Saint Louis University Program Assessment Plan

Program (Major, Minor, Core): PhD Public Health Science
Department: Multiple departments
Person(s) Responsible for Implementing the Plan: PhD Director (TBD as of 8-2018)
Revised **Date Submitted:** 6-28-2018

Program Learning Outcomes	Curriculum Mapping	Assessment Methods	Use of Assessment Data
What do you expect all students who complete the program to know, or be able to do?	*Where is the outcome learned/assessed (courses, internships, student teaching, clinical, etc.)?*	*How do students demonstrate their performance of the program learning outcomes? How does the program measure student performance? Distinguish your direct measures from indirect measures.* **** Appendix contains Rubrics or Forms***	*How does the program use assessment results to recognize success and "close the loop" to inform additional program improvement? How/when is this data shared, and with whom?*
1: CRITICAL THINKING: Critically evaluate, integrate and challenge existing scientific knowledge.	Required doctoral courses contribute to competency attainment, See **Appendix A** for course mapping by competency/domain. Direct: Courses: PHS 6050 and PHS 6060 Rubrics **(Appendices B & C)** Comprehensive, Written Exam Rubric **(Appendix D)** Oral Exam Rubric **(Appendix E)** Dissertation Defense Rubric **(Appendix F)**	Direct: • *PHS 6050: Science, Theory & Public Health* Final project presentation of literature review, conceptual approach, and research questions with rubric **Goal**: The average of the student scores will be at least 90% • *PHS 6060: Applied Research Skills II: Grant writing* Final Grant Proposal reviewed and scored by faculty panel with feedback/notes **Goal**: The average of the overall impact score is 4.0 or below for all students (on scale 1-9) • Comprehensive Written Exam (Scored rubric by 2-3 graders) **Goal**: 80% of students pass exam (Revised from 95%) • Oral Exam (Scored rubric by committee of 5) **Goal**: 90% of students will Pass or Pass with Distinction • Dissertation Defense (Scored rubric by committee of at least 3) **Goal**: 90% score 30 points or above Indirect: PACE reporting Includes self-assessment of competencies survey by student; mentor feedback and program director feedback	Direct: Program assessment results will be shared with the doctoral program committee, which consists of representatives from each of the PHS concentrations, students and staff. Written exam format and scoring were revised to increase assessment abilities before dissertation research stage begins. Oral Exam and Dissertation Defense rubrics were developed with scoring to increase assessment abilities and reduce demonstrated variability across students. Indirect: Individual PACE reports are shared with students, with annual plans for improvement as needed. Director reviews each mentor/mentee assessment and provides additional programmatic comments.

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2: ANALYTICAL SKILLS: Conduct research studies and interpret the results using inferential statistical methods and methods of qualitative data analysis.	Required doctoral courses contribute to competency attainment, See **Appendix A** for course mapping by competency/domain. Direct: Courses: PHS 6050 and PHS 6060 Rubrics **(Appendices B & C)** Comprehensive, Written Exam Rubric **(Appendix D)** Oral Exam Rubric **(Appendix E)** Dissertation Defense Rubric **(Appendix F)**	Direct: • PHS 6010: Design and Analysis in Public Health: Research project report. **Goal**: The average of the student scores will be at least 90% • Comprehensive Written Exam (Scored rubric by 2-3 graders) **Goal**: 80% of students pass exam (Revised from 95%) • Oral PhD Exam (Scored rubric by committee of 5) **Goal**: 90% of students will Pass or Pass with Distinction • Dissertation Defense (Scored rubric by committee of at least 3) **Goal**: 90% score 30 points or above Indirect: PACE Reporting Includes self-assessment of competencies survey by student; mentor feedback and program director feedback	Direct: Program assessment results will be shared with the doctoral program committee, which consists of representatives from each of the PHS concentrations, students and staff. Written exam format and scoring were revised to increase assessment abilities before dissertation research stage begins. Oral Exam and Dissertation Defense rubrics were developed with scoring to increase assessment abilities and reduce demonstrated variability across students. Indirect: Individual PACE reports are shared with students, with annual plans for improvement as needed. Director reviews each mentor/mentee assessment and provides additional programmatic comments.

