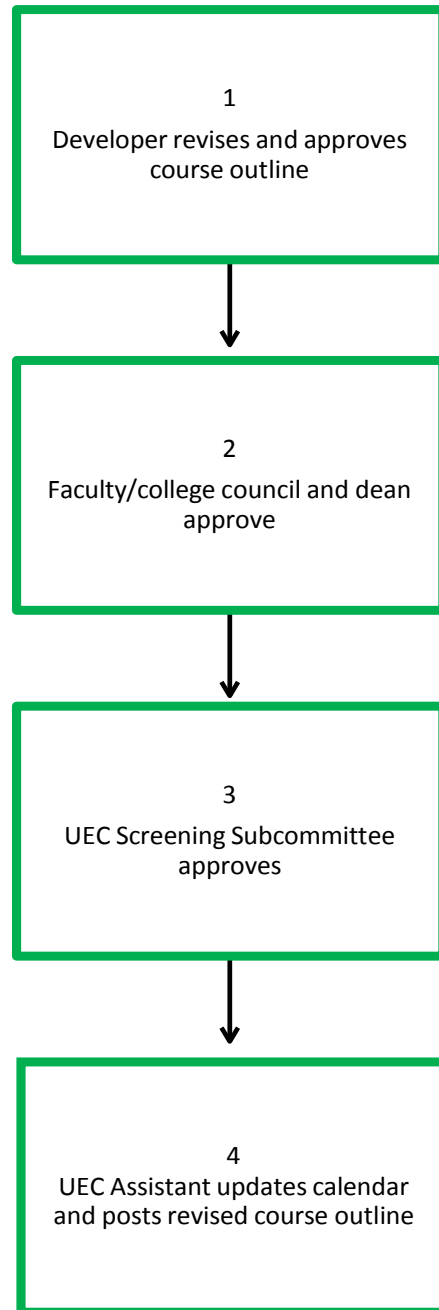
The course approval process differs for new courses, major course changes, and minor course changes. The following outlines the steps in each of the course approval processes. Each process correlates with the flow charts featured on the following page.

A chart of major vs. minor changes to an existing course can be found on page 9.

### Minor course changes (minimum 2-3 months)

1. **Course outline revisions:** The department/school or program committee, hereafter referred to as the developer, requests a Word version of the current course outline from the UEC Assistant. The developer revises and approves the course outline, including transfer to a new course outline form if necessary. The developer also prepares a memo outlining the rationale and any financial implications of the course changes using the Memo Template found on the UEC website.
2. **Faculty/college council and dean:** The developer submits the course outline and memo to the faculty/college council (and, if applicable, the faculty/college curriculum committee) and dean(s) for approval. If changes are recommended, the revisions are made by the developer and the revised course outline is returned to the council assistant who verifies that it conforms to council recommendations.  
  
**Note:** For an Indigenous designation, courses must also be reviewed by the Indigenous Studies Curriculum Committee.
3. **UEC Screening Subcommittee:** The council assistant sends the course outline and memo to the UEC Assistant for the Screening Subcommittee, which confirms that the changes are minor and approves the course changes for publication. If changes are recommended, revisions are made by the developer (using track changes) and resubmitted to the faculty/college council and UEC Screening Subcommittee. Minor editorial changes do not require resubmission.
4. **Publication:** The UEC Assistant/Calendar Editor makes all necessary calendar changes, posts the revised course outline on the website ([www.ufv.ca/calendar/courseoutlines](http://www.ufv.ca/calendar/courseoutlines)), and sends the course outline to OReg for data entry.

**Approval process for minor course changes**



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### **New courses and major course changes (minimum 4-5 months)**

1. **Development of course outline:** The department/school or program committee, hereafter referred to as the developer, develops and approves the course outline. If revisions are being made to an existing course, the developer requests a Word version of the current course outline from the UEC Assistant. The developer also prepares a memo outlining the rationale and any financial implications of the new course using the Memo Template that will be found on the UEC website.

