PROGRAM REPORT SUMMARY

Department: Physical Education and Human Performance	Report Type: SUMMARY
Program Name: Exercise Science	Program Award Level: BS
Report Preparer: Dr. David Harackiewicz	Academic Year: Fall 2018 – Summer 2019
Program Structure (Choose One): Accredited	Date Report Completed: 9-30-19
Accreditation Agency (If Applicable): CAAHEP	Date Next Self Study Due to Agency: June 2020

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Program Assessment Question	Response
1) <u>URL</u> : Provide the URL where the learning outcomes (LO) can be viewed.	CCSU Department website
2) Assessment Instruments: What data/evidence, other than GPA, are used to assess the stated outcomes? (e.g., capstone course, portfolio review and licensure examination, etc.)	 EXS 415 Practical Exam on Fitness Assessment (Table 1) EXS 415 Exercise Prescription Program Design on Final Project (Table 3) EXS 450 American College of Sports Medicine (ACSM) Certified Exercise Physiologist exam (EP-C) or National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialist (CSCS) exam or National Academy of Sports Medicine (NASM) Certified Personal Trainer (CPT) exam (Table 5 and 6) EXS 470 Final Site Supervisor Evaluation (Table 7) EXS 275 Group Workout Presentation (Table 8) EXS 376 Clinical Case Study Project (Table 9) EXS 470 Graduate Survey (Table 10)
3) <u>Interpretation:</u> Who interprets the evidence? (e.g., faculty, Admn. assistant, etc.)	EXS Program Coordinator
4) Results: Since the most recent full report, list: a. The conclusion(s) drawn, noting strengths and weaknesses. b. The changes that were or will be made as a result of those conclusion(s).	EXS 415 Practical Exam (Table 2) Conclusion: On the cardiorespiratory assessments, students improved from an average of 4.3 in 2017-2018 to 4.4 in 2018-19. On musculoskeletal assessments students maintained an average of 4.5 and on body composition assessments improved from an average of 4.4 to 4.5. Students scored between good and excellent on their practical skills of administering the ACSM fitness tests and has shown a slight improvement from the previous year in both cardiorespiratory and body composition assessments. Changes: Practical skills and techniques have been emphasized in lab class each week. In addition, students are encouraged to practice their skills outside of the regular classroom. Using online videos and demonstrations both during lecture and lab have added to the accuracy of students' testing skills and techniques. No changes needed at this time.

EXS 415 Program Design on Final Project (Table 4)

Conclusion:

Table 11: On their final project students' average score was a 2.8 in 2017-18 and this was maintained in 2018-19. Students are maintaining a high level of competency in program design concepts and principles for a client in all aspects of fitness development.

Changes:

No changes necessary.

EXS 450 American College of Sports Medicine Certified Exercise Physiologist Examination (EPC) or National Strength and Conditioning Association Certified Strength and Conditioning Specialist (CSCS) exam or National Academy of Sports Medicine Certified Personal Training exam (Table 5 and 6)

Conclusion:

EPC Exam

Our 2018-19 (N=27) pass rate on the ACSM Certified Exercise Physiologist (EP-C) exam was 93% compared with 80% from the previous year. This was an increase of 13% as we exceeded the national pass rate which was 71% (N=2641). Based on these results, our students showed good improvement in the conceptual understanding of the job task analyses (JTAs) related to the exercise physiology profession. Allowing our students to take this certification exam after all coursework has been completed and preparing them through our practicum seminar class using multiple resources (i.e. weekly quizzes, online PrepU, ACSM certification study guide, case studies, etc.) has helped us improve our pass rate on the EP-C. More specifically we reported the percent correct in each domain of the JTAs. In the Health and Fitness Assessment domain students correctly answered 71% of the questions in 2017-18 and 71% of the questions in 2018-19. In the Exercise Prescription and Implementation category they answered 64% of the questions in 2017-18 and 63% of the questions in 2018-19. In the Exercise Counseling and Behavior Management domain we saw an increase from 72% correct in 2017-18 to 78% in 2018-2019. The Risk Management and Professional Responsibilities domain saw a decrease in the percentage correct from 78% in 2017-18 to 60% in 2018-19.