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3: COMMUNICATION: Demonstrates mastery of written and oral presentations and publications to enhance the effectiveness of dissemination of research to diverse audiences.	Required doctoral courses contribute to competency attainment, See **Appendix A** for course mapping by competency/domain. Direct: Courses: PHS 6050 and PHS 6060 Rubrics **(Appendices B & C)** Comprehensive, Written Exam Rubric **(Appendix D)** Oral Exam Rubric **(Appendix E)** Dissertation Defense Rubric **(Appendix F)** Publications and Presentations **(Appendix G)**	Direct: • *PHS 6050: Science, Theory & Public Health* Final project presentation with rubric **Goal**: The average of the student scores will be at least 90% • *PHS 6060: Applied Research Skills II: Grant writing* Final Grant Proposal reviewed and scored by faculty panel with feedback/notes **Goal**: The average of the overall impact score is 4.0 or below for all students (on scale 1-9) • Comprehensive Written Exam (Scored rubric by 2-3 graders) **Goal**: 80% of students pass exam (Revised from 95%) • Oral PhD Exam (Scored rubric by committee of 5) **Goal**: 90% of students will Pass or Pass with Distinction • Dissertation Defense (Scored rubric by committee of at least 3) **Goal**: 90% score 30 points or above • Annual publications, presentations, awards and grants (collected via CV each January as part of PACE reporting) **Goal**: Increase average number of publications (ANP) by 5% from previous year Indirect: PACE Reporting Includes self-assessment of competencies survey by student; mentor feedback and program director feedback.	Direct: Program assessment results will be shared with the doctoral program committee, which consists of representatives from each of the PHS concentrations, students and staff. Written exam format and scoring were revised to increase assessment abilities before dissertation research stage begins. Oral Exam and Dissertation Defense rubrics were developed with scoring to increase assessment abilities and reduce demonstrated variability across students. Indirect: Individual PACE reports are shared with students, with annual plans for improvement as needed. Director reviews each mentor/mentee assessment and provides additional programmatic comments.

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4: MANAGEMENT AND LEADERSHIP: Apply leadership and management principles to assemble and cultivate effective teams and successful projects or studies, including management of team members, budgets and the project.	Required doctoral courses contribute to competency attainment, See **Appendix A** for course mapping by competency/domain. Direct: Courses: PHS 6050 and PHS 6060 Rubrics **(Appendices B & C)** Comprehensive, Written Exam Rubric **(Appendix D)** Oral Exam Rubric **(Appendix E)** Dissertation Defense Rubric **(Appendix F)**	Direct: • *PHS 6050: Science, Theory & Public Health*-Final project presentation with rubric **Goal**: The average of the student scores will be at least 90% • *PHS 6060: Applied Research Skills II: Grant writing* Final Grant Proposal reviewed and scored by faculty panel with feedback/notes **Goal**: The average of the overall impact score is 4.0 or below for all students (on scale 1-9) • Comprehensive Written Exam (Scored rubric by 2-3 graders) **Goal**: 80% of students pass exam (Revised from 95%) • Oral PhD Exam (Scored rubric by committee of 5) **Goal**: 90% of students will Pass or Pass with Distinction • Dissertation Defense (Scored rubric by committee of at least 3) **Goal**: 90% score 30 points or above Indirect: PACE reporting Includes self-assessment of competencies by student; mentor feedback and program director feedback	Direct: Program assessment results will be shared with the doctoral program committee, which consists of representatives from each of the PHS concentrations, students and staff. Written exam format and scoring were revised to increase assessment abilities before dissertation research stage begins. Oral Exam and Dissertation Defense rubrics were developed with scoring to increase assessment abilities and reduce demonstrated variability across students. Indirect: Individual PACE reports are shared with students, with annual plans for improvement as needed. Director reviews each mentor/mentee assessment and provides additional programmatic comments.

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6: COMMUNITY / CULTURAL ORIENTATION: Devise research studies that integrate knowledge, awareness and respect for the impact of cultural, structural, legal, political, and public health and social justice on health outcomes.	Required doctoral courses contribute to competency attainment, See **Appendix A** for course mapping by competency/domain. Direct: Courses: PHS 6050 and PHS 6060 Rubrics **(Appendices B & C)** Comprehensive, Written Exam Rubric **(Appendix D)** Oral Exam Rubric **(Appendix E)** Dissertation Defense Rubric **(Appendix F)**	Direct: • *PHS 6050: Science, Theory & Public Health*-Final project presentation with rubric **Goal**: The average of the student scores will be at least 90% • Comprehensive Written Exam (Scored rubric by 2-3 graders) **Goal**: 80% of students pass exam (Revised from 95%) • Oral PhD Exam (Scored rubric by committee of 5) **Goal**: 90% of students will Pass or Pass with Distinction • Dissertation Defense (Scored rubric by committee of at least 3) **Goal**: 90% score 30 points or above Indirect: PACE Reporting Includes self-assessment of competencies survey by student; mentor feedback and program director feedback	Direct: Program assessment results will be shared with the doctoral program committee, which consists of representatives from each of the PHS concentrations, students and staff. Written exam format and scoring were revised to increase assessment abilities before dissertation research stage begins. Oral Exam and Dissertation Defense rubrics were developed with scoring to increase assessment abilities and reduce demonstrated variability across students. Indirect: Individual PACE reports are shared with students, with annual plans for improvement as needed. Director reviews each mentor/mentee assessment and provides additional programmatic comments.

