APPENDIX A

Blank compendium dataset for the *Internal Review of Graduate Program Outcomes* (GPOs, the "B1" process) including *B1 Report Template*

2018

Internal Review (B1) of Graduate Program Outcomes (GPOs) Dataset

Program Name –
(program codes)
Michigan Technological University

Regular, periodic reviews of academic departments and schools provide a formal process for thorough, fact-based documentation and evaluation of academic programs and the infrastructure supporting them, and for setting and acknowledging plans for their growth and improvement. The distinctive feature of these reviews is that they focus uniquely on evaluation of the academic department as an integrated whole, and on the way the department's resources are managed to promote its overall success with its graduate program.

SAMPLE ONLY

Contents

Introduction

This document contains data on your program provided by the Graduate School. Please examine these data to find areas of strength and areas you would like to focus on. Please identify appropriate programmatic goals for the next five years (highlighted in green throughout this document; not all goals are appropriate for your program) which you will translate to your report (see attached template at the end of this document). We ask you to supply some information on publications with student coauthors (see green tables at end of PhD and MS sections). This report provides data on the following measures of quality:

Student success:

Time to candidacy
Time to degree
Completion rate
Placement rate
Attrition rate (and at what stage)
Publications

Department/College measures:

Number of applications received/number admitted
Funding of students: GTA/ GRA/self-supported

Student Satisfaction:

Current student survey (data from 2016; 2014, 2012 and averages. Conducted by Student Affairs and Advancement; only supplied if n>12)

Doctoral Programs
Doctoral Student Data

Table PhD1: PhD Applications and Admissions

Biomedical Engineering	2011	2012	2013	2014	2015	2016	2017	5yr Goal
Applications (Summer and Fall)								
New[1] students enrolled with full funding								
New[1] students enrolled with partial funding **[2]**								
New[1] self-supported students enrolled								
Total students enrolled with full funding (Fall)								
Total students enrolled with partial funding (Fall)								
Total self-supported students enrolled (Fall)								
Total students count (Fall)								
Total students enrolled (Fall, Spring, Summer)[3]								

[1]Counts include Fall, Spring and Summer data for first time MTU students
[2]Partial funded – Students receiving tuition only, hourly or support less than 100% for first time MTU students.
[3]Maximum number of enrolled students for Fall, Spring or Summer

Table PhD2: Fall PhD Student Demographics in Percentages

	2011	2012	2013	2014	2015	2016	2017	5yr Goal
Domestic (US citizens/residents)								
International students								
Under-represented minority[1] students								
Female students								

[1]Includes American Indian/Alaskan Native, African American/Non-Hispanic, Pacific Islander and Hispanic/Hispanic American

Table PhD3: Number of Students Who Have Completed a PhD Milestone in the Cohort Indicated

	2011	2012	2013	2014	2015	2016	2017	5yr Goal
Number in cohort[1]								
Completed qualifying exam								
Completed proposal defense								
Scheduled or held dissertation defense								
Number attrited (left the University)								