CSCS Exam

Our 2018-19 (N=9) pass rate for both sections on the NSCA Certified Strength and Conditioning Specialist Exam was **44%** compared to **50%** in 2017-18. The national pass rate is 56%.

CPT Exam

This was the first year of giving students the options of taking the NASM CPT exam. Three out of 4 students passed the exam which is a 75% pass rate.

Changes

EPC

Due to our high pass rate, not many changes are needed in preparing our students for the exam and we will continue to provide all the resources for them in our practicum seminar class CSCS

Additional resources will be placed on the preparation for the CSCS exam for our students especially the Scientific Foundations section of the exam. There will be more of an emphasis on Exercise Physiology and Biomechanics questions as it relates to Scientific Foundations. Students will continue to be given study guides, online learning tools and a sample quizzes of actual exam questions to assist in their preparation for passing the exam.

CPT

We have also added the National Academy of Sports Medicine Certified Personal Trainer exam as option for students that have an interest in this field of study. Resources will be given to student to prepare them for passing the exam

We now have three options for students on taking the national exam and they choose the option based on what will help them be successful in their chosen field. All exams are taken before they start their internship. This has given students more practical hands-on opportunities in their internship because they start the internship with a national certification.

EXS 470 Final Site Supervisor Evaluation (Table 7)

Conclusion:

Results from academic year 2018-19 (N=37) will be compared with academic year 2017-18 (N=52). Our academic year consists of the Fall, Spring and Summer semesters since students may also complete their Internship (EXS 470) in the summer.

EXS 470 Internship in Exercise Science Site Supervisor Student Evaluation
Link to (<u>www.taskstream.com/ts/manager286/ExerciseScienceAssessmentReports</u> (Password: EXER)

We receive site supervisor evaluations at the completion of the student internship. Site Supervisors responded to questions in seven areas: (1) Skills and abilities, (2) Relationships with clients/patients, (3) Relationship with staff, (4) Relationship with supervisor, (5) Professional

competencies, (6) Computer skills, and (7) Personal traits and attitudes. A Likert Scale with the following ratings were used: 5-Outstanding, 4-Highly Satisfactory, 3-Average, 2-Below Average, and 1-Not Satisfactory. In addition, the supervisor was asked to give a Professional

Assessment on whether the student was a good candidate for employment. A 1 indicates that the student is a good candidate for employment, a 2 that the student needs more experience and a 3 that there is insufficient time to evaluate the student.

- Comparing academic year 2018-19 with 2017-18:
 - o Total mean score in category A of Skills and Abilities was **4.51** (2018-19) compared with **4.76** (2017-18) indicating that our students maintain a high a high degree of skills and abilities in the various internship sites that were selected.
 - Total mean score in category B of Relationships with Clients/Patients was 4.64 compared with 4.87 indicating that our students continue to interact well with their clients/patients.
 - o Total mean score in category C of Relationship with Staff was **4.71** compared with **4.89** indicating a good working relationship with other Part-time and Full-time staff members.
 - Total mean score in category D of Relationship with Supervisor was 4.73 compared with
 4.91 indicating that our students had excellent rapport with their supervisor and their ability to work under their potential boss.
 - O Total mean score in category E of Professional Competencies was **4.53** compared with **4.82** which indicates that the coursework and practical experiences they gained while attending school was very beneficial to their internship placement and the job tasks that they were assigned. This is an important category for our program because it reflects the sequencing of coursework that we provide and indicates that we are teaching the proper techniques and educational content important in the exercise science field.
 - Total mean score in category F of Computer Skills was **4.73** compared with **5.00** indicating that our students have a very good knowledge of computer software such as Microsoft office or other related programs. This is to be expected as most students excel in this area based on their consistent use of computers as part of their daily lives.
 - Total mean score in category G of Personal Traits and Attitudes was 4.62 compared with
 4.84 indicating that our students have very good dispositions in the profession. They represent themselves and the university with high character and accountability.

The final question asks the Site Supervisor if the student will be (a) A good candidate for employment, (b) Needs more experience in a similar setting, or (c) Insufficient time to evaluate the internship student

o In 2018-19 **81%** of our students were rated as a good candidate for employment and **19%** of our students were rated as needing more experience in a similar setting. In 2017-18 **96%** of our students were rated as a good candidate for employment while **4%** were rated as needing more experience. Based on the results of the last two years, our students are well-prepared for the field that they choose and would be good candidates for hire.