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7: TRANSLATION AND DISSEMINATION: Use innovative methods to communicate scientific findings and implications to diverse audiences, ensuring appropriate strategies.	Required doctoral courses contribute to competency attainment, See **Appendix A** for course mapping by competency/domain. <u>Direct</u>: Courses: PHS 6050 and PHS 6060 Rubrics **(Appendices B & C)** Comprehensive, Written Exam Rubric **(Appendix D)** Oral Exam Rubric **(Appendix E)** Dissertation Defense Rubric **(Appendix F)**	<u>Direct</u>: • *PHS 6050: Science, Theory & Public Health*-Final project presentation with rubric **Goal**: The average of the student scores will be at least 90% • *PHS 6060: Applied Research Skills II: Grant writing* - Final Grant Proposal reviewed and scored by faculty panel with feedback/notes **Goal**: The average of the overall impact score is 4.0 or below for all students (on scale 1-9) • Comprehensive Written Exam (Scored rubric by 2-3 graders) **Goal**: 80% of students pass exam (Revised from 95%) • Oral PhD Exam (Scored rubric by committee of 5) **Goal**: 90% of students will Pass or Pass with Distinction • Dissertation Defense (Scored rubric by committee of at least 3) **Goal**: 90% score 30 points or above <u>Indirect:</u> PACE reporting Includes self-assessment of competencies survey by student; mentor feedback and program director feedback	<u>Direct</u>: Program assessment results will be shared with the doctoral program committee, which consists of representatives from each of the PHS concentrations, students and staff. Written exam format and scoring were revised to increase assessment abilities before dissertation research stage begins. Oral Exam and Dissertation Defense rubrics were developed with scoring to increase assessment abilities and reduce demonstrated variability across students. <u>Indirect</u>: Individual PACE reports are shared with students, with annual plans for improvement as needed. Director reviews each mentor/mentee assessment and provides additional programmatic comments.

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It is <u>not recommended</u> to try and assess (in depth) all of the program learning outcomes every semester. It is best practice to plan out when each outcome will be assessed and focus on 1 or 2 each semester/academic year. Describe the responsibilities, timeline, and the process for implementing this assessment plan.

Responsibility	Timeline	Process
Program Director/ Associate Dean for Academic Affairs: organized the assessment.	Competency 3 Communication will be assessed in 2017-18	Assessment after Fall 2017 classes and January 2018 written exams; present findings in Spring 2018 (April/May) to Doctoral Committee; revise rubrics if needed during summer 2017 for 2018-19 incoming cohort
Instructors who teach courses who cover specific competency are asked to assess the pertinent competency.	Competency 4 Management and Leadership will be assessed in 2018-19	Meet with instructors from courses that cover this competency (PHS 6060 and 6900); review findings from 6060 and input from 6900 Fall 2017 instructor; present potential assessment rubrics and goals to Doc Cmte in April/May, 2018
Assessment Team: Doctoral Program Committee, which consists of 1 representative from each active concentration area and 2 student representatives.	Competency 5 Ethics and Professionalism will be assessed in 2019-20	Meet with instructors from courses that cover this competency (PHS 6050, 6060 and 6900); review findings from 6050 and 6060 artifacts and input from 6900 Fall 2018 instructor; present potential assessment rubrics and goals to Doc Cmte in April/May, 2019
	Competency 7 Community/Cultural Orientation will be assessed in 2020-21	Meet with instructors from courses that cover this competency (PHS 6050, 6060 and 6900); review findings from 6050 and 6060 artifacts and input from 6900 Fall 2019 instructor; present potential assessment rubrics and goals to Doc Cmte in April/May, 2020

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1. **Please explain how these assessment efforts are coordinated with Madrid (courses and/or program)?**
   Madrid does not offer a doctoral degree in Public Health Studies.

2. **The program assessment plan should be developed and approved by all faculty in the department. In addition, the program assessment plan should be developed to include student input and external sources (e.g., national standards, advisory boards, employers, alumni, etc.). Describe the process through which your academic unit created this assessment plan. Include the following:**

   a. *Timeline regarding when or how often this plan will be reviewed and revised. (This could be aligned with program review.)*
   Every 3 years the plan will be reviewed and revised as needed.

   b. *How students were included in the process and/or how student input was gathered and incorporated into the assessment plan*.
   Two students are part of the Doctoral Program Committee, representing all doctoral students in Public Health Studies. Student input helped formulate new written exam format.

   c. *What external sources were consulted in the development of this assessment plan.*
   We incorporated many external sources, including our recent CEPH self-study and their feedback for improvement, and other doctoral programs at peer schools of public health.

   d. *Assessment of the manageability of the plan in relation to departmental resources and personnel.*
   The learning curve was steep for both the program director and coordinator. We completed several drafts of the plan prior to getting to this point. The curriculum is still evolving to better align the courses with the competencies, taking into account the revised college workload policy and P&T process. We expect that once assessment protocol is in place, the program assessment will be manageable.

