

This document provides tips for completing the **Pedagogical Merit Review (PMR) Form**, as outlined within the *Pedagogical Merit Review Policy* (POL-014) and *Procedures* (PROC-014) - includes 'Full' (App1) and 'Expedited' (App3).

For more support, please contact the PMR Committee Chair.

1. How Pedagogical Merit is Assessed?

- Reviewers offer input from the perspective of applying the Three Rs (Reduce, Refine and Replace) to a teaching/training program based upon their extensive pedagogical consultation experience.
- Reviewers are asked to determine if the specific live animal-based learning objectives **are both clear and essential for the trainees** based on the application. Reviewer understanding is derived from the pedagogic application only and is pedagogic feedback and critique is based upon:
 - People Involved:
 - the composition of the learning group and the instructor(s),
 - current level of experience,
 - technical needs,
 - Basic Requirements:
 - Timeline of proposed activities in relation to achieve objective driven competence in skills and procedures described.
 - Exploration of equivalent absolute (no animal use) or relative (replacing more sentient animals with those having significantly lower pain potential, e.g. invertebrates) replacement alternatives exist.
 - If this is not possible, justification of the proposed training needs to be clearly linked to the learning objectives and explicitly described in non-jargoned lay terms where possible

2. Review Process - Pedagogical Merit Reviews are designed to be collaborative.

- The review team always approaches pedagogic review with the goal for better training environments of the facility, laboratory, or class in question in combination with animal pain and suffering reduction avenues.

3. Reviewer Comprehension Is Key.

- **Use Clear Language** – Ensure language used to list activities and their objectives is understandable by someone external to your scientific discipline and/or inexperienced with animal-based science.
- **Define Acronyms** - Define all acronyms in advance of their use in the form.



- **Be Specific** – Use precise language throughout the form, e.g., disclose specific conditions (timeframes) or expectations of performance/outcome when listing the learning objectives and assessment methods to be used.
 - **Provide Context** – Disclose early, any information that will assist reviewers in understanding the context of the learning activity, e.g., importance of procedures, specialized location, animal model.
 - **Use Clear Filenames for Attachments** – Ensure attachments are clearly named for ease of identification by the reviewer, e.g., add the words ‘learning activities’ to associated filenames.
4. **Learning Objectives/Activities/Assessment Methods Alignment** – The learning objectives, learning activities and assessment methods used must align with one another.
5. **Learning Objectives/Outcomes** – *‘What will be achieved by each learning activity?’*
- **Use Bulleted (Numbered) Lists** - List the objectives in a bulleted format in order to clearly specify what you wish the learner/trainee to learn, these are Learning Objective(s).
 - **Objectives = Action** – Begin each learning objective with an action word, e.g., recognize, identify, compare and contrast, synthesize, apply, mitigate risk of, demonstrate competence in, quantify, practice, perform, quantify, administer, restrain, compare.
 - For a great resource to learning objectives see:
<https://teaching.uwo.ca/curriculum/coursedesign/learning-outcomes.html>
6. **Assessment Method** – *‘Criteria, tests, and tools that assess learning outcomes’*
- Explain how trainees will be evaluated on knowledge and/or skill acquisition involving animals, e.g. essays, quizzes, reports, task performance.
 - Associate the evaluation methods with the learning objectives to demonstrate how evaluation methods will ensure that the learning objectives have been met.
7. **Learning Activities** – *‘How will the learning objectives be achieved’*
- Ensure each learning activity is clearly described, if possible, associate activities back to the ‘Learning Objectives’ section to illustrate the linkage.
 - **Add an Introductory Phrase** - Precede the list of learning objectives for each learning activity with the phrase: “By the end of this learning module/training event, participants will:”
8. **Teaching/Training Replacement Alternatives**
- Restate and/or link your learning objectives for each alternative presented; reference the associated number(s) listed under the ‘Learning Objectives’ section.



- Address specific efforts made to seek out alternatives with reference to the Canadian Council on Animal Care's [Three Rs and Ethics](#) and [FAQs-Pedagogical Merit of Live Animal-based Teaching](#); and then
- Explain why the replacement alternatives may not adequately achieve the specific learning objectives