	Site Supervisor Final Grade
	o 65% of the students received an A, 13.5% received an A-, 8.1% received a B+, 5.4% received a B, 3% received a B- and 5.4% received a C from their supervisor at their site Performance summary evaluations of our students by the site supervisor were very positive and complimentary. These summary statements by the site supervisor can be found on Taskstream.
	Changes:
	No changes needed.
	EXS 275 Group Workout Presentation
	Rubric is in development. Sample provided.
	EXS 376 Clinical Case Study Project
	Conclusion:
	Rubric was developed and implemented in AY 2015-16. In 2018-19 and 2017-18 results indicate that the majority of students' score either a 1 or a 2 on the case studies and only rarely are 3's seen. Changes:
	No changes needed
	EXS 470 Graduate Survey
	Conclusion:
	Student Evaluation of the Exercise Science Program (See Table 2 for average score on each question) At the completion of their internship, students completed a survey that asks thirteen questions about the quality of our program. The students respond to the first 8 questions using a 5 point Likert Scale with 1 being Strongly Disagree and 5 being Strongly Agree. Total Mean score in academic year 2018-19 was 4.62 compared to total mean score in academic year 2017-18 of 4.58 . In addition students are asked fiv open-ended questions. Responses to these open-ended questions can be found on www.taskstream.com/ts/manager286/ExerciseScienceAssessmentReports (Password: EXER)
	Changes: No changes needed.
5) Strengths: What about your	We focus on three areas of assessment in our exercise science undergraduate curriculum and this

continues to be a strength of our assessment program.

(1) EXS 470 Internship in Exercise Science site supervisor student evaluations,

assessment is working well?

(2) Student results of the national ACSM Exercise Physiologist certification (EP-C), NSCA Certified Strength and Conditioning Specialist (CSCS) or NASM Certified Personal Trainer (CPT).

(3) Culminating student evaluation (graduate surveys) of our exercise science program,

Previous sections included how our assessment process is working for our site supervisor evaluations and national exam results. For our results from the student evaluations of our exercise science program you can see that our program assessment process is working to prepare students in various fields of study.

- Based on our results from the site supervisor evaluations and their performance summary, our students are performing well in all aspects of their internship experience.
- Students have exceeded the national pass rate for the EP-C exam which indicates that they are meeting the competencies required by an exercise physiologist.
- Based on our results from the graduate surveys, students have indicated a continued high degree of satisfaction with our program for the past two years.

6. <u>Improvements</u>: List ways in which your assessment process needs to improve based on student data (A brief summary of changes to assessment plan can be reported here)

The previous assessments focusing on student performance will continue to be used in the 2019-2020 year in specific classes that relate to our learning outcomes. This will include an existing rubric that assesses student's practical skills of fitness testing, an existing rubric that evaluates student's exercise testing and exercise prescription of a client, a rubric that addresses student's ability to evaluate case studies of special populations and a developing rubric that evaluates program design of performance fitness. We have also been using Taskstream as our database which will help in putting all students work and test results in one place. This includes the EP-C, CSCS and CPT national test results, site supervisor evaluations and internship site supervisor evaluations. We also give the students the option of taking the EP-C exam, CSCS exam or the National Academy of Sports Medicine Certified Personal Training (CPT) exam which is in line with students' interest in their field of study. The EXS 450 seminar class is preparing the students for the exam of their choice which is taken prior to the student starting their internship. The changes to our assessment plan include reporting the CPT results and grading the students on their student internship presentations.