APPENDIX A

Revised October 2017

Doctoral Required Courses (All Concentrations)

PHS 6050: Science Theory and Public Health	First Year Fall		PHS 6010: Design and Analysis in Public Health	First Year Spring		Written Comprehensive Exam: Offered each January and August	2nd or 3rd year
BST 5100 Introduction to General Linear Modeling	First Year Fall		PHS 6040: Applied Research Skills I: Primary Data Collection	First Year Spring		Oral Exam	2nd-4th years
PHS 6900: Professional Development	Any semester but usually (2nd Year)		PHS 6060: Applied Research Skills II: Grantwriting	2nd Year Fall		Dissertation and Defense	3rd-5th years

Competencies for Doctoral Program (All Concentrations)

Domain 1: Critical Thinking	**Courses**
Critically evaluate, integrate and challenge existing scientific knowledge.	PHS 6010, PHS 6040, PHS 6050, PHS 6060, PHS 6900

Domain 2: Analytical Skills	**Courses**
Conduct research studies, and interpret the results using inferential statistical methods and methods of qualitative data analysis.	BST 5100, PHS 6010, PHS 6040, PHS 6050, PHS 6060, PHS 6900

Domain 3: Communication	**Courses**
Demonstrates mastery of written and oral presentations and publications to enhance the effectiveness of dissemination of research to diverse audiences.	PHS 6010, PHS 6040, PHS 6050, PHS 6060; PHS 6900

Domain 4: Management and Leadership	**Courses**
Apply leadership and management principles to assemble and cultivate effective teams and successful projects or studies, including management of team members, budgets, and the project.	PHS 6040, PHS 6050, PHS 6060, PHS 6900

Domain 5: Ethics and Professionalism	**Courses**
Apply ethical principles for public health research and decisions on social justice and equity in the global environment.	PHS 6040, PHS 6060, PHS 6900

Domain 6: Community/Cultural Orientation	**Courses**
Devise research studies that integrate knowledge, awareness and respect for the impact of cultural, structural, legal, political, and public health and social justice on health outcomes	PHS 6010, PHS 6040, PHS 6060, PHS 6900

Domain 7: Translation and Dissemination	**Courses**
Use innovative methods to communicate scientific findings and implications to diverse audiences, ensuring appropriate strategies.	PHS 6010, PHS 6040, PHS 6050, PHS 6060, PHS 6900

APPENDIX B

Science, Theory and Public Health (PHS6050)
Assignment 5:
Presentation of literature review, conceptual approach and research questions

The final presentation allows you to put together in revised form all the assignments you've completed over the semester. The end result enables you to take a crack at what will become chapter 2 of your dissertation: the review of the relevant literature on your research topic.

What follows is an outline of how this chapter will likely take shape. If your topic and reviewed literature requires that you deviate from this outline please explain in the text. For each key element of the outline, I include a brief description of expectations for the section. A rubric with quality criteria and score value for each section is provided in the accompanying table. Use the assigned points in the rubric to guide how much space (or time) you allocate to each component in the final presentation.

Assignment 4 uses the following outline in the form of a 20-minute presentation. The challenge will be to keep your presentation to 20 minutes. You should aim for about a slide per minute – so 15-20 slides. Please send me the slides before class on Dec. 5, 2017.

1. Topic, outcome and rationale (5 points): Introduce your public health topic, specifying an outcome or phenomenon of interest, and providing evidence about why it is important and worthy of inquiry, citing relevant literature.
2. Determinants (30 points): Describe the range of causal (or conceptual) pathways leading to the outcome or phenomenon of concern, citing relevant literature.
3. Conceptual approaches (10 points): Describe the range of conceptual or theoretical approaches relevant to the pathways of interest, citing relevant literature.
4. Summary (10 points): Summarize and synthesize key findings from the review, and specify gaps in the research.
5. Research questions (5 points): Specify your no more than two research questions.
6. Model (10 points): Prepare a figure setting out broad conceptual model for your topic.
7. Model elements (10 points): Define model elements.
8. Conceptual approach (5 points): Name conceptual or theoretical approach applied in the model.
9. Causal model (5 points): Prepare a figure depicting causal pathways and relationships of specific elements for study, including unit of analysis, and Hos, as appropriate.
10. Presentation quality (10 points): Prepare a well-organized paper that clearly presents an area of research that sets the stage for your research study.

