BPK Graduate Program Learning Outcomes

A graduate from this program is able to:

**MSc**
1. demonstrate advanced knowledge in, and a critical awareness of, a specialized area within the fields of Biomedical Physiology and Kinesiology
2. conduct research in novel lines of enquiry to generate and/or test a hypothesis, which demonstrates mastery of a scientific approach

**PhD**
1. demonstrate a thorough understanding of pertinent literature and recognize and integrate complex ideas and controversies in the field
2. conceptualize, design and undertake independent research using novel ideas and/or approaches to address a series of questions related to a common goal, which result in original contributions to knowledge in the field

**MSc and PhD**
3. demonstrate initiative, intellectual independence, problem-solving skills, and the ability to apply knowledge
4. communicate and defend their work, as well as critically appraise that of others, in written and oral form
5. identify moral, legal and ethical considerations for how to conduct research appropriately
# BPK Graduate Degree Level Expectations

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| **1) Core Knowledge and critical thinking** | **a)** demonstrate advanced knowledge of pertinent literature in a specialized area within Biomedical Physiology and Kinesiology  
**b)** recognize debate, and critically appraise current research in the field  
**c)** evaluate methodological strengths and weaknesses in the literature and understand how this enables/limits interpretation of data | **a)** demonstrate thorough knowledge of literature related to an area within Biomedical Physiology and Kinesiology  
**b)** critically evaluate current literature and integrate complex ideas and controversies in the field  
**c)** identify and understand new and established approaches that are at the forefront of the field |
| **2) Research methods and analyses** | **a)** demonstrate mastery of quantitative and/or qualitative skills in the collection and/or use of data  
**b)** conduct novel research to generate and/or test a hypothesis  
**c)** use established or novel ideas and/or approaches to address a new question  
**d)** contribute to the generation of new knowledge in the field | **a)** conceptualize and design approaches to address a series of research questions  
**b)** undertake independent research using novel ideas and/or approaches to generate and/or test a set of hypotheses or questions related to a common goal  
**c)** produce original research, which creates new knowledge that advances the field |
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| 3) Literacy and scientific communication | a) present a detailed and comprehensive evaluation of a field of literature in written form  
b) orally present and defend their critical appraisal of the work of others  
c) write accessible descriptions of their research for the purposes of knowledge translation  
d) convey their research to multiple audiences in oral and written form  
e) present and defend the rationale, approach and interpretation of their own research in written and oral form | a) comprehensively evaluate pertinent literature, addressing complexities and controversies in the field, in written form  
b) orally present and defend their critical appraisal of the work of others  
c) write accessible descriptions of their research for the purposes of knowledge translation  
d) convey their research to multiple audiences in oral and written form  
e) present and defend the rationale, approach and interpretation of their own research in written and oral form |
| 4) Professional and ethical conduct | a) identify and adhere to moral, legal and ethical considerations for how to conduct research appropriately  
b) manage their own research project  
c) engage in professional conduct with their peers and the scientific community  
d) display academic integrity  
e) demonstrate proficiency in teamwork and leadership  
f) demonstrate initiative, intellectual independence and the ability to apply knowledge | a) identify and adhere to moral, legal and ethical considerations for how to conduct research appropriately  
b) demonstrate independence in project conceptualization, design, and management  
c) engage in professional conduct with their peers and the scientific community  
d) display academic integrity  
e) demonstrate autonomy and strong leadership  
f) understand the broader implications of the application of knowledge in their own and others field or discipline |