Assurance of Student Learning 2018-2019 College of Health and Human Services School of Kinesiology, Recreation & Sport Exercise Science #554 & 554P

| in the subsequent pages |
|--|
| in the subsequent pages. |
| Student Learning Outcome 1: Students develop capacity as practitioners and researchers who use evidence-based practices to implement, asse |
| and revise consumer-based exercise prescriptions and community health initiatives. |
| Instrument 1 Direct: A comprehensive written exam in Exercise Testing & Prescription (EXS 412) evaluates core knowledge and performance domains for EXS stude |
| to be prepared for the American College of Sports Medicine (ACSM) Certified Exercise Physiologist (ACSM – EP) certification exam. |
| Instrument 2 Direct: A comprehensive hands-on practical final exam in Exercise Testing & Prescription (EXS 412) evaluates core knowledge and performance domain |
| for EXS students to be prepared for the American College of Sports Medicine (ACSM) Certified Exercise Physiologist (ACEM-EP) certification exam. |
| Instrument 3 N/A |
| Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1. Met Not M |
| Student Learning Outcome 2: Interpret and apply advanced knowledge of the physiological influence of physical activity/exercise on health & |
| fitness, sport performance, clinical practice, and professional programs – Physical Therapy (PT), Occupational Therapy (OT), Physician's |
| Assistant (PA), Athletic Trainer (AT), and Masters of Science (MS). |
| Instrument 1 Direct: Senior internship portfolio – a comprehensive reflection of the student's entire internship experience. Portfolio includes a log of their days/hours |
| worked (signed by a supervisor), weekly summaries of activities and responsibilities, documents/literature associated with their internship site, pictures, ar |
| reflection paper, as well as other things, as applicable. |
| Instrument 2 Indirect: Student evaluation from internship agency supervisor. |
| Instrument 3 N/A |
| Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2. Met Not M |
| Student Learning Outcome 3: Students develop and demonstrate the skills needed to recognize, evaluate and prescribe solutions from an |
| integrated and holistic approach regarding human movement, wellness, and performance. |
| Instrument 1 Direct: A comprehensive exam in Exercise and Aging (EXS 455) evaluates students' knowledge and understanding of the biopsychosocial aspects of agin |
| the acute and chronic effects of exercise on older adults, and methodologies for assessing and evaluating the efficacy of exercise programs for older adults |
| Instrument 2 Direct: Students in Exercise and Aging (EXS 455) are directly observed implementing a community-based falls prevention program for older adults once |
| week for the duration of the semester. Their skills are demonstrated and assessed using a structured rubric. |
| Instrument 3 Direct: Students in Exercise and Aging (EXS 455) create videos demonstrating their skill for recognizing, evaluating, and prescribing a community-based |
| falls prevention program. including information presented during the lecture portion of the course. |
| Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3. Met Not M |
| |
| Program Summary (Briefly summarize the action and follow up items from your detailed responses on subsequent pages.) |

Formative and summative assessment strategies are utilized across the continuum of course offerings in the Exercise Science (EXS) program. The program progresses students from knowledge to action. Based on the scaffolding of the EXS course offerings, each course level (100, 200, 300, and 400 level) introduces additional depth and difficulty for the students to integrate and demonstrate proficiency. Faculty development and communication efforts focus on creating continuity from course to course and course level to course level. Students demonstrate proficiency through high impact practice evaluation strategies that include examinations, lab practical exams, group projects, and co-evaluation with practicum/internship preceptors. The EXS courses (EXS 412, EXS 455, and EXS 496) in this Assessment of Student Learning represent the 400 level courses that are a reflection of the building of the knowledge, skills, and abilities in the EXS program and ultimately being prepared for their Internship.