APPENDIX B

Topic	Score	Quality criteria
Topic, outcome and rationale (5 points):		• Provides a clear statement of the problem • Poses a good question or problem
Determinants (30 points)		• Explains why the problem is important and significant • Sets the problem in context
Conceptual approaches (10 points)		• Comprehensive but not exhaustive • Shows critical and analytical thinking about the literature • Selects literature wisely and judiciously • Identifies and organizes analysis around themes or conceptual categories
Summary (10 points):		• Uses literature to build a case for research • Synthesizes the literature
Research questions (5 points)		• Well-conceived, logically consistent and internally coherent
Model (10 points)		• Shows understanding and command over the most relevant literature • Uses existing theory well • Complete and correct • Sets the problem in context • Simple and elegant
Model elements (10 points)		• Well-conceived, logically consistent and internally coherent • Uses existing theory well • Complete and correct
Conceptual approach (5 points)		• Well-conceived, logically consistent and internally coherent • Uses existing theory well • Complete and correct
Causal model (5 points)		• Well-conceived, logically consistent and internally coherent
Presentation clarity and quality (10)		• Original, creative, insightful and innovative

PHS 6060: Applied Research Skills 2 -- Grant Review

Doctoral student name: _____

Overall score: ___ (range 1-9)

OVERALL IMPACT

Reviewers will provide an overall impact score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved, in consideration of the following three scored review criteria, and recommendations for improvement. An application does not need to be strong in all categories to be judged likely to have major scientific impact.

Overall Impact *Write a paragraph summarizing the factors that informed your Overall Impact score.*

SCORED REVIEW CRITERIA

Reviewers will consider each of the three review criteria below in the determination of scientific and technical merit, and give a separate score for each.

1. **Significance: ___ (range 1-9)**
Strengths • **Weaknesses** •

2. **Innovation: ___ (range 1-9)**
Strengths • **Weaknesses** •

3. Approach: ___ (range 1-9)
Strengths • **Weaknesses** •

APPENDIX C

Recommendations for improvement

Overall Impact or Criterion Strength	Score	Descriptor
Highs	1	Exceptional
	2	Outstanding
	3	Excellent
Medium	4	Very Good
	5	Good
	6	Satisfactory
Low	7	Fair
	8	Marginal
	9	Poor

APPENDIX D

Rubric for Grading the Comprehensive Exam [1]

Approved by Doctoral Committee 9-7-2016

Component	Pass with distinction (2 points)	Pass (1 point)	Fail (0 points)	SCORE
Introduction	• Well written • Brief, interesting, and compelling • Motivates the work • Has a hook • Provides a clear statement of the problem • Explains why the problem is important and significant • Places the problem in context • Lays out the study's implications • Comprehensive, thorough, complete, coherent, concise, and up to date • Shows critical and analytical thinking about the literature • Synthesizes the literature • Integrates literature from other fields • Displays understanding of the history and context of the problem • Identifies problem and limitations • Is selective-discriminates between important and unimportant works • Identifies and organizes analysis around themes or conceptual categories • Add own insights • Uses literature to build an argument and advance the field • Is like a good review article • Makes readers look at the literature differently	• Well written but less eloquent • Is less interesting; has less breadth, depth, and insight • Motivates the work but less well • Poses a good question or problem • Explains why the problem is important and significant • Comprehensive but not exhaustive • Provides a thoughtful, accurate critique of the literature • Shows understanding of and command over the most relevant literature • Selects literature wisely and judiciously • Sets the problem in context • Uses literature to build a case for the research	• Poorly written or organized • Lacks minimal motivation for the work • Makes a case for a small problem or fails to make any case • Does not do a good job of explaining why the problem is important • Provides minimum or poor context for the problem or fails to present an outline of the research • Presents minimal overview of the work • Contains extraneous material • Provides inadequate or incomplete coverage of the literature • Has clearly not read enough literature nor cites enough sources • Lacks critical analysis and synthesis or misinterprets the literature • Is not selective-does not distinguish between more-and less-relevant works • Misses, omits, or ignores important studies, whole areas or literature of people who have done the same thing • Cites sources student has not read or has only read the abstract • Cites articles that are out of date • Is an undifferentiated list, "This person said this, this person said that" • Does not put problem in context for the research	
Theory	• Original, creative, insightful, and innovative • Simple and elegant • Well-conceived, logically consistent, and internally coherent • Identifies and critically analyzes strength and weakness • Compares or tests competing theories • Advances concepts • Develops, adds to, revises, or synthesizes theory (ies) • Aligns with research question, methods, and observations • Has broad applicability	• Complete and correct • Uses existing theory well • Informs the research question and measures • Identifies where it works and where it does not work	• Is absent, omitted, or wrong • Is misunderstood or misinterpreted • Cannot explain it or why it is being used • Uses inappropriately • Does not align with research question, literature review, or methods • Understands theory at the base level • Does not specify or critically analyze the theory's underlying assumptions	
Methods	• Original, clear, creative, and innovative • Provides thorough and comprehensive description • Flows from question and theory • Uses state-of-the-art tools, techniques, or approaches • Applies or develops new methods, approaches, techniques tools, devices, or instruments • Uses multiple methods • Analysis is sophisticated, robust, and precise • Uses advanced, powerful, cutting-edge techniques	• Appropriate for the problem • Uses existing methods, techniques, or approaches in correct and creative ways • Discusses why method was chosen • Analysis is objective, thorough, appropriate, and correct • Uses standard methods	• Lacks a method • Uses wrong (statistical) method for the problem • Uses (statistical) method incorrectly • Methods do not relate to question or theory • Is fatally flawed or has major confound • Does not describe or describes poorly (insufficient detail) • Is minimally documented • Shows basic competence • Analysis is wrong, inappropriate, or incompetent	