APPENDIX

Table 1 - EXS 415 Fitness Assessment and Exercise Prescription - Practical Exam - Cardio Fitness Assessment

Rubric Scores: 1=Poor, 2= Fair, 3= Average, 4= Good, 5= Excellent

Exercise & Grading Criteria	Score	Comments
Resting Blood Pressure		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Resting Heart Rate		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Use of RPE Scale		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
YMCA Submaximal Bike Test Protocol		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Exercise Blood Pressure		
Explained assessment's value for the assessment	1 2 3 4 5	
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	

EXS 415: Exercise Testing & Prescription - Practical Examination - Body Composition Assessment

Rubric Scores: 0=Missing, 1= Fair, 3= Average, 4= Good, 5= Excellent

Exercise & Grading Criteria	Score	Comments
Skinfold Site Markings		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Skinfold Site Measurements		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Waist Circumference		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Height and Weight		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Bioelectrical Impedance Analysis		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	

EXS 415: Exercise Testing & Prescription - Practical Examination - Musculoskeletal Fitness Assessment

Rubric Scores: 1=Poor, 2= Fair, 3= Average, 4= Good, 5= Excellent

Exercise & Grading Criteria	Score	Comments
Push-up	<u>. </u>	
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Curl-up		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Handgrip dynamometer		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Sit and Reach Test		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	
Functional Movement Screen		
Explained assessment's value/reasons for the	1 2 3 4 5	
assessment		
Demonstrated and instructed clearly	1 2 3 4 5	
Positioned and cued client correctly	1 2 3 4 5	
Assessed with confidence and competence	1 2 3 4 5	

Table 2

EXS 415: Exercise Testing & Prescription - Practical Examination

Fitness Assessment Category	Average Score (2018-2019) (N=50)	Average Score (2017-18) (N=56)
Cardiorespiratory	4.4	4.3
Body Composition	4.5	4.4
Musculoskeletal	4.5	4.5

EXS 415: Exercise Testing & Prescription – Final Project - Program Design

Student:	Client:
Evaluator:	Date:

Rubric Scores: 0=Missing, 1= Unacceptable, 2= Acceptable, 3= Exceeds

Table 3

Exercise & Grading Criteria	Score	Comments
Cardiorespiratory Program	<u>_</u>	
Correct use of Frequency	0 1 2 3	
Correct use of Intensity	0 1 2 3	
Correct use of Time	0 1 2 3	
Correct use of Type	0 1 2 3	
Correct use of Progression	0 1 2 3	
Muscular Fitness Program		
Correct use of Frequency	0 1 2 3	
Correct use of Intensity	0 1 2 3	
Correct use of Time	0 1 2 3	
Correct use of Type	0 1 2 3	
Correct use of Progression	0 1 2 3	
Flexibility Program		
Correct use of Frequency	0 1 2 3	
Correct use of Intensity	0 1 2 3	
Correct use of Time	0 1 2 3	
Correct use of Type	0 1 2 3	
Correct use of Progression	0 1 2 3	
Weight Management Program		
Correct use of Frequency	0 1 2 3	
Correct use of Intensity	0 1 2 3	
Correct use of Time	0 1 2 3	
Correct use of Type	0 1 2 3	
Correct use of Progression	0 1 2 3	

Table 4
Program Design Final Project

Program Design Components	Average Score (2018-2019) (N=50)	Average Score (2017-18) (N=56)
Cardiorespiratory Fitness Program Design	2.9	2.9
Muscular Fitness Program Design	2.8	2.8
Flexibility Program Design	2.9	2.9
Weight Management Program Design	2.7	2.7

Table 5

ACSM Exercise Physiologist Certification (EP-C) - National and CCSU Pass Rates (Passing score is 550)

	National Pass Rates	CCSU Pass Rates	CCSU Ave Score
2012-13	59% (N=2307)	42% (N = 38)	546
2013-14	57% (N=1720)	80% (N = 30)	563
2014-15	43% (N=2752)	74% (N = 36)	578
2015-16	43% (N=3111)	72% (N=32)	562
2016-17	41% (N=3292)	69% (N=36)	578
2017-18	44% (N=2782)	80% (N=40)	584
2018-19	71% (N=2641)	93% (N=27)	603

National Strength and Conditioning - Certified Strength and Conditioning Specialist (CSCS) - National and CCSU Pass Rates (Must pass both sections – Passing score is 70 on each)

2017-18	53% (N=5790)	50% (N=8)	Practical Application = 73
			Scientific Foundations = 69
2018-19	56% (N =not provided)	44% (N=9)	Practical Application = 69
			Scientific Foundation = 62

