Stevens Institute of Technology

Howe School of Technology Management

**AACSB
ASSURANCE OF LEARNING PLAN**

Learning Goal Assessment Guide

**Doctor of Philosophy in Technology Management**

 **(Ph.D.)**

**LEARNING GOAL # 3**

**Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.**

**Responsibility: Thomas Lechler**

December 2014

**Table of Contents**

[1. Learning Goal Assessment Guide 3](#_Toc408774910)

[2. Learning Goals 3](#_Toc408774911)

[3. Learning Goal Introduction 3](#_Toc408774912)

[4. Learning Objectives and Traits 4](#_Toc408774913)

[5. Rubrics 5](#_Toc408774914)

[6. Assessment Process 5](#_Toc408774915)

[7. Results of Learning Goal Assessment 5](#_Toc408774916)

[8. Results of Assessment: Spring 2013 7](#_Toc408774917)

[9. Specific Steps Taken in Spring 2013 8](#_Toc408774918)

[10. Outcomes: PhD Learning Goal # 3 after 1 Round of Assessment 8](#_Toc408774919)

[11. Results of Assessment: Spring 2014 8](#_Toc408774920)

[12. Specific Steps Taken in Fall 2014 9](#_Toc408774921)

[13. Outcomes: PhD Learning Goal #3 after 2 Rounds of Assessment 9](#_Toc408774922)

[14. Results of Assessment: Fall 2014 10](#_Toc408774923)

[15. Specific Steps Taken in Fall 2014 11](#_Toc408774924)

[16. Outcomes: PhD Learning Goal #3 after 3 Rounds of Assessment 11](#_Toc408774925)

[17. Close Loop Process – Continuous Improvement Record 11](#_Toc408774926)

[APPENDIX – Activity Report 13](#_Toc408774927)

# Learning Goal Assessment Guide

This guide documents the assessment process for one of the three learning goals in the Ph.D. program. The assessment process is done in accordance of the Assurance of Learning (AoL) plan for the Ph.D. program.

# Learning Goals

The Learning Goals for the Ph.D. program are listed below. The first learning goal covers general skills and is common across all graduate programs within the Howe School.

1. Students can communicate effectively in written and oral presentations and structure research papers.
2. Ph.D. graduates master the core knowledge and research tools in their major field of study.
3. Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.

# Learning Goal Introduction

This guide covers Learning Goal # 3 for the Ph.D. program: Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.

**This goal is assessed at the end of every academic year**. This goal requires students to defend their dissertation proposal within the first three years of their studies.

**There is one primary method of assessment:** Eachstudent has to submit a progress and activity report at the end of every semester.The assessment reviews the submitted activity reports.

**To complete this requirement successfully, students finishing their third year should ideally** have defended their dissertation proposals and those finishing their fourth year need to have defended their dissertation proposals.

# Learning Objectives and Traits

The following table shows the objectives and traits to assess goal 3 of the PH.D. program.

**Learning Goal # 3: Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.**

The goal is to help the students to finish their dissertations within 5 years. There is not a specific timeline when the students should finish their proposal and a delay of a proposal correlates highly with a delay of the dissertation defense and extends the doctoral studies.

|  |  |
| --- | --- |
| **PhD - 3** | **Learning Goal, Objectives and Traits** |
| **GOAL[Lechler]** | **Our Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.** |
| **Objective 1:** | *Students will defend their dissertation proposal within the first three years but at latest in their fourth year of studies.* |
| **Traits** |   |
| Trait 1: | Elapsed time to proposal defense |

# Rubrics

|  |  |
| --- | --- |
| **Objective 1** | *Students will defend their dissertation proposal within the first three years but at latest in their fourth year of studies.* |
|   | **Trait** | **Poor** | **Good** | **Excellent** | **Score** |
|   | **Value** | **0** | **1** | **2** |  |
| Trait 1: | Elapsed time to proposal defense. |  |  |  |   |
| **Criterion:** | **Does not meet expectations: 5years+; Meets: 4years; Exceeds: 3years** |   |   |   |   |

# Assessment Process

All Ph.D. students will be assessed every semester.

|  |  |  |  |
| --- | --- | --- | --- |
| **PhD LEARNING GOAL 3** | **Where and when measured?** | **How measured?** | **Criterion** |
| 3. Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.  | Every semester | Sampling: All PhD students.Activity report. | Dissertation proposals should be defended within the first 3 years. |

Every student has to submit at the end of every semester an activity report (see appendix). This report is the basis for the collection of the necessary data.

# Results of Learning Goal Assessment

The results of the initial learning goal assessments carried out to date are included below.

**Explanation**

The learning goal #3 has one learning objective and is measured using the rubric “Elapsed time to proposal defense”.

The assessment is conducted by classifying students into the three categories:

- Does not meet expectations
- Meets expectations
- Exceeds expectations

The person doing the assessment provides explanatory comments and recommendations on the bottom of the Results Summary Sheet. The recommendations improve content or policies of the program.