APPENDIX D

Component	Outstanding (2 points)	Very Good (1 point)	Unacceptable (0 points)	SCORE
Results	• Original, insightful • Is aligned with question and theory • Sees complex patterns in the data • Iteratively explores questions raised by analyses • Results are usable, meaningful, and unambiguous • Presents data clearly and cleverly • Makes proper inferences • Provides plausible interpretations • Refutes or disproves prior theories or finding	• Produces rich, high-quality data • Links results to question and theory • Substantiates the results • Provides plausible arguments and explanations	• Produces small amount of this data • Results are correct but not robust • Includes extraneous information and material • Has difficulty making sense of data • Interpretation is too simplistic • Data are wrong, insufficient, fudged, fabricated, or falsified • Data or evidence do not support the theory or argument • Interpretation is too simplistic, and not objective, cogent, or inferences • Overstates the results	
Discussion and conclusion	• Short, clear, and concise • Interesting, surprising, insightful • Summarizes the work • Refers back to the introduction • Ties everything together • Explains what has been accomplished • Underscores and explains major points and findings • Discusses strength, weaknesses, and limitations • Identifies contributions, implications, applications, and significance • Places the work in wider context • Raises new questions and discusses future directions	• Provides a good summary of the results • Refers back to the introduction • States what has been done • Ties everything together • States its contribution • Identifies possible implications • Discusses limitations • Identifies some future directions	• Summarizes what has been accomplished • Repeats or summarizes the results or major points • Repeats the introduction • Does not tie things up • Does not understand the results or what has been done • Claims to have proved or accomplished things that have not been proved or accomplished • Does not address the significance or implications of the research • Does not place the work in context • Identifies a few, nonspecific next steps Does not draw conclusions • Is inadequate or missing	
TOTAL SCORE				

Criterion for Grading:

- These guidelines are to serve as a reference.
- A student will be assessed overall by each component, rather than by individual elements listed in the component.
- All faculty graders must review materials independently and may not share their comments or decisions with the other grader or the tie-breaker. Each grader provides a score for each component and then sums to obtain a total score.
- If a student receives 1 or more fail in any component, a tie breaker will be brought in to decide the final outcome. If both grader 1 and grader 2 issue a fail in any component, the student fails and no tie-breaker will be necessary.

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[1] adapted from: Barbara Lovitts. Making the Implicit Explicit: Creating Performance Expectations for the Dissertation, 2007.

APPENDIX E

PHD ORAL COMPREHENSIVE EXAMINATION
STUDENT OUTCOME EVALUATION WORKSHEET

Approved by Doctoral Committee on 10-6-2016

Student Name: _____ **Date:** _____ **Committee Member Name:** _____

Each committee member completes his/her own worksheet either during the exam or immediately following.

		Fail	Pass	Pass with Distinction	Comments
1	The student has significant breadth and depth of knowledge in the area of emphasis and the dissertation topic.				
2	The student was able to analyze and synthesize information at an appropriate level of a doctoral student.				
3	The research is original and there is potential for publication and dissemination.				
4	The student has adequate knowledge of recent advances in methodological issues relevant to the topic area.				
5	The methodology of the proposed research is rigorous.				
6	The candidate understands the details of the methodological and analytic work related to the dissertation.				
7	The candidate is able to answer additional questions posed by the faculty and adequately participated in a discussion related to the dissertation topic.				
8	The candidate presented in a professional manner with confidence.				

- Committee Members may change their initial votes throughout the process. Members are encouraged to make notes throughout the presentation and Q&A session.
- After the exam, this worksheet will be given to the chair/mentor as a tool to help address problems or deficiencies in the project. The chair/mentor then provides the worksheets to the doctoral program coordinator who keeps them for programmatic quality assessment.

APPENDIX E

PHD ORAL COMPREHENSIVE EXAMINATION
STUDENT OUTCOME EVALUATION WORKSHEET

Approved by Doctoral Committee on 10-6-2016

Criterion for a Failing Grade: A student receives one or more "Fail" in categories 1-7 from three or more members of the committee.

- For example, if committee members A and B felt category 4 was a fail, committee member C felt category 6 was fail, then the student should fail the exam.

Step 1: After the presentation is completed, the mentor conducts at least two formal rounds of questions from the committee members, and then permits follow-up questions and additional inquiries until the committee is finished. The mentor will invite questions from the audience. *It is very important that the student demonstrates his/her command of the topic by answering the questions and may not rely on the committee members for assistance or committee members should not answer for the student*

Step 2: After questions have concluded, the mentor will close the public portion of the examination. Other students, faculty, and guests are excused. The committee, including at-large members, meets in private without the student to discuss the examination and vote using this evaluation worksheet. Based on these votes the mentor will complete the results form and make sure that it is returned to the Doctoral Program Coordinator who will forward it to Graduate Education.