Dean(s) determine if there are significant budgetary implications with the proposed course.

2. **Faculty/college council and dean:** The developer submits the course outline and memo to the faculty/college council (and, if applicable, the faculty/college curriculum committee) and dean(s) for approval. If changes are recommended, the revisions are made by the developer and the revised course outline is returned to the council assistant who verifies that it conforms to council recommendations.

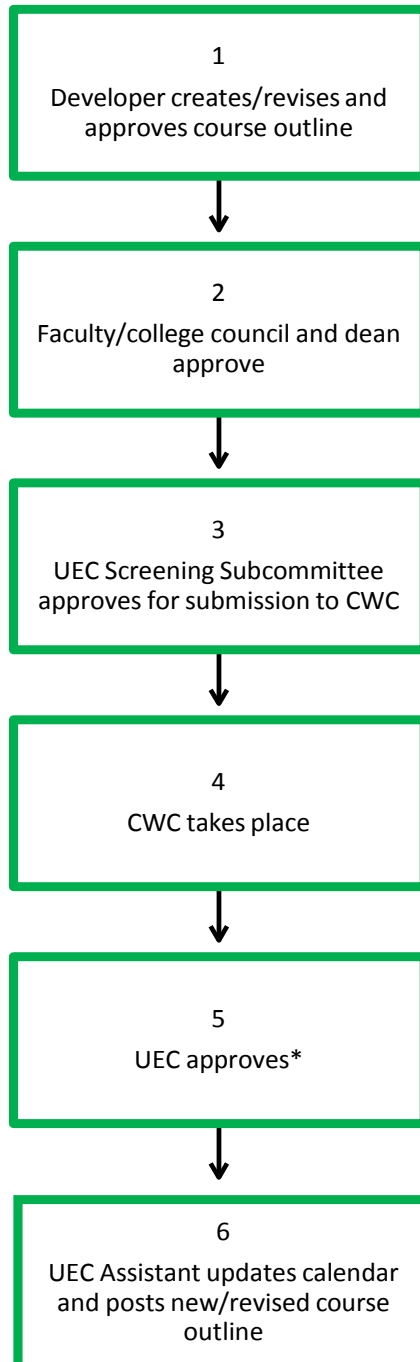
**Note:** For an Indigenous designation, courses must also be reviewed by the Indigenous Studies Curriculum Committee.

3. **UEC Screening Subcommittee:** The council assistant sends the course outline and memo to the UEC Assistant for the Screening Subcommittee, which reviews the proposal before submission to Campus-Wide Consultation (CWC). If changes are recommended, revisions are made by the developer (using track changes) and resubmitted to the faculty/college council and UEC Screening Subcommittee. Minor editorial changes do not require resubmission.
4. **Campus-Wide Consultation (CWC):** The UEC Assistant submits the course outline and memo to the Campus-Wide Consultation, copying the developer. The developer monitors and responds to comments. Any proposal not forwarded to UEC within eight months of CWC must be resubmitted to faculty council for approval.
5. **Undergraduate Education Committee (UEC):** The developer submits the CWC comments and responses, along with any changes to the course outline, to UEC. UEC approves the course outline, or recommends to Senate for approval if there are financial implications.

If there are financial implications, SBC will review the course outline and memo and make a recommendation to Senate. UEC and SBC recommendations are sent to Senate concurrently.

6. **Publication:** The UEC Assistant/Calendar Editor makes all necessary calendar changes, posts the new/revised course outline on the website ([www.ufv.ca/calendar/courseoutlines](http://www.ufv.ca/calendar/courseoutlines)), and sends the course outline to OReg for data entry.

**Approval process for new courses and major course changes**



\* In the case of budgetary implications, UEC and SBC will both review and recommend to Senate for approval.