# Results of Assessment: Spring 2013

**LEARNING GOAL # 3: Our Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.**

**LEARNING OBJECTIVE # 1: Students will defend their dissertation proposal within the first three years.**

**ASSESSMENT DATE: May 22, 2013 ASSESSOR: Ph.D. Program Committee**

**NO. OF STUDENTS TESTED: 25**

|  |  |  |  |
| --- | --- | --- | --- |
| **Last name** | **First name** | **Year** | **ProposalDefense** |
| **Bao** | **Jin** | **3** | **0** |
| **Chen** | **Rongjuan** | **4** | **0** |
| **Gao** | **Ting** | **4** | **0** |
| **Genc** | **Yegin** | **4** | **0** |
| **Ren** | **Jie** | **4** | **0** |
| **Ren** | **Yong** | **4** | **0** |
| **Wang** | **Kai** | **3** | **0** |
| **Total** |  | **0** |

|  |  |
| --- | --- |
| **Objective 1** | *Students will defend their dissertation proposal within the first three years but at latest in their fourth year of studies.* |
|   | **Trait** | **Poor** | **Good** | **Excellent** | **Score** |
|   | **Value** | **0** | **1** | **2** |  |
| Trait 1: | Elapsed time to proposal defense. | 7 | 0 | 0 | 0 |
| **Criterion:** | **Does not meet expectations: 5years+; Meets: 4years; Exceeds: 3years** | 0 | 0 | 0 | 0 |

**COMMENTS:** None of the students finishing their third year or fourth year have so far defended their proposal.

**REMEDIAL ACTIONS:** Each individual student was specifically set a deadline for the proposal defense**.**

# Specific Steps Taken in Spring 2013

None.

# Outcomes: PhD Learning Goal # 3 after 1 Round of Assessment

|  |  |
| --- | --- |
|  | Objective 1Proposal Defense |
| SPRING 2013 | N.A. |

New policies were implemented after the students started in the program. In particular, the policy for essay based dissertations was defined.

# Results of Assessment: Spring 2014

**LEARNING GOAL # 3: Our Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.**

**LEARNING OBJECTIVE # 1: Students will defend their dissertation proposal within the first three years.**

**ASSESSMENT DATE: July 01, 2014 ASSESSOR: Ph.D. Program Committee**

**NO. OF STUDENTS TESTED: 25**

|  |  |  |
| --- | --- | --- |
| **Last Name** | **First Name** | **ProposalDefense Year** |
| **Ayata\*\*** | **Burak** | **9** |
| **Bao** | **Jin** | **4** |
| **Chen\*** | **Rongjuan** | **5** |
| **Gao\*** | **Ting** | **5** |
| **Genc\*** | **Yegin** | **5** |
| **Ren\*** | **Jie** | **5** |
| **Ren** | **Yong** | **5** |
| **Wang** | **Kai** | **4** |
| **Total** | **8** |

\*These students defended their proposals in Fall 2013 and also defended their dissertations is Spring 2014.

\*\*This is a part-time student who was inherited into the program.

|  |  |
| --- | --- |
| **Objective 1** | *Students will defend their dissertation proposal within the first three years but at latest in their fourth year of studies.* |
|   | **Trait** | **Poor** | **Good** | **Excellent** | **Score** |
|   | **Value** | **0** | **2** | **3** |  |
| Trait 1: | Elapsed time to proposal defense. | 6 | 2 | 0 |  |
| **Criterion:** | **Does not meet expectations: 0; Meets: 2; Exceeds: 3** | 0 | 4 | 0 | .5 |

**COMMENTS:** 2 students defended their proposals within their fourth year of studies. 6 students defended in the beginning of their fifth year and graduated at the end of their fifth year.

**REMEDIAL ACTIONS:** No actions discussed for the coming year**.**

# Specific Steps Taken in Fall 2014

None

# Outcomes: PhD Learning Goal #3 after 2 Rounds of Assessment

|  |  |
| --- | --- |
|  | Objective 1Proposal Defense |
| SPRING 2013 | N.A. |
| SPRING 2014 | Poor |

It is too early to draw conclusion. Current students in their third year are preparing their proposals.

# Results of Assessment: Fall 2014

**LEARNING GOAL # 3: Our Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.**

**LEARNING OBJECTIVE # 1: Students will defend their dissertation proposal within the first three years.**

**ASSESSMENT DATE: December 30, 2014**

**ASSESSOR: Ph.D. Program Committee**

**NO. OF STUDENTS TESTED: 3**

|  |  |  |
| --- | --- | --- |
| **Last Name** | **First Name** | **ProposalDefense Year** |
| **Goren\*** | **Esra** | **6** |
| **Ho\*** | **Ting Yi** | **8** |
| **Li** | **Huaye** | **3** |
| **Total Students** | **3** |

\*These are part-time students who were inherited into the program.

|  |  |
| --- | --- |
| **Objective 1** | *Students will defend their dissertation proposal within the first three years but at latest in their fourth year of studies.* |
|   | **Trait** | **Poor** | **Good** | **Excellent** | **Score** |
|   | **Value** | **0** | **2** | **3** |  |
| Trait 1: | Elapsed time to proposal defense. | 2 | 0 | 1 |  |
| **Criterion:** | **Does not meet expectations: 0; Meets: 2; Exceeds: 3** | 0 | 0 | 3 | 1 |

**COMMENTS:** 1 student defended her proposal within her third year of studies. 2 students defended within their sixth year.