Step 3A: If the student passes the oral exam, the committee calls in the student solely to review what suggestions are being made by the committee and what revisions the student must make as he or she works forward with the formal dissertation committee to revise the Memo of Understanding (MOA) and/or Dissertation Proposal Prospectus. The student has 30 days for to secure those revisions and their formal Dissertation Committee approvals.

Step 3B: If the student fails the oral exam, the doctoral committee program coordinator must be called in along with the student, who will then witness the conversation with the committee and can further explain the steps for retaking the oral exam (see also Section 5 of the 2016-17 Student Handbook).

APPENDIX F

Dissertation Outcome Evaluation Worksheet[1]

Each committee member completes his/her own worksheet either during the dissertation defense or immediately following.

	Written dissertation	Pass with Distinction	Pass	Fail	Comments
1	Introduction				
2	Literature review				
3	Theory				
4	Methods/approach				
5	Results/data analysis				
6	Discussion/conclusion				
	Dissertation defense				
7	The candidate is able to answer additional questions posed by the faculty and adequately participated in a discussion related to the dissertation defense.				
8	*The candidate presented in a professional manner with confidence*				

Unfavorable Dissertation Defense: A student receives one or more "Fail" in categories 1-7 from two or more members of the committee.

- For example, if committee member A felt category 4 was a fail and committee member B felt category 6 was a fail, then the student should fail the exam.

Passing with distinction: A student receives at least 5 "Pass with Distinction" in categories 1-7 from two or more members of the committee.

Passing: A student receives any other combination of scores from the committee members.

APPENDIX F

Dissertation Defense Procedures

Step 1: After the presentation is completed, the chair/mentor conducts at least two formal rounds of questions from the committee members, and then permits follow-up questions and additional inquiries until the committee is finished. The chair/mentor will invite questions from the audience. *It is very important that the student demonstrates his/her command of the topic by answering the questions and not relying on the committee members for assistance.*

Step 2: After questions have concluded, the mentor will close the public portion of the examination. Other students, faculty, and guests are excused. If needed, the committee will meet with the student privately to go over additional questions not suitable for the public forum.

Step 3: The mentor will excuse the student when all questions have concluded in the private portion.

Step 4: The committee will meet in private to discuss the examination and each committee member completes the Dissertation Outcome Evaluation Worksheet. The student's dissertation committee then votes and, based on these votes, the chair/mentor will complete both results form (one for the oral defense and another for the written defense) and returns them, along with worksheets, to the doctoral program coordinator who will forward it to Graduate Education. The committee should return the completed results form in a timely manner after the defense either passing or failing the student. The committee can no longer "hold" the results form until the student completes the requested changes to the Dissertation.

APPENDIX F

Guidelines for Quality Dissertation			
Component	**Pass with Distinction**	**Pass**	**Fail**
Introductions	• Well written • Brief, interesting, and compelling • Motivates the work • Has a hook • Provides a clear statement of the problem • Explains why the problem is important and significant • Places the problem in context • Presents an overview of the theory, methods, results, and conclusions • Lays out the study's implications • Provides a road map of the dissertation	• Well written but less eloquent • Is less interesting; has less breadth, depth, and insight • Motivates the work but less well • Poses a good question or problem • Explains why the problem is important and significant • Provides an overview of the dissertation	• Poorly written or organized • Lacks minimal motivation for the work • Makes a case for a small problem or fails to make any case • Does not do a good job of explaining why the problem is important • Provides minimum or poor context for the problem or fails to present an outline of the research • Presents minimal overview of the work • Contains extraneous material
Literature review	• Comprehensive, thorough, complete, coherent, concise, and up to date • Shows critical and analytical thinking about the literature • Synthesizes the literature • Integrates literature from other fields • Displays understanding of the history and context of the problem • Identifies problem and limitations • Is selective-discriminates between important and unimportant works • Identifies and organizes analysis around themes or conceptual categories • Adds own insights • Uses literature to build an argument and advance the field • Is like a good review article • Makes readers look at the literature differently	• Comprehensive but not exhaustive • Provides a thoughtful, accurate critique of the literature • Shows understanding of and command over the most relevant literature • Selects literature wisely and judiciously • Sets the problem in context • Uses literature to build a case for the research	• Provides inadequate or incomplete coverage of the literature • Has clearly not read enough literature nor cites enough sources • Lacks critical analysis and synthesis or misinterprets the literature • Is not selective-does not distinguish between more-and less-relevant works • Misses, omits, or ignores important studies, whole areas or literature of people who have done the same thing • Misses some important works • Cites sources student has not read or has only read the abstract • Cites articles that are out of date • Is an undifferentiated list, "This person said this, this person said that" • Does not put problem in context for the research
Theory	• Original, creative, insightful, and innovative • Simple and elegant • Well-conceived, logically consistent, and internally coherent • Identifies and critically analyzes strength and weakness • Uses more than one theory • Compares or tests competing theories • Advances concepts • Develops, adds to, revises, or synthesizes theory(ies) • Aligns with research question, methods, and observations • Has broad applicability	• Complete and correct • Uses existing theory well • Informs the research question and measures • Identifies where it works and where it does not work	• Is absent, omitted, or wrong • Is misunderstood or misinterpreted • Cannot explain it or why it is being used • Uses inappropriately • Does not align with research question, literature review, or methods • Understands theory at the base level • Does not specify or critically analyze the theory's underlying assumptions

