



VANCOUVER ISLAND UNIVERSITY

ANIMAL CARE COMMITTEE Policy ACC-016 – Pedagogical Merit Review

PURPOSE

1. The Canadian Council on Animal Care (CCAC) and Vancouver Island University Animal Care Committee (ACC) require that all proposed use of animals in teaching and training undergo pedagogical merit review in addition to ethical animal care and use review. For the purpose of this policy, animals refer to non-human vertebrates and cephalopods. Since animals used for educational purposes are not being used to discover, prove or develop new ideas or techniques, but rather to demonstrate principles and facts which are already established, animals must only be used for teaching and training purposes when that use has been found by independent expert peer reviewers to have pedagogical merit, and when the educational goals of the course that rely on the use of animals cannot be effectively conveyed in alternative manner. The Associate Vice-President, Scholarship, Research and Creative Activity (AVP SRCA), as the senior administrator responsible for animal care, is responsible for ensuring the pedagogical merit review process meets the Canadian Council on Animal Care (CCAC) standards.
2. The CCAC standards are outlined in the following documents:
 - [CCAC policy on: Pedagogical Merit of Live Animal-Based Teaching and Training](#)
 - CCAC [FAQ: Pedagogical Merit of Live Animal-Based Teaching and Training](#)
3. When applying the 3Rs (replacement, refinement, reduction) to the use of animals in teaching and training, efforts should focus first on finding a replacement alternative. When no replacement teaching alternative is available to meet in an effective manner the pedagogical or training objectives, justification is required to use animals. The level and type of training for the students (undergraduate / graduate / postgraduate; specialized / non-specialized) are important factors. All students or trainees are required to obtain appropriate animal user training prior to any work with live animals.

Note: Painful experiments or multiple invasive procedures on an individual animal, conducted solely for the instruction of students in the classroom, or for the demonstration of established scientific knowledge, cannot be justified.

SCOPE

4. This Policy applies to all VIU Persons involved in teaching and/ or training. Subject to the following exemption, all animal-based teaching and training at VIU and Affiliated Research Institutes shall be reviewed by two independent referees with knowledge of pedagogy and alternatives to animal-based teaching.

- a) Exemption: Individual students trained for specific research projects covered by their Principal Investigator's approved animal use protocol are exempt from pedagogical merit review, as research protocols are covered by the CCAC policy on *Scientific Merit and Ethical Review of Animal-Based Research*.

REVIEW PROCESS

5. The principal instructor for the teaching and/ or training activity is required to submit the following course material (a) and one of the following forms (B or C) for review prior to submitting an Animal Use Protocol (AUP) to the ACC for the teaching/ training activity.
- a) Copy of the proposed course's syllabus, lab manual, or other material that clearly outlines the learning objectives of the proposed animal use
 - b) Instructor form for VIU Pedagogical Merit Review (Form B)
 - i Required for all VIU teaching and training courses that do not meet the qualifications for the expedited application (defined below).
 - c) Instructor form for expedited application for VIU Pedagogical Merit Review (Form C)
 - i This form may be used when formal institutional training sessions for animal users are required, such as those included in standard operating procedures or syllabus-based programs, or those dictated by governing bodies. This is based on the expectation that the curricular alignment has already been addressed by the prescribing organization.
 - ii An expedited application is only reviewed by one reviewer with knowledge of replacement alternatives.
6. The Animal Care Officer will administer the review of pedagogical merit review under the authority of the AVP SRCA. Two independent reviewers will be chosen from a list of potential referees (updated on an ongoing basis), who do not sit on the VIU Animal Care Committee or have a real or perceived conflict of interest (criteria defined below). Reviewers will be recruited by field of expertise, for their knowledge of pedagogy and/or alternatives to animal-based teaching, as well as subject-matter expertise. In the event, a member of the VIU ACC is the only available qualified reviewer, they may be asked to review the application for pedagogical merit and will not be permitted to take part in the ACC review of the AUP.
- a) A referee must not meet any of the following criteria for a real or perceived conflict of interest:
 - i is from the same immediate department as the applicant, and/ or interacts with the applicant in the course of their duties at the institution;
 - ii has previously taught the teaching/ training activity within the last 5 years

