

FOR APPROVAL

PUBLIC

OPEN SESSION

TO: UTSC Academic Affairs Committee

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DATE: April 20, 2022 for April 27, 2022

AGENDA ITEM: 5

ITEM IDENTIFICATION:

Minor Modifications: Undergraduate Curriculum Changes, Arts & Science Co-op, UTSC

JURISDICTIONAL INFORMATION:

University of Toronto Scarborough Academic Affairs Committee (AAC) “is concerned with matters affecting the teaching, learning and research functions of the Campus (*AAC Terms of Reference, 2021, Section 4*).” Under section 5.6 of its terms of reference, the Committee is responsible for approval of “Major and minor modifications to existing degree programs.” The AAC has responsibility for the approval of Major and Minor modifications to existing programs as defined by the University of Toronto Quality Assurance Process (*UTQAP, Section 3.1*).

GOVERNANCE PATH:

1. **UTSC Academic Affairs Committee [For Approval] (April 27, 2022)**

PREVIOUS ACTION TAKEN:

No previous action in governance has been taken on this item.

HIGHLIGHTS:

This package includes minor modifications to the undergraduate curriculum, submitted by the UTSC Arts & Science Co-op Office, which require governance approval. Minor modifications to curriculum are understood as those that do not have a significant impact on program or course learning outcomes. They require governance approval when they modestly change the nature of a program or course.

- Arts & Science Co-op Office (Report: Arts & Science Co-op)
 - 2 new courses
 - COPB36H3: Work Term in Biodiversity and its Field Assessment
 - COPC36H3: Co-op Work Term for Conservation and Biodiversity

FINANCIAL IMPLICATIONS:

There are no significant financial implications to the campus operating budget.

RECOMMENDATION:

Be It Resolved,

THAT the proposed Arts & Science Co-op undergraduate curriculum changes for the 2022-23 academic year, as detailed in the respective curriculum reports, dated April 27, 2022, be approved.

DOCUMENTATION PROVIDED:

1. 2022-23 Curriculum Cycle Undergraduate Minor Curriculum Modifications for Approval Report: Arts & Science Co-op, dated April 27, 2022.

2022-23 Curriculum Cycle

Undergraduate Minor Curriculum Modifications for Approval

Report: Arts & Science Co-op

April 27, 2022

Arts & Science Co-op Office

2 New Courses:

COPB36H3: Work Term in Biodiversity and its Field Assessment

Description:

While working with a Co-op employer, students will learn how to find, identify and recognize wild species of plants and fishes (or other groups) in the Greater Toronto Area, their major taxonomic groups contributing to their local diversity, and their basic biology (including conservation status and role in local ecosystems). Students will also learn and apply best-practice quantitative methodologies to assess diversity in the field. Students will then apply this new knowledge by creating a collection, participating in regular species identification and contributing to long-term biodiversity monitoring data sets in local green areas.

Note: Students are enrolled in this course after enrolment in the Specialist Co-op Program in Conservation and Biodiversity and will receive support and guidance from Co-op coordinators, faculty and peers, to share and reflect upon their work term experience and performance

Prerequisites: Completion of 4.0 credits, including the following courses [BIOA01H3 and BIOA02H3 and CHMA10H3 and CHMA11H3 and [MATA29H3 or MATA30H3 or MATA35H3, or MATA36H3]]; a CGPA of at least 2.75; and enrolment in the Specialist Co-op Program in Conservation and Biodiversity

Enrolment Limits:5

Learning Outcomes:

Upon completion of the work term, students will be able to:

- Find, identify and recognize the most common plant and fish species (or other groups) in the GTA.
- Demonstrate basic knowledge of the characters of the most important taxonomic groups making up local plants and fishes (or other groups).
- Demonstrate knowledge of where and how to find the most common plant and fish species (or other groups; habitat affiliation).
- Describe the relevance of the basic natural biology of the most common plant and fish species (or other groups) including their conservational status, possible invasiveness, threat or use to humans and their roles in natural and urban ecosystems.
- Quantitatively assess local plants and fish diversities (or other groups).
- Collect plants and fishes (or other groups).
- Understand the importance and use of reference collections.

Topics Covered:

- Species identification (recognition and interpretation of particular morphological traits)
- Historical and contemporary use of collections
- Data collection work: Field-based assessment of local diversity of plants and fishes (or other groups)

Methods of Assessment:

- Exit identification quizzes (10%)
- Midterm report: cumulative exit quiz (10%)
- Final report: collection (35%)
- Data collection work: Field-based diversity assessment (25%)
 - Mid-term and Final evaluation of performance completed by co-op employer

(Work Term Performance is assessed as

Outstanding = 100

Excellent = 85

Very good = 75

Good = 65

Satisfactory = 50

49 or less = Unsatisfactory

- Performance Evaluation Reflection (Assessed by Co-op Office or TA)

Co-op Job Search Documents – evaluation of a resume and cover letter which is put into an ePortfolio at the end of the course (this will address key concepts covered in COPB50 – the coop office can provide this information in the course through asynchronous and an in class session with students towards the end of the semester)

Mode of Delivery: In Class

Rationale:

This course is the first work term for students in the new Specialist (Co-operative) program in Conservation and Biodiversity, which is being developed and will begin enrolling students as of Fall 2022. It will allow students to hone their biodiversity identification and field-based assessments skills; these skills are essential for future professionals working in conservation, remediation, and environmental management in a world facing the current and future challenges of the biodiversity crisis. The need to develop these skills is recognized by faculty and students alike. This course, which includes instruction and scientific data collection, will provide the foundation that students need to succeed as they apply for subsequent work terms with local conservation authorities and other potential employers.