**REMEDIAL ACTIONS:** No direct actions**.**

# Specific Steps Taken in Fall 2014

Change of qualifying examination policy will be introduced in spring 2015 to the faculty.

# Outcomes: PhD Learning Goal #3 after 3 Rounds of Assessment

|  |  |
| --- | --- |
|  | Objective 1Proposal Defense |
| SPRING 2013 | N.A. |
| SPRING 2014 | Poor |
| FALL 2014 | Poor |

It is too early to draw conclusions. Current students in their third year are preparing their proposals to defend in Spring 2015.

# Close Loop Process – Continuous Improvement Record

**Assurance of Learning**

**Assessment/Outcome Analysis**

**Close Loop Process - Continuous Improvement Record Goal 3**

**Program:** Ph.D. in Technology Management

**Goal 3:** Ph.D. students demonstrate capacity to identify and develop a research project for their dissertation in a timely fashion.

**Goal Owner:** Thomas Lechler

**Where Measured:** At the end of the academic year on the program level.

**How Measured:** **Sampling:** Students have to submit a progress and activity report at the end of every semester.

**Description:** Students finishing their third year should ideally have defended their dissertation proposals.

**Closing the Loop: Actions taken on specific objectives**

|  |  |
| --- | --- |
| **Objective 1** | *Student is able to apply project management methodology***.** |
| **When** **Assessed** | *Fall 2014*  |
| **Remedial****Action** | New Qualifying Examination Policy .  |
| **Outcome from Previous assessment:** | Poor. |
| **When Assessed:** | *Spring 2014* |
| **Remedial****Action** | Introduced Essay based Dissertation. |
| **Outcome from previous assessment:** | Poor. |
| **When Assessed:** | *Spring 2013* |
| **Remedial****Action** | *Program underwent a significant change from a part-time program to a full-time program.*  |

Several policies were implemented or are discussed and close to implementation to improve the elapsed time span for the proposal defense.

# APPENDIX – Activity Report

|  |  |
| --- | --- |
| official-logo-clear-bkg | Stevens Institute of TechnologyCastle Point on HudsonHoboken, NJ 07030-5991 |

**Howe School Doctoral Activity Report**

|  |  |
| --- | --- |
| Student Name:  | Advisor Name:  |
| Student Identification No.: \_\_\_\_\_\_-\_\_\_\_-\_\_\_\_\_\_\_\_ |
| Major/Concentration:  |

AREA OF DOCTORAL RESEARCH/ WORKING TITLE OF DISSERTATION:

Activity for: Fall Spring Summer 20 \_\_\_\_

Please list your learning and research activities of the current semester, include preparations for research papers and conferences, passed exams, meetings with the Dissertation Advisory Committee etc.:

|  |  |
| --- | --- |
| Courses taken this period | Grade |
|  |  |
|  |  |
|  |  |
| Qualifying Exams: |  |  |  |
| Dissertation: | Proposal | Defense |
| Papers: | Working Papers | Conference | Proceedings | Journal |
| Research Plan for next semester: |  |
| Overall Self-Evaluation(Satisfied with progress) |  |

Other comments:

Please list your learning and research objectives for the coming semester: include preparations for research papers and conferences, exams etc.:

Please attach your updated CV

STUDENT SIGNATURE DATE

|  |  |  |
| --- | --- | --- |
| Advisor Evaluation: | Satisfactory | Unsatisfactory |

ADVISOR SIGNATURE DATE

(OVER)

INSTRUCTIONS

TO THE STUDENT:

Please list in the activity report all learning and research activities.

1. Which courses have you finished?
2. Have you passed any exams?
3. Have you started to work on your dissertation topic? What have you accomplished?
4. Have you prepared a conference paper or a journal article? To which conference or journal have you submitted?
5. What are your learning and research objectives for the coming semester? Which courses do you plan to take? Do you plan to write a research paper? Do you plan to finish your dissertation proposal?
6. Have you met with members of your dissertation advisory committee?
7. If you have the status of “doctoral candidate” you need to fill out the DAR (Doctoral Activity Report) form. Please use your progress report as the basis for the DAR.
8. Please sign your report and discuss it with your advisor.

TO THE RESEARCH ADVISOR:

Please discuss the activity report with your advisee.

1. Please specify with the student the objectives for the next semester.
2. Please co-sign the report and give a final evaluation.
3. If your advisee has the status of doctoral candidate please sign the Doctoral Activity Report form.
4. Please submit the progress report and if applicable the DAR to the Howe School Ph.D. program director.
5. You will be invited to a review meeting with the Ph.D. program committee.