[1] For example cohort year 2008 would include Summer 2007, Fall 2017 and Spring 2008.
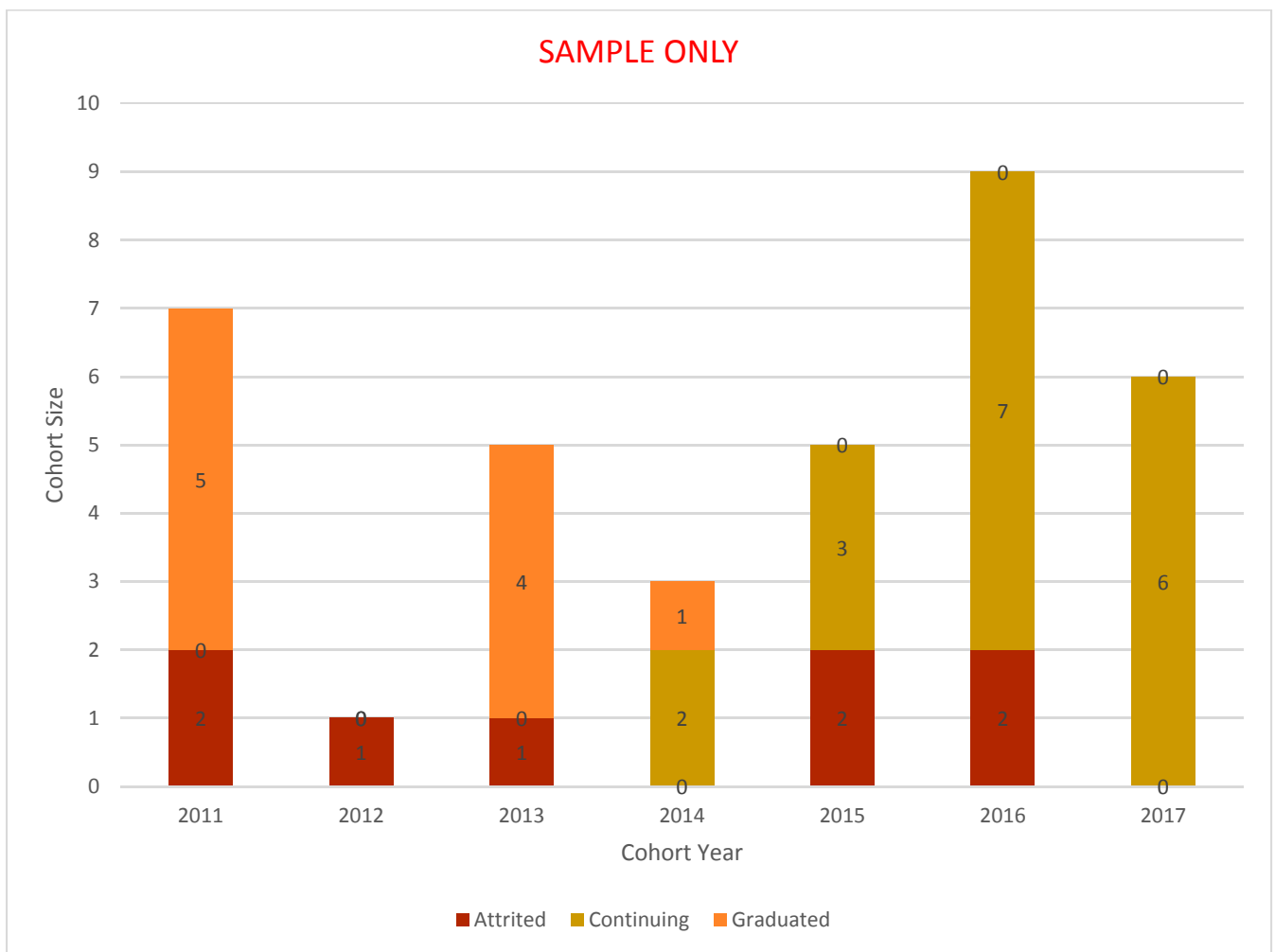

SAMPLE ONLY

Figure PhD 1: Cohort Status: PhD Students Attrited, Attrited with a Master's, Continuing and Graduated by Cohort Year. Cohort detail for this graph on following pages.

Table PhD4: PhD Cohort Detail

Cohort Year	Name	Degree Status[1]	Student Status[2]	Start Term
2011	Sample student 1	Graduated	IG	201008
2011	Sample student 2	Attrited with MS	IG	201005
2011				
2011				
2012				
2013				
2013				
2013				
2014				
2014				
2015				
2015				
2015				
2016				
2016				
2016				
2017				
2017				
2017				

[1]Definitions for Degree Status
 "Graduated" are students who have earned the PhD.
 "Continuing" are students who are still enrolled in the PhD.
 "Attrited with an MS" are no longer pursuing the PhD, but left with an MS
 "Attrited" are students who are no longer pursuing the PhD degree.

[2]Definitions for Student Status
 AS – Active student – currently enrolled
 IS – Inactive student – currently not enrolled
 WM – Medical withdrawal – students not required to register for medical reasons.
 WT – Withdrawal because of a transfer
 GQ – Graduate Quit
 CA – Cancelled enrollment
 IG –Graduated
 NE – Never Enrolled

Table PhD5: Fall Student Funding: Number of Students Receiving Full Funding (tuition + stipend)

Types of Support	2011	2012	2013	2014	2015	2016	2017	5yr Goal
GTA (lab assistant/grader)[1]								
GTI (instructor)[2]								
GRA (research assistant) external funds[3]								
GA (research assistant) internal funds[3]								
GADI (Graduate Administrative Assistantship – internal funds)								
Fellowship (with internal funds)								
Fellowship (with external funds)								
Partial funding								
Self-funded								
Total								