## Course Changes

### Major vs. minor changes to an existing course

| Type of change                            | Major changes                                                       | Minor changes                                                                                               |
|-------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Title and/or calendar description</b>  | Reflects a change in nature or focus                                | For correction or clarification                                                                             |
| <b>Learning outcomes and/or content</b>   | Reflects a change in nature or focus                                | Does not reflect a change in nature or focus                                                                |
| <b>Course level</b>                       | Moving a lower-level course to an upper-level course and vice versa | Moving a first-year course to second year and vice versa or third-year course to fourth year and vice versa |
| <b>Prerequisites and/or co-requisites</b> | Any change to prerequisites                                         | Editorial change only                                                                                       |
| <b>Course details</b>                     | Change in number of credits or number of hours                      | Frequency of course offering                                                                                |
| <b>Delivery method</b>                    | Change or addition of a delivery method that has a cost             | Change or addition of a delivery method that does not affect cost                                           |
| <b>Impact on other programs</b>           | Affects other academic units                                        | Does not affect other academic units                                                                        |
| <b>Other</b>                              | Deletion of course                                                  | PLAR options, grading system, texts, evaluation methods                                                     |

**Note:** One major change means that all changes in the proposal are considered major.

## Program Changes

### Major vs. minor changes to an existing program

| Type of change                            | Major changes                                                                  | Minor changes                                                                    |
|-------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <b>Resource requirements</b>              | Additional resources are required at a cost                                    | Additional resource costs are covered by the associated academic unit            |
| <b>Courses</b>                            | Change to the majority of courses in an approved program                       | Addition of new course options, or deletion or substitution of a required course |
| <b>Duration, philosophy, or direction</b> | Change to the duration, philosophy, or direction of a program*                 |                                                                                  |
| <b>Specialization</b>                     | Addition or deletion of a specialization (e.g., concentration under a major)** |                                                                                  |
| <b>Admission requirements</b>             | Change in requirements for admission                                           |                                                                                  |
| <b>Residency requirements</b>             | Change in requirements for residency                                           |                                                                                  |
| <b>Continuance requirements</b>           | Change in requirements for continuance                                         |                                                                                  |
| <b>Admission quotas</b>                   | Change in admission quotas                                                     |                                                                                  |
| <b>External review</b>                    | Change which triggers an external review                                       |                                                                                  |

\* The Ministry includes in its definition of “new program” revision of a program’s major objectives resulting in significant change and a significant revision of a program that warrants credential renaming. Please consult the Program Development Office if the revision considered may fall under this definition.

\*\* If not considered a new program or covered under the Program Discontinuance policy (222). Addition of a minor or major is considered a new program, not a major program change. Degree programs that refer to their main areas of specialization as “options” or “concentrations” must consult the Program Development Office to determine whether addition of a new specialization is considered a major program change or a new program.