Overall, this Assurance of Student Learning assessment supports that the SLO's for the EXS program have reached the program targets in each categories reported. Moving forward, the EXS faculty will continue to collaborate and ensure that the learning needs of the EXS students are addressed in each of the courses and relevant and meaningful assessments are being used to evaluate student progress of the knowledge, skills, and abilities in the program.

| | | Student Learning Outcon | ne 1 | | |
|---------------------------------|--|--|--|----------------------------|--|
| Student Learning Outcome | Students develop capacity as practitioners and researchers who use evidence-based practices to implement, assess, | | | | |
| | and revise consumer-based exercise prescriptions and community health initiatives. | | | | |
| Measurement Instrument 1 | DIRECT: A comprehensive written exam in Exercise Testing & Prescription (EXS 412) evaluates core knowledge and performance | | | | |
| | | S students to be prepared for the American College | e of Sports Medicine (ACSM) Certified Exer | rcise Physiologist (ACSM – | |
| | EP) certification | n exam. | | | |
| | | | | | |
| Criteria for Student Success | Students will sc | ore $>/= 75\%$ on the comprehensive written exam. | | | |
| Program Success Target for this | | Our target is for $>/= 80\%$ of our students to | Percent of Program Achieving Target | 90% | |
| | | attain the above criterion of a score of $>/= 75\%$ | | | |
| | | on the comprehensive exam. | | | |
| Methods | Student enrollm | ent for the Fall 2018, $N = 46$ and Spring 2019, $N =$ | 41. | | |
| | | | | | |
| | | oice comprehensive exam content addresses each o | | | |
| | | ption and Implementation, Exercise Counseling an | d Behavior Modification, and Risk Manager | nent and Professional | |
| | Responsibilities |). | | | |
| Measurement Instrument 2 | DIRECT: A co | mprehensive hands-on practical final exam in Exer | roise Testing & Prescription (FXS 412) evalu | istes core knowledge and | |
| Weasurement Instrument 2 | | mains for EXS students to be prepared for the Ame | | | |
| | | CEM-EP) certification exam. | freah conege of sports medicine (reshi) (| | |
| Criteria for Student Success | | ore $>/= 75\%$ on the hands-on practical final exam. | | | |
| | | | | | |
| Program Success Target for this | s Measurement | Our target is for $>/= 80\%$ of our students to | Percent of Program Achieving Target | 86% | |
| | | attain the above criterion of a score of $>/= 75\%$ | | | |
| | | on the practical final exam. | | | |
| Methods | Student enrollm | ent for the Fall 2018, $N = 46$ and Spring 2019, $N =$ | 41. | | |
| | | | | | |
| | A practical skills testing environment is designed to mimic exercise testing/prescription knowledge, skills, and abilities in a professional | | | | |
| | setting. At the end of each semester, EXS 412 students report to the Exercise Physiology lab and randomly draw from a list of practical skills | | | | |
| | (blood pressure, body composition, aerobic cycle test, flexibility, and strength tests) to perform on a simulated patient. An EXS f | | | | |
| N | | a scoring rubric to access the skills and abilities of | each student. | | |
| Measurement Instrument 3 | N/A | | | | |
| Criteria for Student Success | N/A | | | | |
| | | | | | |
| Program Success Target for this | s Measurement | N/A | Percent of Program Achieving Target | N/A | |
| Methods | N/A | | | l | |
| | | | | | |
| | | | | | |

| Based on your | results, circle or l | nighlight whether the program met the goal Student Learning Outcome 1. | Met | Not Met |
|---------------|----------------------|--|-----|---------|

Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)

Exercise Testing and Prescription (EXS 412) is a required senior level course with a lab (four credit hours). The course is designed to prepare students for the American College of Sports Medicine (ACSM) Certified Exercise Physiologist (ACSM -EP) certification exam. EXS students can sit for the ACSM – EP certification exam in their final semester their senior year or sit for the exam upon graduation. Based on the assessment of the SLO 1, EXS 412 course content and practical skills align well with ensuring that the EXS students are prepared with the knowledge and hands-on skills necessary to pass the ACSM – EP certification, and in preparing them for careers in physical activity/exercise, health & fitness, sport performance, and/or when pursuing professional programs (PT, OT, PA, AT, MS).

Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)

For future assessments of student learning outcomes, a continued effort will be made to ensure that the EXS 412 course content aligns with the current ACSM – EP certification performance domains and students continue to meet the criteria for student success at the completion of the course. Any updates and/or changes in ACSM guidelines will be integrated into the course content and practical skills. The EXS program will continue to collect information via an alumni survey to determine the number of students who go on to take and pass the certification exam each year. Based on feedback from a recent alumni survey and individual student responses, students are successfully passing the certification exam. Whether or not the EXS students go on to take the ACSM – EP certification, it is imperative that the students possess the EXS 412 knowledge and skills to pursue a career in this or a closely related field.

| | | Student Learning Outcon | ne 2 | | |
|---------------------------------|---|--|--|---|--|
| Student Learning Outcome | Interpret and apply advanced knowledge of the physiological influence of physical activity/exercise on health & fitness, sport performance, clinical practice, and professional programs – Physical Therapy (PT), Occupational Therapy (OT), Physician's Assistant (PA), Athletic Trainer (AT), and Masters of Science (MS). | | | | |
| Measurement Instrument 1 | Direct: Senior internship portfolio – a comprehensive reflection of the student's entire internship experience. Portfolio includes a log of their days/hours worked (signed by a supervisor), weekly summaries of activities and responsibilities, documents/literature associated with their internship site, pictures, and a reflection paper, as well as other things, as applicable. The faculty instructor evaluates the weekly submissions leading up to the final portfolio that is submitted at the end of the semester. The final portfolio is graded based on quality and thoroughness and how the portfolio adequately represents the knowledge, skills and experience gain during the internship. | | | | |
| Criteria for Student Success | After completin | g the senior internship, students will receive an over | erall score of $>/= 90\%$ on their portfolio. | | |
| Program Success Target for this | | Our target is for >/= 90% of our students to attain the above criterion of a score of >/= 90% on the internship portfolio. ent for the Fall 2018, N = 21 and Spring 2019, N = | Percent of Program Achieving Target | 98% | |
| | also requires a s expectations. Th platform has allo hours , to obtain | wided guidelines and requirements for the portfolio horter practicum during the students' sophomore y he portfolios are constructed and submitted via Blac bowed students to take creative advantage of techno and submit proof of student liability insurance as completing their hours. | ear, which also requires a portfolio, they are ekboard. Moving them from a three-ring bind logy. Students are also required, prior to beg | usually already aware of the ler to the Blackboard ginning their internship | |
| Measurement Instrument 2 | Indirect: Student evaluation from internship agency supervisor. | | | | |
| Criteria for Student Success | After completin | g the senior internship, students will receive an over | erall score of $>= 90\%$ on the evaluation from | their internship supervisor. | |
| Program Success Target for this | s Measurement | Our target is for $>/= 90\%$ of our students to attain the above criterion of a score of $>/= 90\%$ on the evaluation from their internship supervisor. | Percent of Program Achieving Target | 98% | |
| Methods | Student enrollment for the Fall 2018, N = 21 and Spring 2019, N = 31. Program faculty have been working with many of the internship supervisors for a number of years, though new ones do periodically get added as students locate new internship sites. Supervisors are informed at the beginning, before they agree to take on a student, of their requirement to submit an evaluation of the student and his/her internship performance. The evaluation is distributed electronically via Qualtrics, and it includes eight required evaluative questions using a likert scale, an additional 14 optional 14 questions that they answer based on applicability, also using a likert scale. There are also sections for the supervisor to submit qualitative comments, observed strengths of the student, suggested areas for the student to improve, and a place to suggest a gradethough they are aware that the final grade is determined by the faculty member from both their evaluation and the student's portfolio. | | | | |
| Measurement Instrument 3 | N/A | | | | |
| | N/A | | | | |