[1]GTA (lab assistant/grader) = assist faculty members in teaching
[2]GTI (instructor) = full responsibility for the course(s) they are assigned to teach
[3]GRA/GA(research assistant) = associated with a specific research grant, contract, or internally supported research project

Table PhD6: PhDs Awarded in Indicated Year, Time to Degree and Placement

Awarded PhD data[1]	2011	2012	2013	2014	2015	2016	2017	5yr Goal
Time to Degree (number of students)								
Time to Degree (mean)								
Time to Degree (median)								
Students with job placement at graduation								
No known job placement								

[1]Counts are based on fiscal year: summer, fall and spring. For example: 2011 count comprises students graduated in Summer 2010, Fall 2010 and Spring 2011.

Departmental Data

Table PhD7: Faculty Involvement in Graduate Education

Number of Faculty	2017
Currently serving as PhD advisor	
Research faculty serving as PhD advisor	

Table PhD 8: Research Productivity of PhD Students Based on Publication Records

Please provide the following data:

	2011	2012	2013	2014	2015	2016	2017	5yr Goal
Number of students with peer-reviewed publications by PhD graduation								
Percentage of students with peer-reviewed publications by PhD graduation								
Total publications from Department								

Additional Measures (The Graduate School does not have data for the following measures. Please provide any information you may have.)
  Regional and national awards
  Alumni feedback

Master's Programs

Master's Student Data

Table MS1: MS Applications and Admissions.

Applied Cognitive Science and Human Factors	2011	2012	2013	2014	2015	2016	2017	5yr Goal
Applications - (Summer and Fall)								
RESEARCH MS								
New[1] students enrolled with full funding								
New[1] students enrolled with partial funding[2]								
New[1] self-supported students enrolled								
Total students enrolled with full funding (Fall)								
Total students enrolled with partial funding (Fall)								
Total self-supported students enrolled (Fall)								
Total students count (Fall)								
COURSEWORK (Professional) MS								
New[1] students enrolled with full funding								
New[1] students enrolled with partial funding[2]								
New[1] self-supported students enrolled								
Total students enrolled with full funding (Fall)								
Total students enrolled with partial funding (Fall)								
Total self-supported students enrolled (Fall)								
Total students count (Fall)								
Total Enrolled Students (Fall, Spring, Summer)[3]								

[1]Counts include Fall, Spring and Summer data for first time MTU students.
[2]Partial funded – Students receiving Tuition Only, Hourly or Support less than 100% for first time MTU students.
[3]Maximum number of enrolled students for Fall, Spring or Summer
Note - Students that have not indicated a path (research or coursework) are only represented here in the Total Enrolled Students count.

Table MS2: Fall MS Student Demographics in Percentages

	2011	2012	2013	2014	2015	2016	2017	5yr Goal
Domestic (US Citizens/residents)	%	%	%	%	%	%	%	
International students	%	%	%	%	%	%	%	
Under-represented minority[1] students	%	%	%	%	%	%	%	
Female students	%	%	%	%	%	%	%	
[1]Includes American Indian/Alaskan Native, African American/Non-Hispanic, Pacific Islander and Hispanic/Hispanic American								

Table MS3: Overall Master's Student Degree Completion Progress. TTD = Time to Degree

		2011	2012	2013	2014	2015	2016	2017	5yr Goal
Research MS	No. students graduated[1]								
	Time To Degree (mean)								
	Time To Degree (median)								
Coursework MS	No. students graduated[1]								
	Mean TTD								
Number attrited[2]									
Attrited students moving to PhD									

[1] Counts based on fiscal year: summer, fall and spring. For example: 2011 count comprises of students graduated in Summer 2010, Fall 2010 and Spring 2011.

[2]Students leaving the program are defined as those who have failed to comply with the continuous enrollment policy for at least two of the most recent academic-year semesters. Date of attrition should be first semester following last enrollment.

Figure MS1: Master's Students Graduated, Currently Enrolled and Attrited by Cohort
Detailed information for the cohort data are on the following pages.