## Program Approval Processes (major and minor changes)

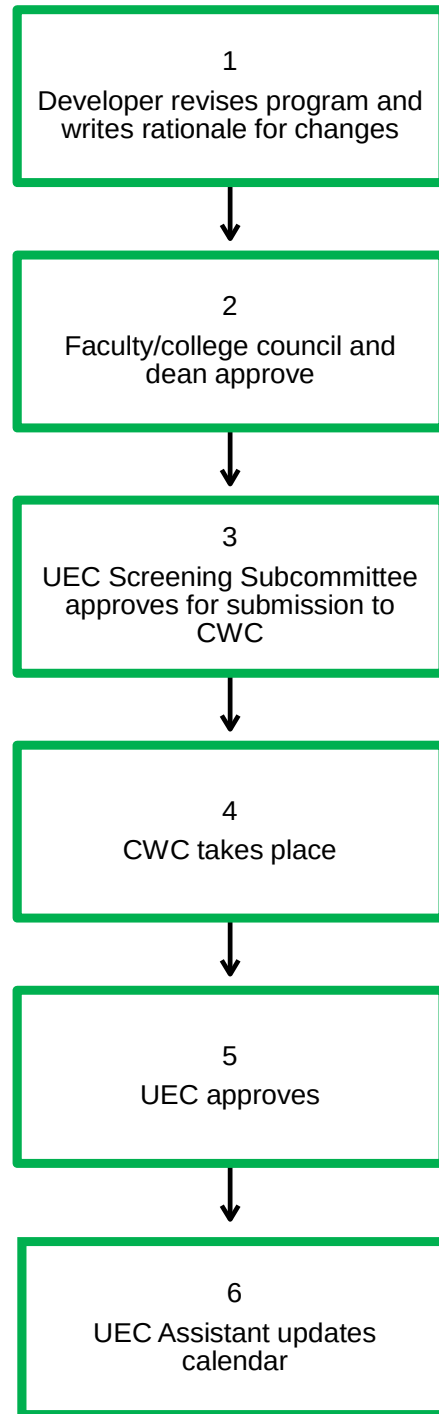
The program approval process differs for new programs, major program changes, and minor program changes. The following outlines the steps for each of these processes and correlates with the flow charts featured on the following page.

A chart of major vs. minor changes to an existing program can be found on page 10.

### Minor program changes (minimum 4-5 months)

1. **Development of proposal:** The department/school or Program Working Group or program committee, hereafter referred to as the developer, outlines and approves the changes and rationale for the proposed program changes, in consultation with the dean(s) responsible.
2. **Faculty/college council and dean:** The developer submits the program proposal and draft calendar copy to the faculty/college council (and, if applicable, the faculty/college curriculum committee) and dean for review and approval. If changes to the proposal are recommended, the revisions are made by the developer (using track changes) and the revised proposal is returned to the council assistant who verifies that they conform to council recommendations.
3. **UEC Screening Subcommittee:** The council assistant sends the proposal and calendar copy to the UEC Assistant for the Screening Subcommittee, which reviews the proposal before submission to Campus-Wide Consultation (CWC). If changes are recommended, revisions are made by the developer (using track changes) and resubmitted to the faculty/college council and UEC Screening Subcommittee. Minor editorial changes do not require resubmission.
4. **Campus-Wide Consultation (CWC):** The UEC Assistant submits the proposal and calendar copy to the Campus-Wide Consultation, copying the developer. The developer monitors and responds to comments. Any proposal not forwarded to UEC within eight months of CWC must be resubmitted to faculty council for approval.
5. **Undergraduate Education Committee (UEC):** The developer submits the CWC comments and responses, along with any changes to the proposal, to UEC. UEC approves the program changes.
6. **Publication:** The UEC Assistant/Calendar Editor confirms that the proposal has final approval, and makes all necessary changes in the academic calendar.