| Program Success Target for this Measureme | ent N/A | Percent of Program Achieving Target | N/A | |
|--|---|---|--------------------|-----------------|
| Methods N/A | | | | |
| Based on your results, circle or highlight wh | ether the program met the goal Studen | t Learning Outcome 2. | Met | Not Met |
| Actions (Describe the decision-making process | and actions planned for program improv | rement. The actions should include a timeline.) | | |
| | | is to take better advantage of the technology available to us opy document that had to be either faxed, scanned/emailed, | | |
| Our current actions for improvement are as foll | ows: | | | |
| workload for faculty, which can be si visits are accomplished, as these wereWe are constructing an evaluation/sat | gnificant particularly at the beginning an very difficult to complete for a single fac isfaction instrument to distribute to our in | cy supervisor as well as a faculty supervisor) across multiple and of semesters, spreads out the responsibilities and he culty member supervising $20 - 30$ students. (Spring, 2020) internship students upon completion of the internship. We | elps to ensure th | at faculty site |
| | · · · · · · · · · · · · · · · · · · · | esses from the students' perspectives. (Spring, 2020) we the actions above have resulted in program improvement | t) | |
| | * * | nd evaluate during the summer. Evaluation will be done by | | in conjunction |
| with the Exercise Science Advisory Board. Our | r primary areas of interest will be to deter | mine whether, indeed, spreading the faculty supervisory re- ell as to see if we acquired any valuable feedback from the | sponsibilities was | s effective for |