Table MS4: MS Cohorts Detail

Cohort Year	Name	Degree Status[1]	PhD Status[2]	Student Status[3]	Start Term
2011	Sample student 1	Graduated	Attrited with MS	IG	200708
2011	Sample student 2	Graduated			200708
2011					
2013					
2013					
2013					
2014					
2014					
2015					
2015					
2016					
2016					
2016					
2017					
2017					
2017					

[1]Definitions for Degree Status:
"Graduated" are students who have earned the MS degree.
"Continuing" are students who are still enrolled in the MS degree.
"Attrited" are students who are no longer pursuing the MS degree.

[2]Definitions for PhD Status:
"Graduated" are students who have earned the PhD degree.
"Continuing" are students who are still enrolled in the PhD program.
"Attrited with an MS" are no longer pursuing the PhD, but left with an MS
"Attrited" are students who are no longer pursuing the PhD degree.
"NA" are students who were not enrolled in a PhD program during the prior eight years.

[3]Definitions for Student Status:
AS – Active student – currently enrolled
IS – Inactive student – currently not enrolled
MW – Medical withdrawal – students not required to register for medical reasons
WT – Withdrawal because of a transfer
GQ – Graduate Quit
CA – Cancelled enrollment
IG –Graduated
NE – Never Enrolled

Table MS5: Fall Number of Students Receiving Full Funding (tuition + stipend)

Degree Type		2011	2012	2013	2014	2015	2016	2017	5yr Goal
Research MS	GTA(lab assistant / grader)[1]- Research								
	GTA(lab assistant / grader)[1]-Coursework								
	GTI(instructor)[2]								
	GRA (research assistant) external funds[3] -Research								
	GRA (research assistant) external funds[3] -Coursework								
	GA (research assistant) internal funds[3]								
	Fellowship(with internal funds)								
	Fellowship(with external funds)-Research								
	Fellowship(with external funds)-Coursework								
	Partial funding - Research								
	Partial funding - Coursework								
	Self-funded - Research								
	Self-funded -Coursework								
	Total(Research)								
Coursework MS									

[1]GTA (lab assistant/grader) = assist faculty members in teaching
[2]GTI (instructor)= full responsibility for the course(s) they are assigned to teach
[3]GRA/GA = (research assistant) associated with a specific research grant, contract, or internally supported research project

Placement

Table MS6: Post-Graduation Activities

Number of Students Graduating in Indicated Year Going Directly to These	2011	2012	2013	2014	2015	2016	2017	5yr Goal
Going for advanced degree								
Job								
Unknown								
[1]Data may be incomplete. Please share additional information with us.								

Departmental Data

Table MS7: Faculty Involvement in Graduate Education

Number of Faculty	2017
Serving as Master's advisor	
Research faculty serving as MS advisor	

Table MS8: Research Productivity of MS Students Based on Publication Record
Please provide the following data:

	2011	2012	2013	2014	2015	2016	2017	5yr Goal
Number of students with peer-reviewed publications by MS								
Percentage of students with peer-reviewed publications by MS								
Total publications from								

Additional Measures (The Graduate School does not have data for the following measures. Please provide any information you may have.)
       Regional and national awards
       Alumni feedback

Internal Review of Graduate Program Outcomes (B1)
Departmental Report Template
Name of Department

I. Introduction

This Internal Review of Graduate Program Outcomes (GPOs) for the (*name graduate program*(s); *indicate MS, PhD, or both*) was conducted during (*give the school year, i.e. 20xx-20yy*). The data we used for this internal review were supplied by the Graduate School on (*give date data supplied*).

II. PhD Program(s)
A. Program Data on PhD Graduate Program Outcomes (PhD-GPOs)

In separate short sections, briefly report on strengths, weakness, and action plans, as appropriate, for the following quality measures (graduate program outcomes) of your PhD programs.

   a) **Time to candidacy**
   b) **Time to degree**
   c) **Completion rate**
   d) **Attrition rate**
   e) **Publications with student authors**
   f) **Career and Professional development activities**
   g) **Student placement upon completion**
   h) **Additional PhD-GPOs (optional)**

B. Qualifying Examinations/Process for the PhD Degree/PhD Course Requirements

Provide a few sentences narrative describing the examination/process used to qualify students for PhD study.   Do your current examinations/processes adequately meet your program's objectives? Do you have any changes planned?

