

**Course Assessment Report
Washtenaw Community College**

Discipline	Course Number	Title
Biology	225	BIO 225 11/20/2023-Tests and Measurements in Exercise Science
College	Division	Department
	Math, Science and Engineering Tech	Life Sciences
Faculty Preparer		Marvin Boluyt
Date of Last Filed Assessment Report		

I. Review previous assessment reports submitted for this course and provide the following information.

1. Was this course previously assessed and if so, when?

Yes

This course was once since its inception, and the date of that report was 1/09/2015.

2. Briefly describe the results of previous assessment report(s).

Students exceeded the standard of success for each of the three outcomes assessed by a wide margin.

3. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.

Outcome 3 has been assessed by two methods since the 2015 report, scores on an optional external exam (ACSM Personal Trainer Exam), and on our course final exam which is composed primarily of questions representative of the ACSM personal trainer exam.

II. Assessment Results per Student Learning Outcome

Outcome 1: Data analysis and interpretation: Conduct appropriate statistical tests of exercise performance and biometric data and interpret the data. Evaluate scientific literature.

- Assessment Plan
 - Assessment Tool: Final Project (Assessment Rubric attached) The final project is an original research paper.

- Assessment Date: Winter 2018
- Course section(s)/other population: All
- Number students to be assessed: All
- How the assessment will be scored: Final Project Assessment Rubric (attached) The final project is an original research paper.
- Standard of success to be used for this assessment: At least 70% of the students will score at least 75% on the final project (Original Research Paper).
- Who will score and analyze the data: Life Science Faculty

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
	2023, 2021, 2021, 2020, 2019, 2018, 2017, 2016	

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
36	30

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

Six students withdrew from the course before completing the evaluations required by the assessment tools.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

This course is only offered in Winter semester. It is typically a small class and sometimes is taught as a "Z" section. All students who completed the course from 2016 through 2023 were assessed.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The "final project" tool is a paper or papers that are written by the students as original research articles. They conduct the research, and analyze the data using one of the following statistical tests; an independent samples t-test, a paired t-test, correlation analysis, or a 2-factor analysis of variance (ANOVA). Prior to 2018,

this consisted of a single large paper with four separate experiments. In 2018, we changed this to four separate papers with one experiment each. This reduced confusion in the introduction and discussion sections of the paper and allowed students to focus on one statistical technique at a time. It is scored with a 100-point rubric (attached) that assigns point values for each section of the paper, as well as various other features that are present in research articles submitted to peer-reviewed journals.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

Students exceeded the standard of success with all 30 of the students (100%) achieving at least an 81% on this assignment. (The standard of success was 70% of students will achieve scores of 75% or better.) Several observations are pertinent here.

1. If students are unhappy with their grade on a paper they are allowed to revise it and resubmit it for a higher score. (This is similar to the peer-review process.)
2. Beginning in 2018 when this assignment became four papers instead of one, students improved markedly from the first to the last paper, such that there were fewer and fewer resubmissions on the later papers.
3. The papers are complex in that they require the ability to write concisely and well, an understanding of the rigid structure of a scientific paper, a deep understanding of how to use and report the statistical test matched correctly to the experimental design, and appropriate citation of previous studies in the literature.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students demonstrated relatively high levels of competence in meeting the goals of outcome #1. This is likely because they practice these skills throughout the course using multiple experimental paradigms. They write a series of four papers similar in structure, but involving a new experiment and a different statistical test. This repeated practice seems to improve their understanding of how to structure a scientific paper, as well as how to write concisely and clearly, how to describe methodological details, how to match hypotheses and conclusions, and how to use and cite literature. They also have an opportunity to revise their papers if it exhibits deficiencies in the outcome measures. Revision and resubmission becomes less frequent as they get better at writing, but it remains, in my opinion, a valuable learning tool.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Until each student earns an A+ on the first draft of each paper, improvement is always possible. It is unrealistic, however, to expect this. Using the multiple paper along with revision and resubmission strategies seems to optimize the opportunity for learning. Indeed, constant improvement is observed in the work of most students from the first paper to the last.

Outcome 2: Physiological Tests: Conduct tests to ascertain maximal oxygen uptake and body composition of human subjects.

- Assessment Plan
 - Assessment Tool: Performance in Laboratory (Mastery Checklists attached)
 - Assessment Date: Winter 2018
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: Mastery checklists for aerobic capacity and body composition
 - Standard of success to be used for this assessment: At least 70% of students will score 100% (complete mastery) on the mastery checklists for aerobic capacity and body composition.
 - Who will score and analyze the data: Life Science Faculty

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
	2023, 2021, 2021, 2020, 2019, 2018, 2017, 2016	

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
36	30

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

Six students withdrew from the course before completing the evaluation.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

This course is only offered in Winter semester. It is typically a small class and sometimes is taught as a "Z" section. All students who completed the course from 2016 through 2023 were assessed.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

This outcome is assessed by observing students perform body composition assessments and conduct maximal oxygen consumption tests. A checklist is used to check off each required skill as the student master's it. (Checklist attached).