**Approval process for minor program changes**

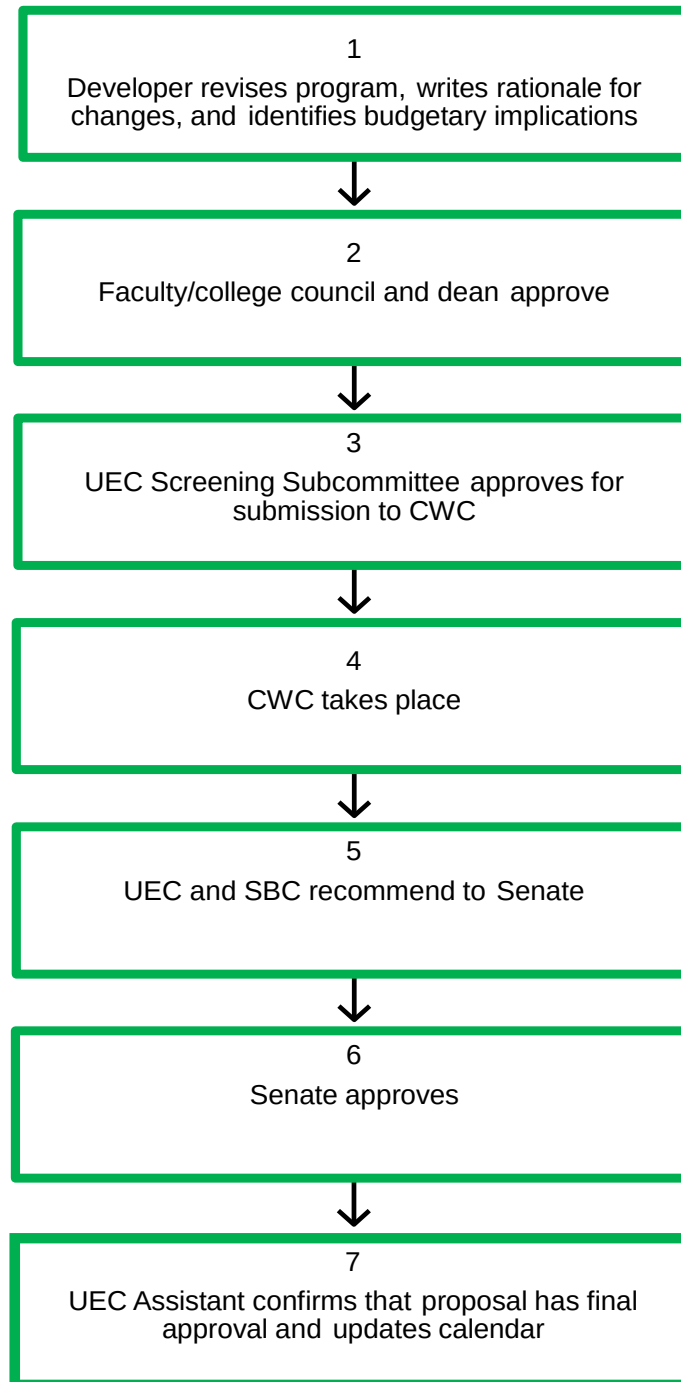


### **Major program changes (minimum 7-8 months)\***

1. **Development of proposal and budget:** The department/school or Program Working Group or program committee, hereafter referred to as the developer, outlines and approves the changes and rationale for the proposed program changes, and identifies any budgetary implications.
2. **Faculty/college council and dean:** The developer submits the program proposal and draft calendar copy to the faculty/college council (and, if applicable, the faculty/college curriculum committee) and dean for review and approval. If changes to the proposal are recommended, the revisions are made by the developer (using track changes) and the revised proposal is returned to the council assistant who verifies that they conform to council recommendations.
3. **UEC Screening Subcommittee:** The council assistant sends the proposal to the UEC Assistant for the Screening Subcommittee, which reviews the proposal before submission to Campus-Wide Consultation (CWC). If changes are recommended, revisions are made by the developer (using track changes) and resubmitted to the faculty/college council and UEC Screening Subcommittee. Minor editorial changes do not require resubmission.
4. **Campus-Wide Consultation (CWC):** The UEC Assistant submits the proposal and calendar copy to the Campus-Wide Consultation, copying the developer. The developer monitors and responds to comments. Major program change proposals must remain at CWC for a minimum of two weeks. Any proposal not forwarded to UEC within 12 months of CWC must be resubmitted to faculty council for approval.
5. **Undergraduate Education Committee (UEC)/Senate Budget Committee (SBC):** The developer submits the CWC comments and responses, along with any changes to the proposal, to UEC for review and recommendation to Senate. The proposal will also be submitted to SBC, which reviews the proposal and makes a recommendation to Senate.
6. **Senate:** Senate approves the program proposal and budget.
7. **Publication:** The UEC Assistant/Calendar Editor confirms that the proposal has final approval, and makes all necessary changes in the academic calendar.