See Appendix A for a listing of course numbers and titles for all 5000 and 6000 level departmental course offerings. *For the PhD program indicate any that are required. Do you have any changes planned?*

See Appendix B for the program's system of Timely Written Feedback for Graduate Students. *Describe your system there.*

C. Program-Specific PhD requirements

Please provide a copy of program-specific requirements.   Indicate how you make program requirements known to graduate students (e.g. you provide a handbook (provide the current version in Appendix C), direct them to a website, conduct orientation, etc.). If you do not have any handouts, indicate that here.

D. New PhD Programs

If you are considering offering new PhD programs, please describe these briefly, including justification.

E. Student Surveys (PhD)

Summarize salient findings from the current graduate student satisfaction survey (administered by Student Affairs and Advancement; conducted in even years, spring) and the current exit survey (administered by the Graduate School; conducted continuously, compiled even years, summer; for both, receive data from the Graduate School). Include identification of strengths and weaknesses as they apply to the PhD program. Provide action items to address weaknesses or to take advantage of strengths, as appropriate. Include survey results in Appendix D.

F. Special information (PhD)

Include in this section any special information on your PhD program(s) that you would like to provide in order to give context to your report. Please limit this section to as little as a few sentences and at most half a page. Include dataset in Appendix D.

G. Summary of PhD Program Internal Review

Provide an overall summary (short paragraph or two) of your action plans for PhD program improvement. Choose 1-3 action items you plan to implement for the current review cycle and provide a timeline for these actions.

III.   Master's Program(s)
A. Program Data on Master's Graduate Program Outcomes (Master's-GPOs)

In separate short sections, briefly report on strengths, weakness, and action plans, as appropriate, for the following quality measures of your master's programs.

   a) **Time to degree**
   b) **Completion rate**
   c) **Attrition rate**
   d) **Publications with student authors**
   e) **Career and Professional development activities**
   f) **Student placement upon completion**
   g) **Additional Master's-GPOs (optional)**

B. Master's Course Requirements

See Appendix A for a listing of course numbers and titles for all 5000 and 6000 level departmental course offerings. *For the Master's program indicate any that are required. Do you have any changes planned?*

See Appendix B for the program's system of Timely Written Feedback for Graduate Students. *Describe your system there. If the same system is used for PhD and master's students, indicate that here.*

C. Program-Specific Master's requirements

If your master's program has graduate degree requirements above and beyond what is specified by the Graduate School, provide documentation of these here. If there are no program-specific requirements, say so here. Indicate how you make program requirements known to graduate students (e.g. you provide a handbook (provide the current version in Appendix C), direct them to a website, conduct orientation, etc.). If the same documents are used for PhD and master's, indicate that here.

D. New Master's Programs

If you are considering offering new master's programs, please describe these briefly, including justification.

E. Student Surveys (Master's)

Summarize salient findings from the current graduate student satisfaction survey (administered by Student Affairs and Advancement; conducted in even years, spring) and the current exit survey (administered by the Graduate School; conducted continuously, compiled even years, summer; for both, receive data from the Graduate School). Include identification of strengths and weaknesses as they apply to the master's program. Provide action items to address weaknesses or to take advantage of strengths, as appropriate. Include survey results in Appendix D.

F.   Special information (Master's)

Include in this section any special information on your master's program(s) that you would like to provide in order to give context to your report. Please limit this section to as little as a few sentences and at most half a page. Include dataset in Appendix D.

G.   Summary of Master's Program Internal Review

Provide an overall summary (short paragraph or two) of your action plans for master's program improvement. Choose 1-3 action items you plan to implement for the current review cycle and provide a timeline for these actions.

IV.   Summary of Internal Review Report

Provide a brief overall summary of this internal review.

V.   Appendices
   A.   **List of Graduate-Level Courses.** *List the course numbers and titles for all 5000- and 6000-level departmental course offerings.*
   B.   **Timely Written Feedback for Graduate Students.** *Describe the system you use to conduct regular evaluation of graduate students; provide your documents. Indicate the schedule used for the evaluation; indicate how graduate students are made aware of the outcome of their evaluation.*
   C.   **Current year graduate student handbook/handouts, etc.** *Include copies of your graduate student handbook or handouts.*
   D.   **Data on Program Objectives Attainment.** *Include the dataset and survey results supplied by the Graduate School and used in the preparation of this report. Include 5-year goals for objectives in the indicated columns (shaded green).*

APPENDIX B

Administrative Response to Self-Examination of Graduate Program Outcomes (GPOs)

Will take the form of a memo from the Dean of the Graduate School outlining 3-5 bullet points as action items for improvement.