National Academy of Sports Medicine – Certified Personal Trainer

2018-19 4 took the exam and 3 passed (75% pass rate) – They do not provide percentages only if the student passed or not

Table 6

ACSM Exercise Physiologist Certification Exam (Average Percent Correct)

Section Analysis	2018-19 (N=27)	2017-18 (N=39)
Health and Fitness Assessment	71%	71%
Exercise Prescription and Implementation	63%	64%
Exercise Counseling and Behavioral Management	78%	72%
Risk Management and Professional Responsibilities	60%	70%

TABLE 7

INTERNSHIP SITE SUPERVISOR'S EVALUATION OF INTERNSHIP STUDENT

EXS 470 - INTERNSHIP IN EXERCISE SCIENCE

NAME OF INTERNSHIP STUDENT:			
INTERNSHIP SITE:			
INTERNSHIP SITE SUPERVISOR			
APPRAISAL PERIOD:		-	
POSITION OF INTERNSHIP SITE SUPERVISOR	R:		dent Indicate on the provid

Please evaluate the internship student named above for each of the following competency areas that apply to the student. Indicate on the provided line, the appropriate number which indicates the level of proficiency/competency for the student.

All evaluations will be submitted online using this same form. Instructions will be emailed to you by Dr. Mel Horton, hortonm@ccsu.edu regarding evaluating the internship student using the online evaluation system.

In addition to this evaluation please write a Performance summary (Supervisor Letter) which is a narrative to elaborate on your evaluation of the internship student. This can be completed online.

PLEASE PRINT OUT THE COMPLETED ONLINE SUPERVISOR EVALUATION AND HAND TO THE INTERNSHIP STUDENT DURING THE EXIT INTERVIEW.

RATING SCALE

5 - Outstanding, superior, corresponds to an academic grade of A, or A-	
4 - Highly satisfactory, corresponds to an academic grade of B+, or B	
3 - Average level of performance, corresponds to an academic grade of B-, or C+	
2 - Adequate, below average, corresponds to an academic grade of C, or C-	
1 - Not satisfactory, corresponds to an academic grade of D	
NA - Not applicable	
A. SKILLS AND ABILITIES (WORK HABITS)	
1. Plans and organizes work efficiently and systematically	
2. Accomplishes assigned tasks with a minimum of supervision	
3. Works consistently at a high rate, "quantity" factor	
4. Works accurately and thoroughly, "quality" factor	
5. Interpersonal skills, expresses self well orally	
6. Writing skills, expresses self-well in writing	
B. RELATIONSHIPS WITH CLIENTS/PATIENTS	
1. Shows a genuine desire to be helpful	
2. Accepts individual differences without prejudice	
3. Gives adequate instructions and explanations	
4. Encourages client/participant in the rehabilitation process	
5. Ability to motivate clients/patients to achieve their desired goals	

C. RELATIONSHIP WITH STAFF 1. Works well with professional colleagues 2. Works well with administrative support services staff 3. Participates appropriately and actively in staff meetings **D. RELATIONSHIP WITH SUPERVISOR** 1. Exhibits a friendly, appropriate attitude 2. Acts professionally with the supervisor 3. Receives criticism and suggestions well 4. Accepts assignments willingly **E. PROFESSIONAL COMPETENCIES** 1. Competent in administration of physical, health fitness assessments 2. Competent in writing exercise prescriptions 3. Competent in conducting group exercise classes 4. Competent in conducting a case study 5. Exhibits knowledge about aerobic exercise programs 6. Exhibits knowledge about resistance/weight training programs 7. Exhibits a professional attitude at all times 8. Adheres to personnel policies and regulations

