

Student Learning Assurance Report
Academic Year 2015-2016
Kinesiology Department
College of Arts and Sciences
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CAS Plan Academic Year 2015-2016

The first curricular question submitted for assessment in the academic year 2015-2016 was: Are the lower division, prerequisite courses preparing students for success in the upper division courses? In order to answer this question we proposed to assess three lower division courses that provide students with introductory level information for selected program learning outcomes (PLOs) and hence build a foundation for successful attainment of PLOs at moderate and advanced levels. The courses proposed, PLOs addressed, and method of assessment were as follows:

1. Course: Introduction to Kinesiology, KIN 120
 - a. PLO 1.2: Explain how the scientific process informs our understanding of physical activity and kinesiology
 - i. Method of Assessment: Paper, “Neighborhood assessment of opportunities and access to physical activity”
 - ii. Curriculum map: Learning outcome *Introduced*
 - b. PLO 2.1: Design and evaluate physical activity programs that promote health and improve quality of life
 - i. Method of Assessment: Interview with a professional in the field (Ph.D., DPT, MD, OT, AT)
 - ii. Curriculum map: Learning outcome *Introduced*

2. Course: Measurement and Statistics, KIN 200
 - a. PLO 4.1: Critically evaluate research related to physical activity and its impact on health and chronic disease
 - i. Method of Assessment: Research critique (peer-reviewed publication)
 - ii. Curriculum map: Learning outcome *Introduced*
 - b. PLO 4.2: Critically evaluate scholarly work related to cultural, historical and philosophical dimensions of physical activity
 - i. Method of Assessment: Cumulative final exam
 - ii. Curriculum map: Learning outcome *Introduced*

3. Course: Anatomical Kinesiology, KIN 220 (prerequisite: Human Anatomy, BIO 113/114)
 - a. PLO 2.1: Design and evaluate physical activity programs that promote health and improve quality of life
 - i. Method of Assessment: Presentation: practical application
 - ii. Curriculum map: Learning outcome *Developed*

Modifications to CAS Plan Academic Year 2015-2016

Based on feedback provided, the CAS 3-year plan has been revised for the academic year 2015-2016. The critique revealed that the plan was too extensive, therefore, in an effort to provide valuable feedback to guide our curricular planning and adjustments, modifications were made to the number of courses assessed and PLOs evaluated. Specifically, the assessment of Anatomical Kinesiology (KIN 220) was changed and added to the second year of the plan. The rationale for this change was to assess courses that introduced the content for the proposed PLOs. Note, Anatomical Kinesiology has a prerequisite (Human Anatomy, BIO 113/114; grade of C or higher) and the content delivered in this course is “developed”. The second modification for Measurement and Statistics (KIN 200) was the elimination of PLO 4.2 (cumulative final exam) from the assessment plan. The faculty will discuss a more specific method of assessment for PLO 4.2.

Note, there were three changes to the specific method of assessment (instructor-specific changes that were received at the time of data collection and considered a more valuable assessment of the PLO):

1. Introduction to Kinesiology, KIN 120: change to method of assessment for PLO 1.2
 - a. Method of Assessment: Literature review, Kinesiology as a multidisciplinary field
2. Introduction to Kinesiology, KIN 120: change to method of assessment for PLO 2.1
 - a. Method of Assessment: Exercise prescription case study
3. Measurement and Statistics, KIN 200: change to method of assessment for PLO 4.1
 - a. Method of Assessment: Research abstract

What are the results of the direct methods of assessment?

The data collected for PLO 1.2 and 2.1 (Introduction to Kinesiology) and PLO 4.1 are presented in Figures 1 and 2. Based on the data collected, the majority of the students are meeting the standards set for successful attainment of the proposed program learning outcomes. The data represent the percentage of students that successfully obtained and A (90-100%), B (80-89%), C (70-79%), D (60-69%), or F (< 60%). In order to pass the courses, students majoring in kinesiology must receive a minimum grade of C. Therefore, the results are as follows:

1. Introduction to Kinesiology, KIN 120: PLO 1.2 (Literature review, Kinesiology as a multidisciplinary field)
 - ⇒ 86% of the students received a grade of C or higher and therefore met the criteria for minimum grade standards (14% received poor or very poor achievement outcome)
 - ⇒ 22% (very good achievement outcome), 42% (good achievement outcome), and 22% (average achievement outcome)
2. Introduction to Kinesiology, KIN 120: PLO 2.1 (Exercise prescription case study)
 - ⇒ 94% of the students received a grade of C or higher and therefore met the criteria for minimum grade standards (8% received poor or very poor achievement outcome)
 - ⇒ 44% (very good achievement outcome), 42% (good achievement outcome), and 8% (average achievement outcome)

3. Measurement and Statistics, KIN 200: PLO 4.1 (Research abstract)
 ⇒ 100% of the students received a grade of C or higher and therefore met the criteria for minimum grade standards (0% received poor or very poor achievement outcome)
 ⇒ 83% (very good achievement outcome), 14% (good achievement outcome), and 3% (average achievement outcome)

Scale	Very Good Achievement Outcome	Good Achievement Outcome	Average Achievement Outcome	Poor Achievement Outcome	Very Poor Achievement Outcome
Assignment	A Literature Review: Kinesiology as a Multidisciplinary Field (PLO 1.2)	B Literature Review: Kinesiology as a Multidisciplinary Field (PLO 1.2)	C Literature Review: Kinesiology as a Multidisciplinary Field (PLO 1.2)	D Literature Review: Kinesiology as a Multidisciplinary Field (PLO 1.2)	F Literature Review: Kinesiology as a Multidisciplinary Field (PLO 1.2)
	A Exercise Prescription Case Study (PLO 2.1)	B Exercise Prescription Case Study (PLO 2.1)	C Exercise Prescription Case Study (PLO 2.1)	d Exercise Prescription Case Study (PLO 2.1)	F Exercise Prescription Case Study (PLO 2.1)
Performance/Direct Assessment	1. More than 90 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.	1. More than 80 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.	1. More than 70 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.	1. More than 60 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.	1. Less than 60 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.
Score	22% (PLO 1.2, N = 36)	42% (PLO 1.2, N = 36)	22% (PLO 1.2, N = 36)	8% (PLO 1.2, N = 36)	6% (PLO 1.2, N = 36)
	44% (PLO 2.1, N = 36)	42% (PLO 2.1, N = 36)	8% (PLO 2.1, N = 36)	3% (PLO 2.1, N = 36)	3% (PLO 2.1, N = 36)

Figure 1. Introduction to Kinesiology performance scores expressed as a percentage for PLO 1.2 and 2.1.

Scale	Very Good Achievement Outcome	Good Achievement Outcome	Average Achievement Outcome	Poor Achievement Outcome	Very Poor Achievement Outcome
Assignment	A Research Abstract in Kinesiology (PLO 4.1)	B Research Abstract in Kinesiology (PLO 4.1)	C Research Abstract in Kinesiology (PLO 4.1)	D Research Critique in Kinesiology (PLO 4.1)	F Research Abstract in Kinesiology (PLO 4.1)
Performance/Direct Assessment	1. More than 90 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.	1. More than 80 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.	1. More than 70 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.	1. More than 60 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.	1. Less than 60 percent correct selected assignment, 2. 100% of data collected from selected assignment, and 3. Report percentage performance of students meeting this criteria.
Score	83% (PLO 4.1, N = 36)	14% (PLO 4.1, N = 36)	3% (PLO 4.1, N = 36)	0% (PLO 4.1, N = 36)	0% (PLO 4.1, N = 36)

Figure 2. Measurements and Statistics performance scores expressed as a percentage for PLO 4.1.

What elements of the student learning assessment are successful?

PLO 1.2: Explain how the scientific process informs our understanding of physical activity and kinesiology

The literature review assignment requires students to find five peer-reviewed related articles and collate and summarize them into a cohesive unit. They have to understand how the articles can be linked together, as well as understand how to concisely summarize disparate information. This assignment is a good method of assessment for an introduction to PLO 1.2.

PLO 2.1: Design and evaluate physical activity programs that promote health and improve quality of life

For the case study assignment, the students are assigned a partner and must perform a health evaluation/exercise prescription for that individual. This assignment requires the students to assess the five components of health-related fitness, determine the fitness levels of their partners, as well as prescribe a strategy to improve these levels. This assignment is a good method of assessment for an introduction to PLO 1.2.