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

29 of 30 students (97%) achieved a score of 100% on the skills checklist. One student scored 100% on one skills checklist, but missed class when the other skill was evaluated. The standard of success was exceeded by a wide margin.

Students get practice at calibrating the equipment, entering the subject data, monitoring the subject throughout the test, manipulating the treadmill workload for the maximal oxygen consumption test, as well as each aspect of measuring body composition by skin caliper, girth, body mass index, and bioimpedance in this class as well as in BIO 201 (Physiology of Exercise) and by the time they are evaluated, they demonstrate excellent mastery in conducting the measurements as well as interpreting the results.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Student achievement was nearly perfect on the mastery of laboratory skills. Each student demonstrated an ability to conduct a graded exercise test on a treadmill safely and successfully. They also exhibited an ability to interpret the test results and monitor the data in real time. Using mock accidents, they also demonstrated successful handling of potential cardiac events during the test. Finally, they demonstrated an ability to calculate a VO₂max result from a submaximal test. Each student also demonstrated the ability to reliably use calipers, bioimpedance, and tape measures of girth to assess body compositions. They were

able to explain the strengths and weaknesses of each type of assessment, and to identify the shortcomings of body mass index.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

As one student failed to complete one of the mastery checklist tests due to repeated absences, a small amount of improvement could be hoped for, but it is difficult to overcome this obstacle. It is highly likely that student would have demonstrated mastery on that single missed evaluation had they been present at any of the opportunities to complete it.

Outcome 3: Personal Training Skills: Demonstrate competence in the knowledge, skills, and abilities required for the Certified Personal Trainer as listed in the current edition of ACSM's Guidelines for Exercise Testing and Prescription.

- Assessment Plan
 - Assessment Tool: External: ACSM Certification Exam for either Personal Trainer or Health/Fitness Instructor Internal: Performance on final exam that includes ACSM-derived questions.
 - Assessment Date: Winter 2018
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: Students will self-report outcome of ACSM Exam. Final exam will include questions from a pool of questions derived from the ACSM's Certification Review.
 - Standard of success to be used for this assessment: External: At least 70% of students who take the ACSM certification exam will become certified in 2 or fewer attempts. Internal: At least 70% of students will score at least 75% on the final exam containing ACSM-derived questions.
 - Who will score and analyze the data: Life Sciences Faculty
1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
	2021, 2021, 2020, 2019, 2023, 2018, 2017, 2016	

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
36	30

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

Six students withdrew before completing the assignment.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

This course is only offered in Winter semester. It is typically a small class and sometimes is taught as a "Z" section. All students who completed the course from 2016 through 2023 were assessed.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The tool for this outcome is the final exam. This exam covers material pertinent to personal trainers, and builds on material from all three Exercise Science courses. Most of the questions are patterned after questions from the American College of Sports Medicine (ACSM) practice exams and review materials for personal training. This material is a comprehensive review of the entire field of exercise science, as well as a number of practical issues relevant to personal training. Scores represent percentages of correct answers.

The other tool for this outcome was not used, because no student during the years assessed reported taking the external ACSM Personal Training Exam.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

29 of 30 students (97%) scored at least 75% or better on this exam, exceeding the standard of success by a comfortable margin.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students did reasonably well on this outcome. Since the ACSM exam evolves over time, our preparation for it evolves as well. The challenge here is to reflect as well as possible the changing emphases required by the ACSM personal training exam in our preparation and on our final exam.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

For continued improvement, the lecture material in class must cover all the basics and then adapt to the updated emphases placed by the ACSM guidelines and requirements. We will use the latest material provided by the ACSM to prepare the students as well as possible.

III. Course Summary and Intended Changes Based on Assessment Results

1. Based on the previous report's Intended Change(s) identified in Section I above, please discuss how effective the changes were in improving student learning.

The key changes made since the last assessment in 2015 are:

1. Changing the "final project" or original research assignment from a single large paper with four experiments to four separate papers describing one experiment each. Both the data and my observations while grading these papers support the notion that this was a successful approach.

2. Updating the personal training preparation to match that of ACSM's personal training requirements. The final exam results suggest that students are continuing to meet and exceed the standards of success on this outcome. They should be well prepared for the ACSM Personal Training Exam should they choose to take it.