- iii has been a student or supervisor of the applicant within the last ten years;
 - iv is a close personal friend or relative of the applicant;
 - v has had long-standing academic or personal differences with the applicant;
 - vi is in a position to gain or lose financially from the outcome of the application;
- or,
- vii for some other reason feel that they cannot provide an objective review of the application.
7. As stipulated by the CCAC, for each assessment of animal-based teaching/training, the pedagogical merit review will consider key aspects such as:
- a) whether the learning objectives are clear and specify the involvement of animals;
 - b) in the case of teaching technical skills, whether the learning objectives specify the proportion of the objective that must be achieved and/or how well the technique/procedure must be performed (accuracy, speed, quality);
 - c) in the case of illustrating scientific principles, whether the learning objectives sufficiently justify the use of live animals, compared to alternatives;
 - d) whether the composition, learning level and needs of the student group(s) are compatible with the goals and objectives of the animal-based teaching/training;
 - e) whether the timing of the inclusion of animals in the teaching/training is suitable for the projected timing of the expected outcome(s);
 - f) any feedback from student assessments and course or session evaluations regarding the benefit of the animal-based teaching/training; and,
 - g) whether the review of the obstacles and opportunities for implementing 3Rs by the animal-based teaching/training instructors is sufficiently thorough.
8. Reviewers will be provided with all material submitted by the principal course instructor as outlined above. For ongoing courses, the Animal Care Officer will provide reviewers with copies of any student feedback from surveys of animal use in the course, if available.
9. Reviewers will be required to fill out the VIU Pedagogical Merit Reviewer Form. The Animal Care Officer will review the reviewer forms. Review decisions are made by consensus of the two reviewers. In the event, consensus cannot be reached among the reviewers, the Animal Care Officer will consult the AVP SRCA who will determine if a third reviewer is needed prior to making a review decision. When a third reviewer is assigned the file, a majority decision will be rendered. The Animal Care Officer will then inform the principal instructor and the ACC of the review decision and all reviewer comments.
10. The pedagogical merit review will remain valid until the Animal Use Protocol undergoes its next full review. If there are substantive changes to the use of animals in the approved course or training, the ACC may stipulate that a new AUP be submitted for pedagogical merit and ACC review prior to the next full review.

11. Enough time must be allotted for the review process to allow non-animal alternatives to be implemented should that be necessary. Thus, AUPs for teaching courses involving animals should be submitted at least 4 months in advance of the course start date or by the date listed on the [VIU ACC website](#) for academic courses.



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Instructor form for VIU Pedagogical Merit Review (Form B)

Course/teaching activity title and number (if any):	
Instructor(s):	
INTENDED LEARNING OUTCOMES	
a. Specific Clearly describe learning objective(s) or intended outcomes.	
b. Measurable Specify, when applicable, how well (e.g., maximum number of attempts, accuracy, speed, quality) the learned skills must be performed.	
c. Attainable and Realistic Describe how intended outcomes are realistically achievable, given the composition, learning level and needs of student group(s), and the teaching activities proposed. What is the student-to-animal ratio and how was it selected?	

<p>d. Timely Explain how the timing of the inclusion of animals in this teaching activity is suitable for the projected timing of the intended learning outcome(s).</p> <p>Explain the potential benefits of involving animals in this course, at this point in time in the academic curriculum, to future study or career paths.</p> <p>Does this course serve as a prerequisite for later course(s)? Quote further course number, if known.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div> <div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div> <div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
LEARNING ASSESSMENT METHODS	
<p>Clearly describe how the achievement of intended learning outcomes will be evaluated (e.g., lab reports, multiple choices, essays, demonstration).</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
LEARNING ACTIVITIES	
<p>Clearly describe all learning activities involving animals.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
<p>What is the student per instructor ratio? Describe how the students will be assisted, instructed, and supervised.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
<p>Explain why chosen learning activities are best suited to the intended learning outcomes and assessment methods.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
REPLACEMENT ALTERNATIVES	
<p>Describe efforts to identify equivalent absolute of relative replacement alternatives, including resources that were consulted.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
<p>Objectively explain why replacement alternatives were not chosen.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>

Instructor name:

Date:



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Instructor form for VIU Expedited Pedagogical Merit Review (Form C)

Course number and name, or other identifier:	
Instructor(s):	
Name of organization mandating skills	
INTENDED LEARNING OUTCOMES	
b. Specific Clearly describe learning objective(s) or intended outcomes.	
e. Measurable Specify, when applicable, how well (e.g., maximum number of attempts, accuracy, speed, quality) the learned skills must be performed.	
f. Attainable and Realistic Describe how intended outcomes are realistically achievable, given the composition, learning level and needs of student group(s), and the teaching activities proposed. What is the student-to-animal ratio and how was it selected?	