\* The Ministry includes in its definition of “new program” the revision of a program’s major objectives resulting in significant change, and a significant revision of a program that warrants credential renaming. Please consult the Program Development Office if proposed revisions may fall under this definition. Also note that addition of a minor or major is considered a new program, not a major program change. Degree programs that refer to their main areas of specialization as “options” or “concentrations” must consult the Program Development Office to determine whether addition of a new specialization is considered a major program change or a new program.

**Approval process for major program changes**



## New Program Approval Process

The following outlines the steps for new programs and correlates with the flow charts featured on the next pages.

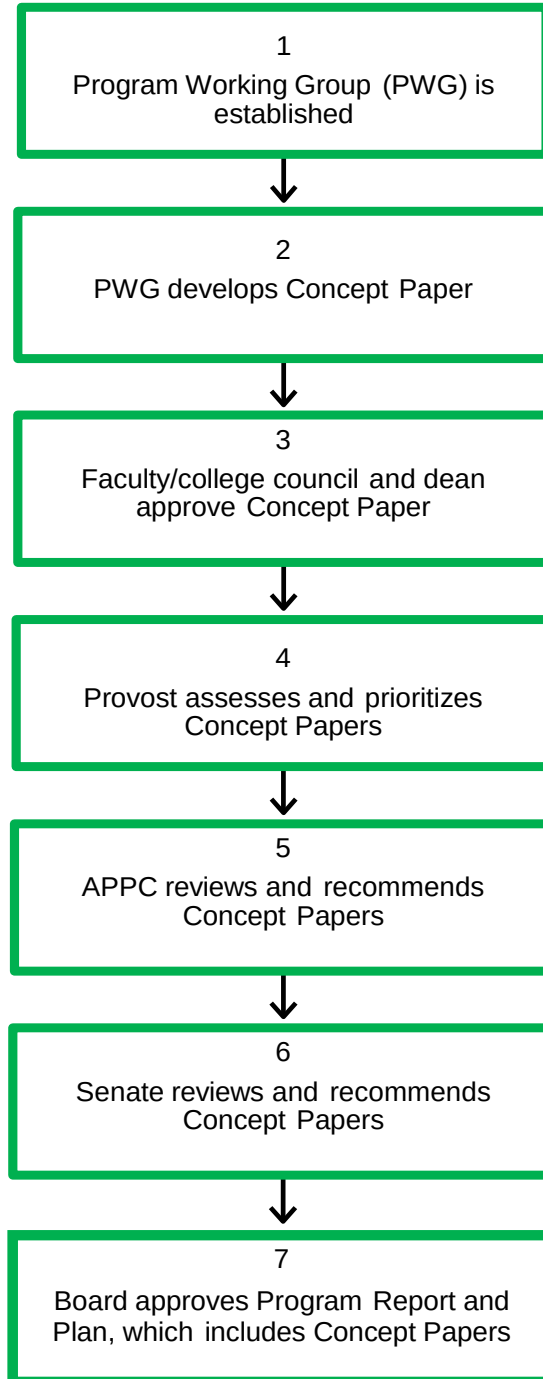
Before you begin the development of a new program, please contact the Program Development Office for specific information about submission formats and procedures. An administrative guide for the internal approval process is available on the website at <http://www.ufv.ca/pdo/getting-started/>.

### Concept Paper

**Note:** Normally, a single dean will have administrative responsibility and approval authority over a program. In the case that a program draws resources from more than one faculty/college beyond the provision of service courses, the deans involved will decide on who will assume administrative responsibility for the program and whether it will be shared by more than one faculty/college. The faculty/college and dean that has administrative responsibility will have approval authority at the relevant stages of the program approval process.