PLO 4.1 Critically evaluate research related to physical activity and its impact on health and chronic disease

For the research abstract, students present their findings from the class study using American College of Sports Medicine guidelines. This is a semester-long assignment that begins with class discussion on the components of a quality peer-reviewed study. A background literature review is then performed by each group to determine an appropriate research question in physical activity. After data collection, students continue their literature search to follow up on questions that remain. Students then analyze the class data and compare their findings to previous studies. At the end of the abstract students provide examples of future research studies that expand on their own data. This assignment is a good method of assessment for an introduction to PLO 4.1.

What have we learned from this process?

1. In order to successfully interpret the data and better inform our curricular planning and changes, the data collected need to be specific to the categories of each rubric. However, specific data for each category of the rubrics were not available.
⇒ This item will be included on our agenda for the Fall Faculty Retreat.
2. There is some difficulty with writing methods of assessment in introductory-level courses. This is due to varying levels of writing ability and in some cases an inability to write in a clear, concise, and comprehensive manner.
⇒ Faculty will continue to refer students to the Learning & Writing Center.
⇒ Scaffolded writing assignments will be discussed at the Fall Faculty Retreat.
3. The results of this report will be distributed to the faculty and future discussions will ensue at the retreat.

Have we successfully answered our proposed curricular question, “Are the lower division, prerequisite courses, preparing students for success in the upper division courses? “

This curricular question has been answered on a very basic level. As mentioned in the report, there needs to be more in depth information provided from the rubrics.

Rubrics for Methods of Assessment

Kin 120: Exercise Prescription Case Study

Section 1: Case presentation				
<i>Introduction</i>	Introduces self, including PA history, interests, injuries and barriers to PA (5)	Introduces self with minor errors (omits 1 area) (3)	Introduction is missing several components (2)	Introduction is missing (0)
Reviewer's Comments				
Score				
Section 2: Health assessment results				
<i>Components</i>	6 health assessments are performed and results are clearly described (5)	Most health assessments are performed (4-5) but lacking clear detail (3)	Some assessments are performed and/or described. Minimal attempt at assignment is observed. (2)	Assessments were not performed or described as assigned. (0)
Reviewer's Comments				
Score				
Section 3: Discussion				
	Overall fitness, perception of health, and goals are clearly defined and explained. Health risk assessment is clear to the reviewer. (6)	At least one of the three components is missing or not clearly described. Overall health risk is not clear to the reviewer. (4)	>1 of the components is missing and overall health risk is ambiguous. (3)	None of the components are explained and overall health assessment was not described or analyzed. (0)
Reviewer's comments				
Score				
Section 4: Supporting materials				
	Data from energy expenditure calculation, and PAR-Q are included and described in the text. (6)	Data from energy expenditure calculation, and PAR-Q are included but not referred to in the text. (4)	<2 of the supporting materials are included (3)	Supporting materials are not included. (0)
Reviewer's comments				
Score				

**Introduction to Kinesiology (KIN 120)
Literature Review Rubric**

Name:

Part I: Assignment Overview

Appropriate level of communication

Developing

Competent

Exemplar

Appropriate selection of five research articles

- Language is often inappropriate for the audience.
- Definitions of important concepts are unclear or wordy.

- Language is occasionally over or under the audience's level.
- Most important concepts are concisely and clearly defined.

- Language is appropriate for an educated but uninformed audience.
- All important concepts are concisely and clearly defined.

- Fewer than five articles, outdated articles, or non-primary research articles are included.
- The connection between the articles and the purpose is missing.

- At least five research articles published since 1997 are included.
- The connection between some of the articles and the purpose is unclear.

- At least five research articles published since 1997 are included.
- All articles are relevant to the purpose.

- Four-page limit exceeded by more than one page.

- Four-page limit exceeded by one page.

- Four-page limit honored.

Title page

- Some required information is missing.
- Extraneous information is included.

- All required information is included.
- Some extraneous information is included.

- No extraneous information is included.

Abstract

- The abstract is not a good reflection of the literature review.
- The abstract is excessively wordy.

- The abstract is a description of the literature review, but it is sometimes unclear or wordy.