There are no similar courses at UTSC or the more comprehensive University of Toronto.

Consultation:

DCC Approval Biological Sciences: June 29, 2021

A&S Co-op Approval: Feb 5, 2021,

RO Approval: April 11, 2022

Resources:

- Two faculty (one per taxonomic group)
- Two TAs (help with instruction of species identification and field-based diversity assessment)
- No additional equipment or infrastructure support is needed
No ancillary or laboratory fees
- Use of existing Arts & Science Co-op resources for Co-op components one faculty and one TA[AA1] (105 hours)
- No additional equipment or infrastructure support is needed
- No ancillary or laboratory fees
- Use of existing co-op resources for co-op components
- The cost for each student to be hired into this work term would be \$15 x 420 hours = \$6300. A total of 5 students would require \$31,500. Dean Gough and Dr. Kenneth Welch (Acting Chair, Department of Biological Sciences) have agreed to split this total cost for the launching of the first 2 years of this program.

COPC36H3: Co-op Work Term for Conservation and Biodiversity

Description:

Students work full-time at a co-op employer based on the position they are hired into. While working with their employer, students complete the duties of the position, set goals for the term in consultation with their work term supervisor, track and reflect upon these goals and progress and are assessed on performance in the workplace. A work term project and portfolio bring together industry and academic knowledge and showcase students' work and skill

development working full time with a co-op employer. Students receive support and guidance from co-op coordinators, faculty and peers, and share and reflect on their work term experiences.

Note: Students are enrolled in this course once hired for their second and co-op work terms.

Prerequisites: [Completion of COPBXXH3 and COPB51H3 and COPB52H3] or permission from the department.

Learning Outcomes:

During the second and third co-op work terms, students will:

- Transition successfully from university to the workplace
- Set and attain personal and professional learning goals using the SMART goal framework
- Apply and develop their knowledge and skills by being immersed full time in a work place setting
- Begin to understand how to manage common workplace situations and dynamics
- Contribute positively in a professional environment, working independently and as part of a team
- Receive, reflect upon and incorporate feedback on work performance for continuous improvement and development
- Develop and communicate ideas and well-reasoned arguments in writing and orally
- Create an effective Portfolio to showcase skills, knowledge and experience used or developed on work term to be used in future co-op work term search or job search activities

Topics Covered:

- Transitioning from University to Work
- Starting your Co-op Work Term
- Setting Your Work Term Goals
- Performance Evaluations, Areas of Strength and Areas of Development; incorporating feedback
- Work Term Project Topic Selection & Requirements
- ePortfolio
- Wrapping up your work term
- Project Presentations

Methods of Assessment:

- Mid-term and Final evaluation of performance on the job will gauge a student's contributions to the team and organization. It will allow for reflection on the work and performance so far and provide opportunities to tap further into areas of strength and receive support in development areas.
 - Self & Work Term Reflections – students complete a reflection journal or prompted feedback via a survey to reflect on work term experiences
 - Setting Goal & Action plan assignment allows students to set 3 goals for their work term in consultation with their work term supervisor and apply the SMART goal method. Students also track and report on progress through the ePortfolio submission which highlights the attainment or progress of these goals throughout the work term
 - Portfolio submissions will allow students to document and showcase their personal and professional development while on a work term. This is linked to the personal and professional learning goals for the work term. This will also include an updated resume that incorporates their recent work term experience. This will be used in future job search activities.
 - Work Term Project Presentation connects academic knowledge and skills to industry knowledge and experience and provides students with the mechanism to develop and communicate ideas on a topic and present well-reasoned arguments in writing and verbally
- All components must be completed successfully to receive credit for this course.

Mode of Delivery: Hybrid

Rationale:

This course fulfils the second and third work terms for the proposed Specialist (Co-op) in Conservation and Biodiversity. This work term will be 4-months in length and will be taken following Year 2 of the program (including completion of the first work term and the COPB51H3 and COPB52H3 prep courses). In this work term, students will have the opportunity to utilize and develop their biodiversity identification and field-based assessments skills. These skills are essential for future professionals that will work in areas such as conservation, remediation and environmental management.

The second and third work terms will be 4-months in length and will be taken following Years 2 and 3 of the program, along with all required work-term prep courses. Through their work terms, and in particular, through their first work term, students will have the opportunity to utilize and develop their biodiversity identification and field-based assessments skills.

These skills are essential for future professionals that will work in areas such as conservation, remediation and environmental management. With the addition of this experiential and work-integrated learning component, the proposed program will be unique within the landscape of other Conservation and Biodiversity programs (within and outside the province) and will be attractive to students. At the same time, it will ensure that UTSC students are more competitive compared to students in other Co-op programs, since the first work term takes place early in the program, and is focused on key skills development.

Consultation:

DCC Approval Biological Sciences: June 29, 2021

A&S Co-op Approval: Feb 5, 2021,

RO Approval: April 11, 2022

Resources: No additional resources are required.