2. Describe your overall impression of how this course is meeting the needs of students. Did the assessment process bring to light anything about student achievement of learning outcomes that surprised you?

Overall, the data suggest that this 225 course is meeting the needs of the students very well. In terms of the scientific skills described in outcome one, students demonstrate a high level of competence that exceeds the outcome goals substantially. Anecdotally, I can also add that students appear to make very large improvements in these skills from the beginning to the end of this course.

In terms of the mastery skills outcome, the students typically get so much practice at these skills during the prerequisite courses and this course that they all perform

at the mastery level. The data indicate that there is no real room for improvement on this outcome.

According to the data in this assessment, we are meeting the goals of outcome 3. It is a goal of the program to have students that complete BIO 225 be adequately prepared to pass the ACSM Personal Training Certification exam. To my knowledge, no students reported taking the ACSM exam during this assessment period, so in the future we should evaluate whether or not this outcome should still be a major goal of the course. Since the ACSM personal training exam covers basic exercise science broadly, it may remain a relevant outcome even as student need to take this exam waxes and wanes.

3. Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

Information will be shared at a regular departmental meeting.

4. Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Assessment Tool	Single-attempt research paper will be used to assess outcome 1 in future assessments.	In order to be more in line with assessment requirements, BIO 225 will be assessed using an embedded original research paper assignment that students can only submit once. The four separate papers throughout the semester worked well, but for assessment purposes, we will assess using only the fourth and final paper. This way, the students have the chance to receive feedback on previous papers throughout the	2024

		semester before being graded on the single-attempt fourth paper.	
Assessment Tool	Certification exam removed from future assessment	We will assess Outcome 3 with the questions from the preparatory exam instead, as all students are required to take it, while students have not done the certification exam in some time.	2024

5. Is there anything that you would like to mention that was not already captured?

The Exercise Science program has had a relatively low enrollment in the upper level courses. Some semesters required teaching some upper level courses as "Z" sections so that students could graduate. Enrollment dipped particularly low during the pandemic, but has rebounded since. It is my hope that, despite its small size, this program will continue to be supported by the college. Anecdotally, it has produced a small number of highly successful students who have been able to realize their dreams. This past semester I met with two former students, one a strength and conditioning coach, and the other a Doctor of Physical Therapy, who have formed a business (Pryde Athletics and Physical Therapy). They have pioneered a fusion of athletic performance training with physical therapy, promoting the idea that after physical therapy, patients "graduate" to athletic performance training. This promotes prevention of future injuries and provides continuous improvement in the health of their patients. This is one of a number of examples of our students making a significant contribution to society.

III. Attached Files

[Final Project \(Original Research\) Grading Rubric](#)
[Aerobic Capacity/Body Composition Skills Checklist](#)
[Assessment Data 2023](#)

Faculty/Preparer: Marvin Boluyt **Date:** 11/27/2023
Department Chair: Susan Dentel **Date:** 11/28/2023
Dean: Tracy Schwab **Date:** 11/30/2023
Assessment Committee Chair: Jessica Hale **Date:** 10/30/2024

**Course Assessment Report
Washtenaw Community College**

Discipline	Course Number	Title
Biology	225	BIO 225 01/09/2015-Tests and Measurements in Exercise Science
Division	Department	Faculty Preparer
Math, Science and Engineering Tech	Life Sciences	Marvin Boluyt
Date of Last Filed Assessment Report		

I. Assessment Results per Student Learning Outcome

Outcome 1: Data analysis and interpretation: Conducts appropriate statistical tests of exercise performance and biometric data and interprets the data. Evaluates scientific literature.

- Assessment Plan
 - Assessment Tool: Final Project (Assessment Rubrick Attached)
 - Assessment Date: Winter 2010
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored:
 - Standard of success to be used for this assessment:
 - Who will score and analyze the data:

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
	2015	

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
8	8

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

8 of 8 students enrolled were assessed.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

8 of 8 students were selected for assessment.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Final Project (Original Research Paper) was evaluated with a grading rubric. The original rubric used a scoring system of 1, 2 or 3. I modified the rubric to create percentages. A score of 75% on the new rubric is equivalent to a 2 on the original rubric.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

7 of the 8 students 87.5% completing the course scored at least 75% on the final project (Original Research Paper). Scores ranged from 53.5% to 93.5%.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students demonstrated acceptable levels of competence in meeting the goals of outcome #1. This is likely because they practice these skills throughout the course using multiple experimental paradigms. They also have an opportunity to revise their final project if it exhibits deficiencies in the outcome measures.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Throughout the semester, we practice the skills identified in outcome #1 and we observed marked improvement. The more practice we can fit into the course meeting times, the more improvement in these skills can be expected.