APPENDIX C

Template *Plan for Assessment of Graduate Student Outcomes*

Appendix C

Graduate Student Outcomes Assessment Plan

(Program)
(Year)

I.   Introduction

Assessment is part of our commitment to continuous improvement of our graduate programs at Michigan Tech. Programs set Graduate Learning Objectives (GLOs) for their graduate degree programs. Programs annually assess Graduate Student Outcomes against these objectives. This template document details a Department's Assessment Plan. **Programs submit an annual Assessment Report to the Graduate School (separate template).**

This document describes the Graduate Student Outcomes Assessment Program for the *(name graduate program(s); indicate MS, PhD, or both).*

II.   PhD Program(s)
   A. PhD Graduate Learning Objectives (GLOs)

Articulate here the learning objectives that your program has adopted for its PhD candidates. The number of objectives is not limited, but programs are encouraged to have no more than five objectives.

The PhD Graduate Learning Objectives of our program are:
   1. Tbd
   2. Tbd
   3. Tbd
   4. Tbd
   5. Tbd

   B. Assessment Points for Measuring PhD Graduate Student Outcomes (GSO)

Articulate here the assessment points your program has adopted to measure Graduate Student Outcomes for its PhD candidates.

Assessment Points for Graduate Student Outcomes (GSO) (a measure of student attainment of Graduate Learning Objectives)	PhD Graduate Learning Objectives (GLO) addressed	Notes (evaluation form described)
Tbd		
Tbd		
Tbd		
Tbd		

III.   MS Program(s)
A. MS Graduate Learning Objectives (GLO)

Articulate here the learning objectives that your program has adopted for its MS candidates. The number of objectives is not limited, but programs are encouraged to have no more than five objectives.

The MS Graduate Learning Objectives of our program are:
1. Tbd
2. Tbd
3. Tbd
4. Tbd
5. Tbd

B. Assessment Points for Measuring MS Graduate Student Outcomes (GSO)

Articulate here the assessment points your program has adopted to measure Graduate Student Outcomes for its MS candidates.

Assessment Points for Graduate Student Outcomes (GSO) (a measure of student attainment of Graduate Learning Objectives)	MS Graduate Learning Objectives (GLO) addressed	Notes (evaluation form described)
Tbd		
Tbd		
Tbd		
Tbd		

IV.   Rubrics and Evaluation Forms (PhD and MS)

Rubrics and Evaluation Forms are used to collect results from a variety of assessment points. There are typically four levels assigned to the student performance, for example: *Deficient, Marginal, Satisfactory, Excellent*. Individual evaluation forms are designed for each assessment point, depending on which Graduate Learning Outcomes (GLO) they address. A common rubric for each degree may used (makes the system simpler).

V.   Data Compilation Plan

Departmental faculty are to compile and review annually the graduate student outcomes data, compare Graduate Student Outcomes from prior years to the current year, and compare student outcomes against the intended Graduate Learning Objectives. Indicate here how your program plans to meet this requirement.

Departments are directed to retain annual Data Compilations for all the years between external review cycles. Access to these may be requested by external reviewers.

APPENDIX D

Template *Annual Assessment Report to the Graduate School ("A" process)*

Annual Assessment Report to the Graduate School (Template)

This summary is submitted annually to the Graduate School for each graduate degree program; this is evidence of Departments/Program directors "closing the loop" on assessment.

Department	
Degree Program Name	
Dates of Assessment Data Discussed by involved faculty	
Submitted By	
Submission Date	

I. Summary of Findings/Data Analysis of GLOs (Number of students assessed, any changes to described assessment plan, major findings, points targeted for improvement and why). Please also review and include in your discussion information gleaned from these student surveys: *Graduate Student Exit Surveys and Current Student Satisfaction Surveys* (if provided by the Graduate School; schedule is to do so every other year), as well as from any internal student surveys conducted.

II. Action plan and timeline to improve GLOs (On-going and new activities)

Year Started	Related GLO	Action plan & timeline	Actions taken during this year	Status as of this report

III. Additional Comments (lessons learned, current challenges, anticipated changes/challenges)

Version 30 August 2018