<p>g. Timely Explain how the timing of the inclusion of animals in this teaching activity is suitable for the projected timing of the intended learning outcome(s).</p> <p>Explain the potential benefits of involving animals in this course, at this point in time in the academic curriculum, to future study or career paths.</p> <p>Does this course serve as a prerequisite for later course(s)? Quote further course number, if known.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div> <div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div> <div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
LEARNING ASSESSMENT METHODS	
<p>Clearly describe how the achievement of intended learning outcomes will be evaluated (e.g., lab reports, multiple choices, essays, demonstration).</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
LEARNING ACTIVITIES	
<p>Clearly describe all learning activities involving animals.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
<p>What is the student per instructor ratio? Describe how the students will be assisted, instructed, and supervised.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
<p>Explain why chosen learning activities are best suited to the intended learning outcomes and assessment methods.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
REPLACEMENT ALTERNATIVES	
<p>Describe efforts to identify equivalent absolute of relative replacement alternatives, including resources that were consulted.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>
<p>Objectively explain why replacement alternatives were not chosen.</p>	<div style="background-color: #e0e0e0; height: 20px; width: 100%;"></div>

Instructor name:

Date:



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Expedited Pedagogical Merit Review Form

Course number and name, or other identifier:		
Instructor(s):		
Name of organization mandating skills		
Reference to specific intended learning outcome mandated by prescribing organization or by practical training syllabus in institution		
LEARNING ACTIVITIES		
Are the learning activities provided by the instructor clear?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: _____
Replacement Alternatives		
Has the instructor made reasonable efforts to identify replacement alternatives?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: _____
Which resources were consulted?	_____	
Best Learning Model and Replacement Alternatives		
<p>Based on the availability and suitability of equivalent absolute or relative replacement alternatives is the live animal proposed in this course the best model in support of learning outcomes?</p> <input type="checkbox"/> Yes <input type="checkbox"/> No Explain choice: _____		

If a replacement alternative would be more appropriate, provide options below:

Absolute (e.g., computer simulation, model):

Relative (e.g., tissue, eggs, invertebrate):

Conclusion

With regard to meeting prescribed learning outcomes, the proposed live animal model is:

- ESSENTIAL (has pedagogical merit)
- NOT ESSENTIAL (no pedagogical merit)

Reviewer name:

Date:



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Pedagogical Merit Review Form

Course Number and Name:		
Instructor(s):		
LEARNING OUTCOMES		
Are the learning outcomes:		
a. Specific: are they clearly described and do they specify the involvement of animals?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: <input type="text"/>
b. Measurable: do they specify how well the learned behaviour must be performed (accuracy, speed, quality)?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If No, explain: <input type="text"/>
c. Attainable and Realistic: are they realistically achievable, given the composition, learning level, and needs of the student group(s), and the teaching activities (what, where) proposed?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: <input type="text"/>
Are the animal/student ratio and instructor/student ratio appropriate to achieve the learning outcomes?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
d. Timely: is the timing of the inclusion of animals in the teaching/training suitable for the projected timing of the intended learning outcome(s)?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: <input type="text"/>
Are there clear benefits to involving animals in this course, at this point in time in the academic curriculum, to future study or career paths?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: <input type="text"/>
Does this course serve as a prerequisite for further study?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
LEARNING ASSESSMENT METHODS		
Are live animals involved in the assessment?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: <input type="text"/>

Are the learning assessment methods clear?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: _____
LEARNING ACTIVITIES		
Are the learning activities clear?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: _____
CONSTRUCTIVE CURRICULUM ALIGNMENT PARADIGM (see question 7 in the CCAC frequently asked questions: Pedagogical merit of live animal-based teaching and training)		
Do learning outcomes strongly align logically with learning assessment methods, and do both align with learning activities in support of the outcomes?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: _____
REPLACEMENT ALTERNATIVES		
Has the instructor made reasonable efforts to identify replacement alternatives?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If No, explain: _____
Which resources were consulted?	_____	
BEST LEARNING MODEL AND REPLACEMENT ALTERNATIVES		
<p>Based on SMART learning outcomes, constructive curriculum alignment, and the necessity for these students to achieve stated learning outcomes at this point in their teaching/training experience, is the live animal proposed in this course the best model in support of learning outcomes, or could equivalent absolute or relative replacement alternatives be used?</p> <p><input type="checkbox"/> BEST MODEL <input type="checkbox"/> ALTERNATIVE</p> <p>Explain choice: _____</p>		
<p>If a replacement alternative would be more appropriate, provide options below:</p> <p>Absolute (e.g., computer simulation, model): _____</p> <p>Relative (e.g., tissue, eggs, invertebrate): _____</p>		
CONCLUSION		
With regard to meeting learning outcomes, the proposed live animal model is:	<input type="checkbox"/> ESSENTIAL (has pedagogical merit) <input type="checkbox"/> NOT ESSENTIAL (no pedagogical merit)	