- An accurate and concise description of the literature review is provided, including background, purpose, method, results, and conclusion.

Results

- Comparison and contrast of findings are lacking.
- Discussion of findings does not relate well to the main discussion points in the purpose statement.
- Study limitations are not mentioned.
- Gaps (what is unknown and needs to and controversies that exist in the literature are not discussed).

- Comparison and contrast of findings are provided but lack thoroughness.
- Discussion of findings could relate better to the main discussion points in the purpose statement.
- Study limitations are discussed, but possible connections to differences in findings are not clearly identified.
- Gaps and controversies in the literature are discussed, but clarity could be enhanced.

- Thorough comparison and contrast of findings are provided and relate to the main discussion points in the order of their appearance in the purpose statement.
- Focus is on research findings rather than research methods.
- Study limitations that might have led to different findings are discussed.
- Gaps and controversies that exist in the literature are clearly discussed.

Conclusion

- A summary of the main points is not clearly presented.
- Implications are absent, illogical, irrelevant, or unclear.

- A summary of the main points is presented, but clarity could be enhanced.
- Implications are included but lack logic, relevance, or clarity.

- A summary of the main points is clearly articulated.
- Implications are logical, relevant, and clear.

Part II: Language Style Issues

Measurement and Statistics (KIN 200): Research Abstract Rubric (40 points)			
	Very Good (total = 40)	Average (total = 28.5)	Poor
Introduction/Methods <i>14 pts.</i>	2 pts each <ul style="list-style-type: none"> <input type="checkbox"/> Background review of literature is clear and informative <input type="checkbox"/> Hypothesis is clear <input type="checkbox"/> Purpose is clear <input type="checkbox"/> Methods are repeatable <input type="checkbox"/> Participants are clearly described <input type="checkbox"/> Measures are clearly described <input type="checkbox"/> Statistical analysis is correct 	1.5 pts each <ul style="list-style-type: none"> <input type="checkbox"/> The background is attempted but is ambiguous <input type="checkbox"/> Hypothesis is attempted but unclear <input type="checkbox"/> Purpose is unclear <input type="checkbox"/> Some important details are missing <input type="checkbox"/> Participants' description needs more detail <input type="checkbox"/> Measures need more detail <input type="checkbox"/> Statistical analysis is mostly correct 	0 pts each <ul style="list-style-type: none"> <input type="checkbox"/> Background literature is missing <input type="checkbox"/> Hypothesis is missing <input type="checkbox"/> Purpose is missing <input type="checkbox"/> Methods are not repeatable <input type="checkbox"/> Participants are not described <input type="checkbox"/> Measures are unclear <input type="checkbox"/> Statistical analysis is incorrect or missing
Results/Conclusion <i>18 pts.</i>	3 pts each <ul style="list-style-type: none"> <input type="checkbox"/> Findings are based on the statistical analysis <input type="checkbox"/> Comparisons are made to previous studies <input type="checkbox"/> Conclusions are reflective of the results <input type="checkbox"/> Limitations and future research are stated <input type="checkbox"/> Practical implications of findings are given <input type="checkbox"/> Summary sentence is accurate 	2.0 pts each <ul style="list-style-type: none"> <input type="checkbox"/> Findings are missing some detail <input type="checkbox"/> Attempt is made to compare previous studies <input type="checkbox"/> Conclusion is attempted <input type="checkbox"/> Limitations or future research are missing <input type="checkbox"/> Practical implications are unclear <input type="checkbox"/> Summary is adequate 	0 pts each <ul style="list-style-type: none"> <input type="checkbox"/> Results are not clear; data incorrect <input type="checkbox"/> No attempt to compare previous research <input type="checkbox"/> Conclusion is missing <input type="checkbox"/> Limitations and future research are missing <input type="checkbox"/> No practical implications <input type="checkbox"/> No summary statement given
Format (ACSM) <i>8 pts.</i>	2 pts each <ul style="list-style-type: none"> <input type="checkbox"/> Title and word count are correct <input type="checkbox"/> Author and institution are given <input type="checkbox"/> Electronic and hard copies provided (Arial font) <input type="checkbox"/> Abstract category stated and correct 	1.5 pts each <ul style="list-style-type: none"> <input type="checkbox"/> Title or word count is incorrect <input type="checkbox"/> Author or institution is missing <input type="checkbox"/> E-copy or hard copy missing <input type="checkbox"/> Abstract category mostly correct 	0 pts each <ul style="list-style-type: none"> <input type="checkbox"/> Title and word count are incorrect <input type="checkbox"/> Author and institution are missing <input type="checkbox"/> Deadline missed (10% per day) <input type="checkbox"/> Abstract category missing