F. COMPUTER SKILLS

1. Exhibits a knowledge of basic computer skills ____

2. Ability to utilize the software programs at your facility

G. PERSONAL TRAITS AND ATTITUDES							
1. Exhibits leadership qualities							
2. Is courteous, cordial, and considerate of pe	ople						
3. Is reliable, dependable and trustworthy							
4. Exhibits enthusiasm' for the field of health f	fitness/pr	omotion					
5. Adapts to emotional difficult situations well	II						
H. PERFORMANCE SUMMARY (SUPERVISOR LETTER)							
1. Please attach a typed written description of	f the perfo	ormance o	f the intern	ship stud	lent from	ı your persp	ective
I. PROFESSIONAL ASSESSMENT, PLEASE CHECK ONE							
1. Student is a good candidate for employmen	nt						
2. Student needs more experience in a similar	r setting						
3. Insufficient time to evaluate the internship	student						
J. RECOMMENDED FINAL GRADE							
Please circle one of the following grades							
A A- B+ B B- C	C+ C	C-	D+	D	D-	F	
INTERNSHIP SITE SUPERVISOR (SIGNATURE);							
- <u></u> -			DATE:				
INTERNSHIP STUDENT (SIGNATURE);							
			DATE:				

Table 8

EXS 275 Group Workout Presentation (Individual Assessment Rubric)

	1	2	3
Length of Workout	Very few exercises, little time spent performing exercises	Adequate flow of exercises/time spent, flow not matched to other groups.	Length appropriate, time spent exercising more than explaining. Good coordination across groups.
Exercise Corrections	No corrections or supervision given	corrected one or two students, no feedback to other group members	kept an eye on all group members, gave feedback when necessary
Difficulty adjustments (Regress/progre ss)	Demonstrated only one version of exercise without any modifications	Gave a modification for one or two exercises	gave modifications for all exercises
Motivation	Minimal presence, not loud or vocal to group,	Motivating to one or two students, did not excite entire group.	vocal, loud, clear, motivated all group members
Demonstrate technique	No visual demos. Only gave verbal instructions	Gave verbal and visual instructions but did not adequately demonstrate exercises so that it was clear to all members of group	Demonstrations included verbal/visual, very clear and easy to follow

Table 9

Clinical Exercise Physiology CASE STUDY Rubric

1: Demonstrates exceptional understanding of FITTVP for particular clinical population
2: Demonstrates satisfactory knowledge of FITTVP for particular clinical population

$${\tt 3: Demonstrates\ unsatisfactory\ knowledge\ of\ FITTVP\ for\ particular\ clinical\ population}\\$$

- 1: Demonstrates exceptional understanding of medications for particular clinical population
- 2: Demonstrates satisfactory knowledge of medications for particular clinical population
- 3: Demonstrates unsatisfactory knowledge of medications for particular clinical population

- 1: Demonstrates exceptional understanding of lifestyle factors for particular clinical population
- 2: Demonstrates satisfactory knowledge of lifestyle factors for particular clinical population
- 3: Demonstrates unsatisfactory knowledge of lifestyle factors for particular clinical population

- 1: Demonstrates exceptional understanding of exercise adherence principles for particular clinical population
- 2: Demonstrates satisfactory knowledge of exercise adherence principles for particular clinical population
- 3: Demonstrates unsatisfactory knowledge of exercise adherence principles for particular clinical population

Exercise Adherence Principles____15,5,1___

Table 10

(Student final evaluation of the exercise science program)

Likert Scale for first 8 questions:

5 = Strongly agree

4 = Agree

3 = Somewhat agree

2 = Disagree

1 = Strongly Disagree

Average score for each question presented below

Questi	<u>ons</u>	<u>2018-19(N</u>	l= 36) <u>2017-18 (N=43)</u>
1.	The coursework portion adequately prepared me for my present position.	4.50	4.44
2.	The clinical/practical portion adequately prepared me for my present position.	4.44	4.60
3.	The program adequately prepared me for the certification exam.	4.42	4.21
4.	Program faculty were available for assistance.	4.75	4.72
5.	5. Program faculty were sensitive to student needs, and treated students equally and with respect.		4.67
6.	Program faculty were supportive of the students, and provided constructive evaluations.	4.72	4.67
7.	Program officials were competent, knowledgeable, and well-prepared for instruction.		
	Questions and independent thinking were encouraged.	4.81	4.70
8.	Program policies and procedures were clearly defined and enforced.	4.75	4.60
9.	What do you feel were the strengths of the program? (open-ended)		
10.	What do you feel were the weaknesses of the program? (open-ended)		
11.	If you could make changes in the program, what would you change? (open-ended)		
12.	What portions of the program would you keep, and why? (open-ended)		
13.	Overall comments about your education. (open-ended)		
	Average:	4.62	4.58