1. **Establishment of Program Working Group (PWG):** Faculty members interested in developing a new program present a notice of intent to the dean. The PWG is approved by the dean, and the dean informs the Program Development Office (PDO) of its membership. A Program Working Group will consist of a minimum of three faculty with teaching or research expertise in the subject area. If a new program is entirely discipline-based, at least one additional member from another discipline with teaching or research expertise in the subject area or related area should be added.
2. **Development of Concept Paper:** PWG develops the Concept Paper, on the approved template, in consultation with the PDO, appropriate academic units, and the dean. PWG submits the Concept Paper to the PDO, who verifies that it is complete before submission to faculty/college council.
3. **Faculty/college council and dean:** The PWG presents the Concept Paper to faculty/college council for discussion. The Concept Paper is then presented to the dean for review and approval.
4. **Provost's recommendation to Academic Planning & Priorities Committee (APPC):** Upon approval by the dean, the Provost, in consultation with Deans' Caucus, assesses all Concept Papers submitted in a given academic year, prioritizes them, and prepares a report for presentation to APPC (with accompanying rationale) on Concept Papers that are: a) meritorious and supported for development with a specified timetable for implementation and start date; or b) not supported for development (with an explanation).
5. **APPC:** APPC reviews and recommends Concept Papers to be approved for development.
6. **Senate:** Senate reviews and recommends Concept Papers.
7. **Board:** The Program Report and Plan, which includes Concept Papers, is submitted to the Board for approval. **Only upon approval by the Board should a Program Working Group proceed with submitting the Full Program Proposal for internal review and approval.**

**Approval process for Concept Paper**



## Full program proposal

1. **Orientation Meeting:** Following approval of concept paper, an orientation meeting will be held to review program design principles and proposal preparation. This meeting will include the PWG chair and members; Teaching and Learning Director or designate; Dean responsible for the program; and the Program Development and Quality Assurance Coordinator and assistant.
2. **Development of full proposal and PDO verification:** With the assistance of the PDO, the PWG develops the program and writes the full program proposal. The PWG submits the program proposal and draft calendar copy to the PDO, who verifies that it is complete and that appropriate internal consultation has taken place before submission to faculty/college council. The proposal will normally be sent to external reviewers early during the internal approval process. External reviewers' reports, and PWG's responses to the reports, will accompany the program proposal as it goes through internal review.
3. **Faculty/college council and dean:** Faculty/college council (and, if applicable, the faculty/college curriculum committee) and dean review and approve the program proposal and, if applicable, the new courses related to the program. The proposal will include a summary of the internal consultation that has taken place, with supportive evidence.
4. **UEC Screening Subcommittee:** The UEC Screening Subcommittee reviews the proposal and verifies that all appropriate internal consultation has taken place. Notice of proposals is submitted to Campus-Wide Consultation (CWC) for information only. Since internal consultation will have already occurred during the program development process, new program proposals are not required to remain at CWC for a specific time period; however, During CWC, developers must nonetheless respond to all any comments submitted received from CWC and include this response in the program proposal and, where applicable, include any responses in the program proposal.
5. **Undergraduate Education Committee (UEC):** The program proposal, calendar copy, consultation summary, and the PWG's response to any UEC Screening Subcommittee comments are submitted to UEC for review and recommendation to the Academic Planning & Priorities Committee (APPC). All new courses or substantially reviewed courses that are included in a new program must also be approved before the program is recommended to APPC.
6. **Senate Budget Committee (SBC):** Following UEC approval, budgetary analysis for the program is submitted to SBC for review and recommendation to APPC.
7. **Academic Planning & Priorities Committee (APPC):** APPC reviews the recommendations from UEC and SBC, and makes its recommendation to Senate.
8. **Senate:** APPC submits its recommendation to Senate for approval. If it is decided by Senate that the program has substantially changed from what was proposed in the Concept Paper, Board approval is solicited.
9. **External approval:** The program proposal is sent to the PDO for review and submission through the Office of the Provost and VP Academic for external approval, as required by the Ministry of Advanced Education.
10. **Implementation:** Upon approval, the dean's office decides on an implementation date and the calendar copy is included in the academic calendar.

### Approval process for full program proposals