| | | Student Learning Outcon | ne 3 | | |
|--|--|---|---|--|------------------------------|
| Student Learning Outcome | Students develop and demonstrate the skills needed to recognize, evaluate and prescribe solutions from an integrate | | | | integrated |
| | and holistic approach regarding human movement, wellness, and performance. | | | | |
| Measurement Instrument 1 | | | | | |
| | | l aspects of aging, the acute and chronic effects of e | | | l evaluating |
| | | exercise programs for older adults. | | C C | Ũ |
| | | | | | |
| Criteria for Student Success | Students will sc | ore $>/= 75\%$ on the comprehensive exam. | | | |
| Program Success Target for this | Measurement | Our target is for $>= 80\%$ of our students to | Percent of Program Achieving Target | 88 | % |
| | | attain the above criterion of a score of $>/= 75\%$ | | | |
| | | on the comprehensive exam. | | | |
| Methods | Student enrollm | ent for the Fall 2018, N = 38 and Spring 2019, N = | 35. | | |
| | | | | | |
| | | ministered a multiple choice, true/false, and essay e | | | |
| Measurement Instrument 2 | | ents in Exercise and Aging (EXS 455) are directly | | | |
| | | e per week for the duration of the semester. Their p | practical skills are demonstrated and assessed | using a structu | red rubric. |
| Criteria for Student Success | Students will sc | ore $>/= 75\%$ on the practical skills assessment. | | | |
| | | 1 | 1 | | |
| Program Success Target for this Measurement | | Our target is for >/= 80% of our students to | Percent of Program Achieving Target | 83 | % |
| | | | | | |
| | | attain the above criterion of a score of $>/= 75\%$ | | | |
| | | on the practical skills assessment. | | | |
| Methods | Student enrollm | | : 35 | | |
| Methods | | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = | | | |
| Methods | The instructor the | on the practical skills assessment. ent for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time duri | | ances. A struct | ured rubric i |
| | The instructor the used to assess p | on the practical skills assessment. ent for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time duri erformance. | ng the semester to observe students' perform | | |
| Methods Measurement Instrument 3 | The instructor the used to assess p | on the practical skills assessment. ent for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time duri erformance. ents in Exercise and Aging (EXS 455) create video | ng the semester to observe students' perform | valuating, and p | |
| Measurement Instrument 3 | The instructor the used to assess p DIRECT: Stud community-base | on the practical skills assessment. ent for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time duri erformance. ents in Exercise and Aging (EXS 455) create video ed falls prevention program, including information | ing the semester to observe students' perform as demonstrating their skill for recognizing, ev presented during the lecture portion of the co | valuating, and p purse. | rescribing a |
| Measurement Instrument 3 | The instructor the used to assess p DIRECT: Stud community-base | on the practical skills assessment. ent for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time duri erformance. ents in Exercise and Aging (EXS 455) create video | ing the semester to observe students' perform as demonstrating their skill for recognizing, ev presented during the lecture portion of the co | valuating, and p purse. | prescribing a |
| Measurement Instrument 3 Criteria for Student Success | The instructor the used to assess possible of the second s | on the practical skills assessment. ent for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time duri erformance. ents in Exercise and Aging (EXS 455) create video ed falls prevention program, including information ore >/= 75% on a rubric assessing students' ability | ng the semester to observe students' perform os demonstrating their skill for recognizing, ev presented during the lecture portion of the co to prescribe, implement, and evaluate the fall | valuating, and p ourse. Is prevention pr | orescribing a ogram. |
| Measurement Instrument 3 Criteria for Student Success | The instructor the used to assess possible of the second s | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during erformance. Then the fall sprevention program, including information ore >/= 75% on a rubric assessing students' ability Our target is for >/= 80% of our students to | ing the semester to observe students' perform as demonstrating their skill for recognizing, ev presented during the lecture portion of the co | valuating, and p purse. | orescribing a ogram. |
| | The instructor the used to assess possible of the second s | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during erformance. Then the service and Aging (EXS 455) create video end falls prevention program, including information ore >/= 75% on a rubric assessing students' ability Our target is for >/= 80% of our students to attain the above criterion of a score of >/= 75% | ng the semester to observe students' perform os demonstrating their skill for recognizing, ev presented during the lecture portion of the co to prescribe, implement, and evaluate the fall | valuating, and p ourse. Is prevention pr | orescribing a ogram. |
| Measurement Instrument 3 Criteria for Student Success | The instructor the used to assess possible of the second s | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during erformance. Then the fall spread of the state of the | ng the semester to observe students' perform os demonstrating their skill for recognizing, ev presented during the lecture portion of the co to prescribe, implement, and evaluate the fall | valuating, and p ourse. Is prevention pr | orescribing a ogram. |
| Measurement Instrument 3 Criteria for Student Success | The instructor the used to assess possible of the second s | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during the erformance. The ents in Exercise and Aging (EXS 455) create video end falls prevention program, including information ore $>/= 75\%$ on a rubric assessing students' ability Our target is for $>/= 80\%$ of our students to attain the above criterion of a score of $>/= 75\%$ on the rubric assessing students' ability to prescribe, implement, and evaluate the falls | ng the semester to observe students' perform os demonstrating their skill for recognizing, ev presented during the lecture portion of the co to prescribe, implement, and evaluate the fall | valuating, and p ourse. Is prevention pr | orescribing a ogram. |