Outcome 2: Physiological Tests: Conducts tests to ascertain maximal oxygen uptake, strength, and body composition of human subjects.

- Assessment Plan
 - Assessment Tool: Performance in Laboratory (Mastery Checklists Attached)
 - Assessment Date: Winter 2010
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored:
 - Standard of success to be used for this assessment:
 - Who will score and analyze the data:

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
	2015	

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
8	8

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

8 of 8 students enrolled were assessed.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

8 of the 8 students, all of those that completed the course, were assessed.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Mastery Checklists

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this

learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: <u>Yes</u>
100% of the 8 students who completed the course scored 100% mastery on the aerobic capacity assessment checklist. 7 of 8 students (87.5%) scored a 100% on the mastery checklist for body composition.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students performed well on the mastery skills. Only one student failed to master one of the checklists. He was absent on the evaluations day and was provided an opportunity to complete it on a later day, but did not avail himself of the opportunity.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Students performed well on the mastery skills. No improvement is possible here.

Outcome 3: Personal Training Skills: Demonstrates competence in the comparison of knowledge, skills, and abilities required for the Certified Personal Trainer as listed in the current edition of ACSM's Guidelines for Exercise Testing and Prescription.

- Assessment Plan
 - Assessment Tool: External: ACSM Certification Exam for either Personal Trainer or Health/Fitness Instructor.
 - Assessment Date: Winter 2010
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored:
 - Standard of success to be used for this assessment:
 - Who will score and analyze the data:

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
	2015	

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
8	8

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

All students took the final exam that contained ASCM-derived questions. Scores ranged from 71.1 to 97%. One student took the external ACSM exam and passed it.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

Only one of the students in this cohort chose to take the voluntary ACSM Personal Training Exam.

All students took the final exam containing ACSM-derived questions.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

One of the students in this cohort chose to take the voluntary ACSM Personal Training Exam.

This student passed the ACSM personal training exam.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

One of the students in this cohort chose to take the voluntary ACSM Personal Training Exam. This student passed the ACSM personal training exam.

7 of the 8 (or 87.5%) students scored at least 75% on the final exam that included representative questions from the ACSM Certification exam material. Thus, we would predict that 7 of 8 students would have passed the ACSM certification exam.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Despite meeting the goals of this outcome, the performance on the final exam that covers some of the material evaluated in the ACSM Certification exam indicates that improvement in more effectively teaching these objectives is possible and desirable.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

We will plan to spend more time in class on some of the more problematic questions that students struggle with on the exam. We will perform an item analysis on the final exam to identify the problem areas that could benefit most from more attention.

II. Course Summary and Action Plans Based on Assessment Results

1. Describe your overall impression of how this course is meeting the needs of students. Did the assessment process bring to light anything about student achievement of learning outcomes that surprised you?

Overall, the data suggest that the Bio 225 course is meeting the needs of the students very well. In terms of the scientific skills described in outcome one, students demonstrate a high level of competence that exceeds the outcome goals substantially. Anecdotally, I can also add that students appear to make very large improvements in these skills from the beginning to the end of this course.

In terms of the mastery skills outcome, the students typically get so much practice at these skills during the prerequisite courses and the 225 course that they all perform at the mastery level. The data indicate that there is no room for improvement on this outcome.

According to the data in this assessment, the most room for improvement exists in outcome 3. It is a goal of the program to have students that complete BIO 225 be adequately prepared to pass the ACSM Personal Training Certification exam. In addition to the single student from this semester who took the ACSM external exam, at least two students from other semesters have taken the ACSM Personal Training Certification exam, and each of those students passed on the first try and reported that they were well prepared by BIO 225 and by the Exercise Science program overall.

- Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

Information will be shared at a regular departmental meeting.

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Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Assessment Tool	Outcome 3 will be tested in two ways instead of one. Instead of just assessing how many students passed the external optional ACSM exam, we will also assess their performance on the final exam questions that deal with this outcome.	This change will allow us to gather data on all students who complete the course rather than just those that choose to take the voluntary external ACSM exam.	2018

- Is there anything that you would like to mention that was not already captured?

5.

III. Attached Files

[Final Project Grading Rubric](#)

[Aerobic Capacity and Body Composition Mastery Checklist](#)

Faculty/Preparer: Marvin Boluyt **Date:** 05/13/2015

Department Chair: Anne Heise **Date:** 05/13/2015

Dean: Kristin Good **Date:** 05/14/2015

Assessment Committee Chair: Michelle Garey **Date:** 06/15/2015