APPENDIX F

Guidelines for Quality Dissertation			
Component	**Pass with Distinction**	**Pass**	**Fail**
Methods/Approach	• Original, clear, creative, and innovative • Provides thorough and comprehensive description • Identifies strength and weakness/advantages and disadvantages • Flows from question and theory • Uses state-of-the-art tools, techniques, or approaches • Applies or develops new methods, approaches, techniques tools, devices, or instruments • Uses multiple methods	• Appropriate for the problem • Uses existing methods, techniques, or approaches in correct and creative ways • Discusses why method was chosen • Describes advantages and disadvantages	• Lacks a method • Uses wrong (statistical) method for the problem • Uses (statistical) method incorrectly • Methods do not relate to question or theory • Is fatally flawed or has major confound • Does not describe or describes poorly (insufficient detail) • Is minimally documented • Shows basic competence
Results and Data Analysis	• Original, insightful • Uses advanced, powerful, cutting-edge techniques • Analysis is sophisticated, robust, and precise • Is aligned with question and theory • Sees complex patterns in the data • Iteratively explores questions raised by analyses • Results are usable, meaningful, and unambiguous • Presents data clearly and cleverly • Makes proper inferences • Provides plausible interpretations • Discusses limitations • Refutes or disproves prior theories or finding	• Analysis is objective, thorough, appropriate, and correct • Uses standard methods • Produces rich, high-quality data • Links results to question and theory • Substantiates the results • Provides plausible arguments and explanations	• Analysis is wrong, inappropriate, or incompetent • Produces small amount of data • Results are correct but not robust • Includes extraneous information and material • Has difficulty making sense of data • Interpretation is too simplistic • Data are wrong, insufficient, fudged, fabricated, or falsified • Data or evidence do not support the theory or argument • Interpretation is too simplistic, and not objective, cogent, or inferences • Overstates the results
Discussion and Conclusion	• Short, clear, and concise • Interesting, surprising, insightful • Summarizes the work • Refers back to the introduction • Ties everything together • Explains what has been accomplished • Underscores and explains major points and findings • Discusses strength, weaknesses, and limitations • Identifies contributions, implications, applications, and significance • Places the work in a wider context • Raises new questions and discusses future directions	• Provides a good summary of the results • Refers back to the introduction • States what has been done • Ties everything together • States its contribution • Identifies possible implications • Discusses limitations • Identifies some future directions	• Summarizes what has been accomplished • Repeats or summarizes the results or major points • Repeats the introduction • Does not tie things up • Does not understand the results or what has been done • Claims to have proved or accomplished things that have not been proved or accomplished • Does not address the significance or implications of the research • Does not place the work in context • Identifies a few, nonspecific next steps • Does not draw conclusions • Is inadequate or missing

[1] adapted from: Barbara Lovitts. Making the Implicit Explicit: Creating Performance Expectations for the Dissertation, 2007.

APPENDIX G

Calendar Year	# Students	Pubs (1st)	Pubs (other)	Total Pubs	Unique Pubs *(No Duplicates)*	Average Pubs per Student*	Pres (1st)	Pres (other)	Total Presentations *(includes non-peer reviewed conference papers)*	Unique Conference Presentations *(by conference not by poster)*	Avg Presentations per Student	Peer Reviewed Published Abstracts (1st)	Peer Reviewed Published Abstracts (other)	Total Peer Reviewed Published Abstracts	Comments
2016	41	19	62	**81**	**67**	*1.98*	51	74	**125**	**103**	*3.05*	19	32	**51**	1 mid year grad; 1 mid-year withdrawal
2015	40	15	32	**47**		*1.18*	63	58	**121**		*3.03*	4	18	**22**	1 mid year grad; 1 mid-year dismissal
2014	39	0	29	**29**		*0.74*	20	16	**36**		*0.92*				Abstracts not tracked (started in 2015)
2013	39	3	19	**22**		*0.56*	19	15	**34**		*0.87*				
2012	41	10	31	**41**		*1.00*	15	33	**48**		*1.17*				