| Measurement Instrument 3 Criteria for Student Success Program Success Target for this | The instructor the used to assess possible of the possible of the used to assess possible of | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during the erformance. The ents in Exercise and Aging (EXS 455) create video end falls prevention program, including information ore $>/= 75\%$ on a rubric assessing students' ability Our target is for $>/= 80\%$ of our students to attain the above criterion of a score of $>/= 75\%$ on the rubric assessing students' ability to prescribe, implement, and evaluate the falls prevention program. | ing the semester to observe students' perform as demonstrating their skill for recognizing, ev presented during the lecture portion of the co to prescribe, implement, and evaluate the fall Percent of Program Achieving Target | valuating, and p ourse. Is prevention pr | orescribing a ogram. |
| Measurement Instrument 3 Criteria for Student Success Program Success Target for this | The instructor the used to assess possible of the possible of the used to assess possible of | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during the erformance. The ents in Exercise and Aging (EXS 455) create video end falls prevention program, including information ore $>/= 75\%$ on a rubric assessing students' ability Our target is for $>/= 80\%$ of our students to attain the above criterion of a score of $>/= 75\%$ on the rubric assessing students' ability to prescribe, implement, and evaluate the falls | ing the semester to observe students' perform as demonstrating their skill for recognizing, ev presented during the lecture portion of the co to prescribe, implement, and evaluate the fall Percent of Program Achieving Target | valuating, and p ourse. Is prevention pr | orescribing a ogram. |
| Measurement Instrument 3 Criteria for Student Success | The instructor tr used to assess p DIRECT: Stud community-base Students will sc Measurement Student enrollm | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during erformance. Then the fall sprevention program, including information ore >/= 75% on a rubric assessing students' ability Our target is for >/= 80% of our students to attain the above criterion of a score of >/= 75% on the rubric assessing students' ability to prescribe, implement, and evaluate the falls prevention program. Then the fall 2018, N = 38 and Spring 2019, N = | ing the semester to observe students' perform as demonstrating their skill for recognizing, even presented during the lecture portion of the co to prescribe, implement, and evaluate the fall Percent of Program Achieving Target | valuating, and pourse. Is prevention pr 84 | orescribing a ogram. % |
| Measurement Instrument 3 Criteria for Student Success Program Success Target for this | The instructor tr used to assess p DIRECT: Stud community-base Students will sc Measurement Student enrollm Groups of stude | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during erformance. Then the fall 2018, N = 38 and Spring 2019, N = ents in Exercise and Aging (EXS 455) create video ed falls prevention program, including information ore >/= 75% on a rubric assessing students' ability Our target is for >/= 80% of our students to attain the above criterion of a score of >/= 75% on the rubric assessing students' ability to prescribe, implement, and evaluate the falls prevention program. Then the fall 2018, N = 38 and Spring 2019, N = ents present their videos during the final week of the | ing the semester to observe students' perform as demonstrating their skill for recognizing, even presented during the lecture portion of the co to prescribe, implement, and evaluate the fall Percent of Program Achieving Target | valuating, and pourse. Is prevention pr 84 | orescribing a ogram. % |
| Measurement Instrument 3 Criteria for Student Success Program Success Target for this Methods | The instructor tr used to assess p DIRECT: Stud community-base Students will sc Measurement Student enrollm Groups of stude The videos are a | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during erformance. Then the fall 2018, N = 38 and Spring 2019, N = ents in Exercise and Aging (EXS 455) create video ed falls prevention program, including information ore >/= 75% on a rubric assessing students' ability Our target is for >/= 80% of our students to attain the above criterion of a score of >/= 75% on the rubric assessing students' ability to prescribe, implement, and evaluate the falls prevention program. Then the fall 2018, N = 38 and Spring 2019, N = ents present their videos during the final week of the assessed using a structured rubric. | ing the semester to observe students' perform as demonstrating their skill for recognizing, every presented during the lecture portion of the co- to prescribe, implement, and evaluate the fall Percent of Program Achieving Target 35 e semester and respond to questions from the | valuating, and pourse. Is prevention pr 84 | orescribing a ogram. % |
| Measurement Instrument 3 Criteria for Student Success Program Success Target for this Methods | The instructor tr used to assess p DIRECT: Stud community-base Students will sc Measurement Student enrollm Groups of stude The videos are a | on the practical skills assessment. Then for the Fall 2018, N = 38 and Spring 2019, N = ravels to each community site at least one time during erformance. Then the fall 2018, N = 38 and Spring 2019, N = ents in Exercise and Aging (EXS 455) create video ed falls prevention program, including information ore >/= 75% on a rubric assessing students' ability Our target is for >/= 80% of our students to attain the above criterion of a score of >/= 75% on the rubric assessing students' ability to prescribe, implement, and evaluate the falls prevention program. Then the fall 2018, N = 38 and Spring 2019, N = ents present their videos during the final week of the | ing the semester to observe students' perform as demonstrating their skill for recognizing, every presented during the lecture portion of the co- to prescribe, implement, and evaluate the fall Percent of Program Achieving Target 35 e semester and respond to questions from the | valuating, and pourse. Is prevention pr 84 | orescribing a ogram. % |

Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)

Exercise and Aging (EXS 455) is designed for students to gain a better understanding of the acute physiological responses and chronic adaptations associated with exercise in the aged population. Because it is critical students develop and demonstrate the skills needed to recognize, evaluate and prescribe solutions from an integrated and holistic approach, the course is heavily focused on engaging students in a semester-long service-learning initiative. Written and oral reflection are used as tools for awareness, deeper understanding, analysis, and interpretation in order to transform the service-learning experiences into meaningful learning. This process is continually updated to ensure complete and accurate assessment of students' service-learning experiences.

Our current actions for improvement are as follows:

1. We will require students to complete the US Center for Control STEADI training. This training better prepares students to access fall risk in older adults and, ultimately, prescribe appropriate physical activity interventions. (Spring 2020)

2. We will modify the evaluation instrument to distribute to the community site supervisors at the service-learning sites. We are also modifying the evaluation instrument used to assess the students during implementation of the service-learning experience to more accurately assess their ability to integrate the information presented in the classroom. (Fall 2020)

3. We will modify the group video project to better reflect and assess students' ability to holistically interact with the older adult participants at their service-learning sites. Specifically, students will be asked to provide more evidence of their ability to connect information presented in the classroom with the "real world" needs of older adults. This is valuable for students' future careers in all types of health care professions. (Fall 2020)

Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)

All actions will begin in the spring of 2020 and be completed by the fall of 2020.

1. We will require students to complete the US Center for Control STEADI training. This training better prepares students to access fall risk in older adults and, ultimately, prescribe appropriate physical activity interventions. (TO BE COMPLETED SPRING 2020)

2. We will modify the evaluation instrument to distribute to the community site supervisors at the service-learning sites. We are also modifying the evaluation instrument used to assess the students during implementation of the service-learning experience to more accurately assess their ability to integrate the information presented in the classroom. (TO BE COMPLETED FALL OF 2020)

3. We will modify the group video project to better reflect and assess students' ability to holistically interact with the older adult participants at their service-learning sites. Specifically, students will be asked to provide more evidence of their ability to connect information presented in the classroom with the "real world" needs of older adults. This is valuable for students' future careers in all types of health care professions. (TO BE COMPLETED FALL OF 2020)

Skinfold Test Evaluation

| Evaluator | Score (50 p | re (50 possible) | | |
|--|-------------|------------------|---------------|--|
| Preparation (6 points) | | | | |
| Introduce yourself and get client's name | 0 | 1 | | |
| Weigh client (or ask) and get personal information (i.e., age) | 0 | 1 | | |
| Explain purpose and procedures of test to client | 0 | 1 | 2 | |
| • Skin thickness to predict percent body fat (not absolute measure) | | | | |
| • Principle that subcutaneous fat proportional to total body fat | | | | |
| Ask client if there are any questions or concerns | 0 | 1 | | |
| Politely request clothing removal that will affect skinfold assessments | 0 | 1 | | |
| Assessment (27 points) | | | | |
| Take all assessments on right side of body | 0 | 1 | | |
| Firmly grasp skinfold between thumb and index finger (left hand overgrip) | 0 | 1 | 2 | |
| • Pinch starts ~3 inches apart perpendicular to long axis of skinfold starts | ite | | | |
| • Obese individuals require fingers to be spread apart > 3 inches | | | | |
| Hold caliper in right hand with contact surfaces of caliper 1 cm below finge | ers 0 | 1 | | |
| Release caliper grip while continuing to support calipers with right hand | 0 | 1 | | |
| Determine reading within 2 seconds after releasing caliper claws | 0 | 1 | 2 | |
| • Measure skinfold to nearest 0.5 mm | | | | |
| Avoids jaw slippage by opening calipers before removing from skinfold | 0 | 1 | | |
| Record the reading for each skinfold site. Tell evaluator results. | 0 | 1 | 2 | |
| Rotate through all skinfold sites | 0 | 1 | | |
| • tricep (vertical, mid-humerus) | 0 | 1 | 2 | |
| subscapular (diagonal, below inferior angle) | 0 | 1 | 2 | |
| • pectoral (men 1/2 & women 1/3 between axilla & nipple) | 0 | 1 | 2 | |
| midaxillary (vertical, midaxillary line, level of xiphoid) | | 1 | 2 | |
| suprailiac (diagonal, at anterior axillary line) | 0 | 1 | 2 | |
| abdominal (vertical, 1" to right of navel) | 0 | 1 | 2 | |
| thigh (vertical, mid-femur) | 0 | 1 | $\frac{1}{2}$ | |
| Measure each skinfold site at least one more time | 0 | 1 | $\frac{1}{2}$ | |
| • If not within 1 or 2 mm, then retest each individual site | 0 | 1 | - | |
| Conclusion (2 points) | | | | |
| Have client get dressed immediately after skinfold assessments | 0 | 1 | | |
| Thank client and information (i.e., %Body Fat and ranking) available in fut | | 1 | | |
| | | 1 | | |
| General (2 points) | <u>^</u> | | - | |
| Briefly mentions where client will be touched prior to each skinfold site | 0 | 1 | 2 | |
| Qualtity (5 points) | 1 2 | 3 | 4 | |