Curriculum Mapping

	PLO 1.1	PLO 1.2	PLO 1.3	PLO 2.1	PLO 3.1	PLO 3.2	PLO 4.1	PLO 4.2	PLO 4.3
Course	<i>Describe the relationship between physical activity participation and health, wellness and quality of life.</i>	<i>Explain how the scientific process informs our understanding of physical activity</i>	<i>Describe the sociocultural and historical factors that influence physical activity</i>	<i>Design and evaluate physical activity programs that promote health and improve quality of life</i>	<i>Demonstrate an appreciation and commitment to physical activity practice</i>	<i>Demonstrate an appreciation of cultural diversity and make ethical decisions</i>	<i>Critically evaluate information about physical activity from a scientific basis</i>	<i>Critically evaluate research related to physical activity and its impact on health and chronic disease.</i>	<i>Critically evaluate scholarly work related to cultural, historical, and philosophical dimensions of physical activity</i>
KIN 120	I	I	I	I	I	I	I	I	I
KIN 200		I		I			I	I	
KIN 220	D	D			D		D	D	
KIN 300			D	D			D	D	D
KIN 310	M	M	I	D	D	D	M	M	M
KIN 315	M		I	D	M		D	D	
KIN 320		M					M		
KIN 325	M	M		M	M		M	M	
KIN 330	M		I	M	D			D	
KIN 335	M	M	D	D	D	D	M	M	D
KIN 340							M	M	M
KIN 350									
KIN 354	D	M	D	M	M	M	M	M	D
KIN 358	M	M		M	M		M	M	
KIN 360	M		D	D		D		D	D
KIN 362									
KIN 368	M	M	D	I	D	I	M	M	D
KIN 398	M	M		M	M	M	M	M	M
KIN 390									
KIN 410							M	M	M

Curriculum Mapping: PLOs – ILOs

		ILO# 1	ILO# 1	ILO# 1	ILO# 1	ILO# 1	ILO# 1
		Students reflect on and analyze their attitudes, beliefs, values, and assumptions about diverse communities and cultures and contribute to the common good. (Critical Thinking)	Students explain and apply disciplinary concepts, practices, and ethics of their chosen academic discipline in diverse communities. (Critical Thinking)	Students construct, interpret, analyze, and evaluate information and ideas derived from a multitude of sources. (Critical Thinking; Quantitative Reasoning; Information Literacy)	Students communicate effectively in written and oral forms to interact within their personal and professional communities. (Written and Oral Communication)	Students use technology to access and communicate information in their personal and professional lives. (Component of Information Literacy)	Students use multiple methods of inquiry and research processes to answer questions and solve problems. (Critical Thinking; Quantitative Reasoning; Information Literacy)
PLO 1.1	<i>Describe the relationship between physical activity participation and health, wellness and quality of life.</i>						X
PLO 1.2	<i>Explain how the scientific process informs our understanding of physical activity</i>			X			X
PLO 1.3	<i>Describe the sociocultural and historical factors that influence physical activity</i>	X	X	X			
PLO 2.1	<i>Design and evaluate physical activity programs that promote health and improve quality of life</i>			X	X	X	
PLO 3.1	<i>Demonstrate an appreciation and commitment to physical activity practice</i>	X	X				
PLO 3.2	<i>Demonstrate an appreciation of cultural diversity and make ethical decisions</i>	X					
PLO 4.1	<i>Critically evaluate information about physical activity from a scientific basis</i>			X		X	X
PLO 4.2	<i>Critically evaluate research related to physical activity and its impact on health and chronic disease.</i>		X	X		X	X
PLO 4.3	<i>Critically evaluate scholarly work related to cultural, historical, and philosophical dimensions of physical activity</i>	X					X

