Academic Year 2016 – 2017

Program – Health and Exercise Science (377)

College: Gallaspy College of Education and Human Development

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Northwestern State University of Louisiana's Mission. Northwestern State University is a responsive, student-oriented institution that is committed to the creation, dissemination, and acquisition of knowledge through teaching, research, and service. The University maintains as its highest priority excellence in teaching in graduate and undergraduate programs. Northwestern State University prepares its students to become productive members of society and promotes economic development and improvements in the quality of life of the citizens in its region.

Gallaspy College of Education and Human Development is a committed and diverse community of scholars, educators, students, and future leaders working collaboratively to acquire, create, and disseminate knowledge through transformational, high-impact experiential learning practices, research, and service. The College produces graduates with the capabilities and confidence to be productive members of society equipped with the skill sets necessary to promote economic and social development thereby improving the overall quality of life in the region. The College offers a wide variety of exemplary undergraduate and graduate programs that prepare candidates for career success across the spectrum of professional roles and setting. These programs include teacher education, leadership, and counseling; health and human performance; psychology and addiction studies; social work; and military science. Candidates are taught to become adaptive critical thinkers and problem solvers in diverse scenarios capable of leveraging new technologies to enrich lifelong learning. As caring, competent, reflective practitioners, our graduates become positive role models in their communities and leaders in the nation's military.

Department of Health and Human Performance's Mission. The Department of Health and Human Performance at Northwestern State University of Louisiana provides training for health, physical education, exercise science, and sport professionals. Dedicated faculty and staff members build student knowledge through the discussion and utilization of current practices, topics, and trends to optimize classroom engagement. The department goals align with the Gallaspy Family College of Education and Human Development, as faculty and staff members actively implement transformational, high-impact experiential learning practices, research, and service for a diverse population of learners. Students may earn one of three degrees – Bachelor of Science in Health and Exercise Science, Bachelor of Science in Health and Physical Education, or Master of Science in Health and Human Performance. Additionally, students in the

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Department of Health and Human Performance participate in competitive internships in a wide variety of locations

Health and Exercise Science Program Mission Statement: Through the completion of program requirements for Health and Exercise Science, students will gain a distinct appreciation for the employment opportunities within the four segments of the Health and Exercise Science industry. Students will acquire, create and disseminate knowledge through transformational, high-impact experiential learning practices, critical thinking, research, reflective analysis, communication, and evaluation. The Bachelor of Science Degree in Health and Exercise Science challenges students to develop plausible solutions to the diagnostic and prescriptive response to exercise needs in health scenarios. Through these learning experiences, Health and Exercise Science students are prepared for life and career success in this every growing transitional field.

Purpose (optional): The Bachelor's program will prepare students for entry positions in the health and fitness industry in which the ability to comprehend, influence, and respond to the fitness needs of the industry clients is necessary. It will also prepare interested students for the pursuit of further / additional advanced degrees in Health and Human Performance such as Health Promotion or Sport Administration, as well as professional clinical programs to include Physical or Occupational Therapy.

Methodology: The assessment process for the HAES program is as follows:

- (1) Data from assessment tools are collected and returned to the Department Head;
- (2) The Department Head will analyze the data to determine whether students have met measurable outcomes;
- (3) Results from the assessment will be discussed with the program faculty;
- (4) Individual meetings will be held with faculty teaching major undergraduate courses if required (show cause);
- (5) The Department Head, in consultation with the HHP Advisory Committee, will propose changes to measurable outcomes, assessment tools for the next assessment period and, where needed, curricula and program changes.

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Student Learning Outcomes:

SLO 1. The student will demonstrate a basic knowledge of exercise science.

Course Map: Tied to course syllabus objectives.

HP 2000: Introduction to Exercise Science

HP 2270: Physical Fitness

HED 3000: Community Health HP 3550: Applied Kinesiology HP 3560: Exercise Physiology

Measure 1.1. (Direct – knowledge)

On an annual basis, students enrolled in HP 2000, HP 2270, HED 3000, HP 3550 and HP 3560, all required courses for HAES Bachelor's students, will be administered their course exams designed to evaluate the student's knowledge and understanding of the foundational concepts, theories, strategies, and challenges of the four segments of the Health and Fitness industry. 75% of enrolled students will be able to describe a basic knowledge of the Health and Fitness industry standards by scoring 70% or higher on the exams.

Finding: Target Met (Table #1).

Health and Exercise Science students exceeded this goal (Table 1 Below). In all classes listed, students were able to successfully describe basic knowledge of Health and Fitness industry standards at 70% or higher on exams. The lowest performance occurred in Exercise Physiology HP 3560 (fall only course). The only other course below the 90% ranking occurred in Testing, Evaluation and Prescription of Exercise in HHP (HP 4170) at 82.14%.

Analysis:

Table #1

Course	Fall 2016		Spring 2017		Percent
	Mid-	Final	Mid-	Final	Total
	Semester		Semester		
HP 2000	31 of 33	31 of 33	31 of 38	36 of 38	94.36
HP 2270	22 of 24	21 of 24	27 of 38	34 of 38	90.32
HP 3560	18 of 32	25 of 32			78.13
HP 3561-1	11 of 11	10 of 10			100.00

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HP 3561-2	20 of 21	19 of 21			90.48
HP 4170	8 of 18	13 of 18	9 of 11	10 of 10	82.14
HP 3550-1			27 of 29	28 of 29	92.30
HP 3550-2			17 of 23	20 of 23	
HED 3000			35 of 40	39 of 40	97.50

Action - Decision or Recommendation: A Possible reduction in the number of courses evaluated to the industry segments. HP 2000 and HP 2270 specifically address the foundational concepts within the four segments. The other courses address the theories, strategies and challenges faced within the four segments through the science of human performance. A secondary recommendation would be that scores other than the mid-term and final grade, be used to assess the knowledge and understanding of the foundational concepts, theories, strategies, and challenges of the four segments of the Health and Fitness industry. Perhaps a pre-post evaluation instrument could be developed to better address this outcome. Faculty discussion should address this recommendation.

Measure 1.2. (Direct – Skill / Ability)

Students will demonstrate their critical thinking and problem-solving skills through a variety of case studies, as well as scenario-driven exercises in which they are required to analyze and develop a response to a health and exercise related situation. In these responses, they must demonstrate proper response and actionable recommendations based on the information presented. 75% of the students will score 70% or higher on these exercises.

Finding: Target met (Table #2).

Health and Exercise Science students exceeded this goal (Table 2 Below). In all classes listed, students successfully demonstrated critical thinking and problem-solving skills through a variety of case studies, as well as scenario-driven exercises, in which they were required to analyze and develop a response to a health and exercise related situation. In these responses, students demonstrated proper response and actionable recommendations based on the information presented.

Analysis:

Table #2

Course	Fall 2016		Spring 2017		Percent
	Mid-	Final	Mid-	Final	Total
	Semester		Semester		
HP 2270	22 of 24	21 of 24	27 of 38	34 of 38	90.32

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HP 3561-1	11 of 11	10 of 10			100.00
HP 3561-2	20 of 21	19 of 21			90.48
Course	Fall 2016		Spring 2017		Percent
	Midterm	Final	Midterm	Final	
HP 4170	8 of 18	13 of 18	9 of 11	10 of 10	82.14
HED 3000			35 of 40	39 of 40	97.50

In HP 2270 (Physical Fitness), students are presented with several scenarios/cases to be addressed by physical output performance and the role of exercise and its effect on overall physical health. HP 3561 (Exercise Physiology Labs) were laboratory classes where students were presented with a variety of conditions that required critical thinking and theoretical application to cases regarding physical performance and health. HP 4170 (Testing, Evaluation and Prescription of Exercise in HHP) and HED 3000 (Personal and Community Health) students specifically addressed case studies and the application of knowledge and understanding of the foundational concepts, theories, strategies, and challenges as applied to the four segments of the Health and Fitness industry.

Action - Decision or Recommendation: The courses listed here appropriately address the application of skills and abilities necessary to perform in the four segments of the fitness industry. Again, the recommendation would be that scores other than the mid-term and final grade, be used to assess the knowledge and understanding of the foundational concepts, theories, strategies, and challenges of the four segments of the Health and Fitness industry. Perhaps a pre-post evaluation instrument could be developed to better address these outcomes. Faculty discussion should address this recommendation.

SLO 2. The student will demonstrate the ability to develop an exercise prescription plan, which encompasses the initial prescription, maintenance for such prescription and subsequent re-evaluation strategies for apparently healthy populations.

Course Map: Tied to course syllabus below.

HP 4170: Testing, Evaluation, and Prescription of Exercise in Health and Human Performance

Measure: 2.1. (Direct – Skill / Ability)

Students will prepare a prescription plan for a specified health need/condition. In these responses, the student will demonstrate proper progression toward the expected outcome and

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actionable recommendations based on the scenario(s). 75% of the students will score 80% or higher on these exercises.

Finding: Target was not met (Table #3).

Health and Exercise Science students failed to meet this goal (Table 3 Below). In all classes listed, students did not successfully demonstrated critical thinking and problem-solving skills through a variety of case studies, as well as scenario-driven exercises, in which they were required to analyze and develop a response to a health and exercise related situation. In the analyses of these responses, students did not demonstrated proper response and actionable recommendations based on the information presented.

Analysis:

Table #3

Course	Fall 2016		Spring 2017		Percent
	Midterm	Final	Midterm	Final	
HP 4170	3 of 18	6 of 18	4 of 11	7 of 10	44.83

HP 4170 (Testing, Evaluation and Prescription of Exercise in HHP), students reviewed and studied several cases dealing with health threatening conditions. Students then addressed these conditions through proper prescription of exercise and duration to address strength and conditioning, flexibility, endurance, and aerobic capacity as needed in each case.

Action - Decision or Recommendation: Continue to offer the course in the face-to-face format. This course is scheduled in both spring and fall semesters. This course was offered in an online format for fall of 2016, and then in a face-to-face format in the spring of 2017. The instructor was new, and the online course was already in place for fall, as the new instructor assumed HP 4170 from an adjunct instructor for fall of 2016. The new faculty member then taught the course face-to-face in spring 2017. The course is designed for face-to-face instruction. The assessment for this measure should continue to be the final examination grade for the course.

Measure: 2.2. (Direct -- Knowledge)

Students will be able to understand and identify the correct prescriptive activity and the duration of exercise needed to satisfy the outcome required by the respective scenario(s). This will be determined with 75% of the students earning a score at least 80% on semester course exams.

Finding: Target was not met (Table #4).

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Students successfully completed the mid-term and final examinations, and were not able to correctly/thoroughly identify the necessary prescriptive activity and the duration of exercise needed, to satisfy the outcome required by the respective scenario(s).

Analysis:

Table #4

Course	Fall 2016		Spring 2017		Percent
	Midterm	Final	Midterm	Final	
HP 4170	3 of 18	6 of 18	4 of 11	7 of 10	44.83

Action - Decision or Recommendation: HP 4170 is currently (Spring 2017) taught in the face-to-face format, and the instructor has a background in human movement performance analysis. Additionally, the instructor required the use of APA style writing for the submission of analysis documents, with references and citations, and thus some of the students were challenged with the writing component of the course, as well as the subject matter. This instructor is changing jobs for fall 2017, and students will have to conform to yet another new teacher. Perhaps student performance will get better as we recruit a full-time, long-term instructor for the program in its science-based courses.

SLO 3. The student will be able to demonstrate the ability to administer test protocols for evaluating the components of physical fitness.

Course Map: Tied to course syllabus below.

HP 3561: Exercise Physiology Laboratory

HP 4170: Testing, Evaluation, and Prescription of Exercise in Health and Human Performance

Measure 3.1. (Direct – Skill / Ability)

The student will earn a performance evaluation score of 80% or higher in the administration of testing protocols for various physical fitness components.

Finding: Target partially met (Table #5)

Analysis:

Table #5

Course Fall 2016	Spring 2017	Percent
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	Mid-	Final	Mid-	Final	Total
	Semester		Semester		
HP 3561-1	11 of 11	10 of 11			100.00
HP 3561-2	20 of 21	19 of 21			90.48
HP 4170	3 of 18	6 of 18	4 of 11	7 of 10	44.82

HP 3561 is a one-hour laboratory class in conjunction with HP 3560 (Exercise Physiology), both of which are scheduled only for the fall semester. Students gain support for this class through prerequisites in biology (BIOL 2250-51 and 2260-61) both of which have a lab component. Therefore, students are better prepared for the laboratory experiences associated with HP 3560. The only prerequisite for HP 4170 is HP 3560-61, and preliminary guides for prescriptive exercise are first introduced in HP 2270 (Physical Fitness).

Action - Decision or Recommendation: Students should be introduced to the concepts of prescriptive exercise at an earlier point in the curriculum (through HP 2270 for instance). Perhaps one or two of the HP 3561 labs could address prescriptive activity for students. An adjustment to the course textbook may bear review, to determine that exact prescriptive activity is being addressed. The final grade could be continued as an assessment, if the final exam specifically addressed the student having to assess and provide prescriptive exercise for a case study.

Measure 3.2. (Direct – Knowledge)

75% of the students will correctly select the appropriate test protocol to be used in various physical fitness and exercise settings (corporate, recreational, clinical and/or commercial).

Finding: Target met (Table #6).

Analysis:

Table #6

Table #0					
Course	Fall 2016		Spring	Percent	
	Mid-	Final	Mid-	Final	Total
	Semester		Semester		
HP 2000	31 of 33	31 of 33	31 of 38	36 of 38	94.36
HP 2270	22 of 24	21 of 24	27 of 38	34 of 38	90.32
HP 3560	18 of 32	25 of 32			78.13
HP 3561-1	11 of 11	10 of 10			100.00
HP 3561-2	20 of 21	19 of 21			90.48
HP 4170	8 of 18	13 of 18	9 of 11	10 of 10	82.14

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HP 3550-1		27 of 29	28 of 29	92.30
HP 3550-2		17 of 23	20 of 23	

Based upon mid-semester and final grades for the courses reported in Table #6, students successfully identified (70% or better), appropriate test protocols used in various physical fitness and exercise settings (corporate, recreational, clinical and/or commercial).

Action - Decision or Recommendation: In using the mid-semester and final grades as determinants, data gathered is very broad and includes information other than the specific and correct selection of the appropriate test protocol to be used in various physical fitness and exercise settings (corporate, recreational, clinical and/or commercial). Perhaps a prepost testing protocol would be more appropriate to satisfy this measure.

Comprehensive Summary of key findings and or decisions:

Overall, student performance in the Health and Exercise Science degree program is above average. The proper selection of the program and curriculum prerequisites supports the material and course content of the professional classes in the degree. Clearly, assessing the SLO's through use of the mid-semester examination and final examination grades is not accurate enough to address all areas of concern. In some cases, a pre-post evaluation may suffice to better measure specific outcomes. Having a full-time, long-term instructor for HP 3560-61, HP 3550 and HP 4170 will provide a more thorough and cohesive curricular element for student learning. These classes are designed to complement each other, and the instructor should be in place longer than a single semester or a single year, in order for that complement to take place.