| Name: | Section: | Date: | Grade: |
|-------|----------|-------|--------|
|-------|----------|-------|--------|

Fitness Programming Blood Pressure Measurement Evaluation

Excellent (3 pts):Skill performed with excellent techniqueGood (2 pts):Skill performed properly with no significant errors in techniquePoor (1pt):Skill not performed or performed incorrectly

| Skill | Excellent | Good | Poor | Comments |
|---|-----------|------|------|----------|
| Student sizes cuff to arm | | | | |
| Proper cuff size is used | | | | |
| Cuff is applied properly (proper location on arm with respect to artery and antecubital fossa; cuff is applied snugly) | | | | |
| Arm is supported and elbow is Straight | | | | |
| Arm is positioned properly (artery at heart level of client) | | | | |
| Brachial pulse is palpated | | | | |
| Stethoscope is placed over brachial pulse | | | | |
| Stethoscope ear tips are facing forward | | | | |
| Cuff is properly inflated and deflated | | | | |
| Blood pressure is accurately heard | | | | |

Student BP reading _____

Faculty BP reading _____

YMCA Submax Bike Test Evaluation

Name Score (50 possible) Evaluator Preparation (17 points) Introduce yourself and get client's name 0 1 Ask age and calculate Age predicted max and 85% 0 1 Explain purpose of test to client 1 2 3 0 • Submax bike test that predicts aerobic status • Data recorded, multiple stages, pace, resistance increments Explain HR monitor placement (with water) and have client do it 0 1 **Resting BP** 0 1 2 3 Test client's HR monitor and hand it to evaluator 0 1 Start timer 0 1 Adjust seat height (i.e., knee flexed 5-10° with toes on pedal) 0 1 2 Palpate 30 Second HR with client seated on bike. Tell evaluator / 0 2 1 Start metronome 0 1 Have client pedal without any resistance or 0.25 kg at cadence for ~1 min 0 1 Test (10 points) Set pendulum resistance to 0.5 kg 0 1 Measure client's HR the 2nd and 3rd min (15 seconds) BP at 2nd min 1 2 0 • Tell Evaluator: 1 / , 2 / , 3 / 4 / , 5 / , 6 / 0 1 2 Compare minute 2 HR to minute 3 HR during each stage. 1 2 0 • If difference within 5 bpm, consider stage complete • If > 5 bpm, continue stage until final 2 minutes of stage meet criteria Set second stage pendulum resistance based on final HR of first stage 0 1 • < 80 bpm, set at 2.5 kg • 80-89 bpm, set at 2.0 kg • 90-100 bpm, set at 1.5 kg • > 100 bpm, set at 1.0 kg Compare minute 2 HR to minute 3 HR during each stage. 1 2 0 • If difference within 5 bpm, consider stage complete • If > 5 bpm, continue stage until final 2 minutes of stage meet criteria Cool-Down (3 points) Allow client to cool down pedaling at 50 rpm with 0.5 kg of resistance 0 1 Measure client's HR each minute until below 110 bpm or 3 minutes 0 1 Thank client and information (i.e., est VO_{2max} and ranking) available in future 0 1 General (5 points) Regularly check client's status (i.e., once every stage) 1 0 Regularly check pendulum resistance 0 1 Regularly check client's RPM (per stage) 0 1 Inform client of workload changes prior to increase (per stage) 0 1 5 Qualtity (5 points) 1 2 3 4 Comments:

Interpretation (10 points): Points _____ Comments: