Mr. I. J. LeBlond May 26, 2014

Canadian Technology Accreditation Board Attn: Director, Program Development 295 – 1101 Prince of Wales Drive Ottawa ON K2C 3W7

Dear Mr. LeBlond,

<u>RE: CTAB Triennial Review of the Forest Resources Technology program at Vancouver Island</u>
University

Please find attached our triennial review submission for the Forest Resource Technology Programme at Vancouver Island University.

Since the last program review in 2010/11 academic year we have made the following changes to the Forestry Program. Starting in the fall of 2011 we reduced overall student contact hours by 10 due to budget constraints and rearranged course content in many courses to present learning objectives in a logical order while reducing excessive student workload in the first year of study. We also increased our emphasis on forest ecology and non-timber resource values and addressed CTAB *opportunities for improvement* revising all course learning objectives in the forestry courses.

The specifics of these changes are as follows:

Deleted courses

- FRST 122 Photo Interpretation (3 hours, 2 credits) instead photo (image) interpretation is covered as needed in other courses
- FRST 181 Computer Application (3 hours, 2 credits) computer skills are now covered as needed in other courses, plus 2 hours/week are dedicated to computer skills in the revised FRST 121 Spatial Data course
- FRST 182 GIS (3 hours, 2 credits) this course has been restructured/enhanced and added as a third year course FRST 328 (see below)
- FRST 241 Forest Resource Administration II (2 hours, 1 credit) 1 hour of content was added to FRST 144 (see below)
- MATH 171 Mathematics for Forestry Technology (4 hours, 2 credits) instead math skills have been incorporated into other courses as needed, math is now taught 'across the curriculum', much of the content overlapped with FRST 111 and 121, these courses now directly incorporate introductory math skills into the curriculum

Added courses

- FRST 143 Forest Hydrology & Riparian Management (4 hours, 3 credits) expansion of non-timber values, some of this content was moved out of FRST 242 IRM, to allow for other topics
- FRST 235 Forest Ecology II (3 hours, 2 credits) expansion of forest ecology
- FRST 328 GIS for Natural Sciences see FRST 182 above

Changes

- FRST 111 Forest Surveying –1 hour
- FRST 112 Forest Inventory +2 hours, +1 credit, some content from FRST 212 added here
- FRST 121 Spatial Data +2 hours, +1 credit, some content from MATH 171 & FRST 181 added here
- FRST 131 Forest Botany +1 credit
- FRST 144 Forest Resources Administration +1 hour
- FRST 162 Fire Management -1 hour
- FRST 173 Field Skills -1 hour
- FRST 201 Research Methods +1 credit, course repurposed to focus on research methods and public speaking
- FRST 211 Forest Biometrics -2 hours, -1 credit
- FRST 212 Silviculture Assessment -6 hours, -3 credits, old course also included non-timber assessments, which were moved to FRST 242 (see below)
- FRST 231 Silviculture I -1 hour, content moved to new course FRST 235 (see above)
- FRST 242 IRM +2 hours, +1 credit increased emphasis on non-timber values

It should also be noted that the program underwent an internal VIU review in 2012 (see section B.3). The office of University Planning and Analysis stated the end-result of the review was one of the highest thus far.

Based on results from the last CTAB and the internal VIU reviews, the department met with the Centre for Excellence In Learning (CEIL) to review i) course learning objectives, ii) program learning objectives, iii) assessment and evaluation strategies and iv) content delivery options. Based upon these meetings, several changes were made, as outlined below.

In response to the *opportunities for improvement* of the 2011 Biennial review the following changes have been implemented:

Opportunities for Improvement:

1. Given that in BC, Forestry is a restricted and regulated profession, it would be good if some specific outcomes related to that topic, registration and scope of practice be included.

Learning outcomes relating to the profession of forestry, especially ethics, have been added to FRST 144 and 242. In addition, 2 workshops, delivered by the ABCFP, regarding professionalism and ethics have been added to the program.

2. Faculty must continue to improve course outlines to include more definitive outcome statements such as "describe, apply, or evaluate" rather than "demonstrate a thorough knowledge of", "Appreciate the importance of" or "Understand". State outcomes, especially in 2nd Year courses, that reflect higher order thinking like analysis, synthesis, and evaluation.

The entire department sat with the Centre for Excellence In Learning (CEIL) and reviewed the learning outcomes for all FRST courses. As appropriate changes were made to provide an outcome that is measureable and at the appropriate level (i.e. Bloom's Taxonomy). Further to this we incorporated broad program-level learning outcomes, as appropriate, into all FRST courses.

3. Several course outlines, especially in support courses of Math and English lack detail as to schedule of topics and emphasis within course. The students would be well served if all courses, including the English courses, provided matching competency based outcomes in the course outlines to ensure program recognition and facilitate the student's transition to professional status through program accreditation.

Course outlines for FRST courses have been revised. However, course outlines for other departments are not within the purview of the Forestry Department and no changes have been made.

4. FRST 212 – Forest Measurements IV – best represents the Forest Measurements major. This course has previously been the selected Forest Measurements program strength course.

This is no longer the case; FRST 211 now best represents the Forest Measurements major.

Other Changes:

It is worth noting that other changes recently made the Forestry Program:

- 1. Use of smart devices the Forestry Program will be "going paperless" this fall. First year students will be required to purchase an iPad, which will be utilized for field navigation, data collection, collaborative work and function as a virtual forestry library. To keep the initiative cost neutral for students, we have eliminated the need to purchase texts and found "e-replacements".
- 2. Through consultation with CIEL we have redesigned course work to assign fewer, but more substantive assignments and projects.
- 3. We have met with the English Instructors to find ways to incorporate meaningful writing assignments in appropriate courses.
- 4. Invited student representatives to sit on the Program Advisory Committee.
- 5. Enhanced safety orientation, organization and field procedures in appropriate courses.

If you have any questions or comments, please do not hesitate to contact me. I look forward to your field visit.

Yours,

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