



Saint Louis University Program Assessment Annual Reporting

It is recommended program assessment results be used to *celebrate achievements of student learning as well as to identify potential areas for future curriculum improvement.*

Please email this completed form as an attachment to thatcherk@slu.edu

CAS PROGRAMS: Please email this completed form by July 1 to Donna LaVoie lavoiedj@slu.edu

1. Degree Program(s) included in this report: IAS PhD
 2. Department: IAS
 3. School/Center/College: CAS
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Instructions: Please answer the following **five** questions to the best of your ability for each degree program offered within your department.

1. Summarize your **assessment activities** during the past year for each degree program and how this work relates to the established assessment plan (*e.g. what program outcomes were assessed, faculty discussions, new survey design, data collection, revised assessment plans or learning outcomes, etc.*). Please include how Madrid courses/program were involved.

Learning outcome #1: Students will use scientific principles underpinning the primary scientific discipline in which their concentration is based and by applying basic research methodology, demonstrate their application to their particular field of interest (chemistry, biology, physics, environmental science, sustainability science).

- 14 students completed coursework and received passing grades in all of them.
- 4 students took a written comprehensive exam which re-examines prior coursework understanding and expertise and challenges students to apply knowledge. Student received a full passing grade on all three exam papers.

Learning outcome #2: Students will demonstrate advanced creativity in scientific research methodology in their concentration and appropriately use techniques in a laboratory and/or field setting – including experimental, theoretical, and computational methods.

- 17 students completed 2015 annual evaluation forms and all received 'satisfactory' ratings. Program Director conducted meetings with individual students and their mentors to review progress toward annual goals.
- 3 students took dissertation proposal oral exams which include written dissertation proposals. Students were assessed to have good ability to creative propose independent research projects.
- 3 students defended their final PhD dissertation and were awarded the degree of PhD.

- Student published 12 papers in peer-reviewed journals and conference proceedings and have a further 16 manuscript preparations in progress.

Learning outcome #3: Students will demonstrate an ability to communicate (oral and written) results and conclusions from their research, describe techniques and methodology used, and apply their experiences in the greater world in which we live.

- 17 students completed 2015 annual evaluation forms and all received 'satisfactory' ratings. Program Director conducted meetings with individual students and their mentors to review progress toward annual goals.
- 3 students took dissertation proposal oral exams which include written dissertation proposals. Students were assessed to have good ability to creative propose independent research projects.
- 3 students defended their final PhD dissertation and were awarded the degree of PhD.
- Students published 12 papers in peer-reviewed journals and conference proceedings (0.71 papers/student – an 18 % decrease from the previous year) and have a further 16 manuscript preparations in progress (0.94 manuscripts/student – an 8 % increase from the previous year).
- Students gave a total of 12 presentations at conferences or other scientific meetings (0.71 presentations/student – a 44 % decrease from the previous year).
- 14 students completed the IAS 6030 Current Topics course, each giving oral presentations on recent research literature and all passing with excellent grades.

2. Describe specific **assessment findings** related to the **learning outcomes** assessed for each degree program, including any pertinent context surrounding the findings. Please include the **learning outcomes themselves**. (e.g. *Our goal was that 75% of students performed at the "proficient" level of competency in problem solving, using a new scoring rubric. 81% of students performed at the "proficient" level in problem solving, exceeding our expectations.*) Do not include student-level data. Data included in this report should be in aggregate. Please include how Madrid courses/program were involved.

100 % IAS students completed 2015 annual reports and were given feedback and advice on past work and goals for future productivity in student/mentor meetings with the IAS Program Director (learning outcomes #1,2 and 3).

100 % of students passed coursework with acceptable grades for graduate students (learning outcomes #1 and 3).

100 % students (that attempted candidacy exams) passed written and oral exams thus demonstrating proficiency in research creativity and productivity (learning outcomes #1,2 and 3).

**Please attach any tables, graphics, or charts to the end of this report.*

3. Describe how assessment **feedback** has been provided to students, faculty, and staff. (*e.g. report for faculty, executive summary for the dean, web page for students, alumni newsletter, discussion with students in class or club event, etc.*)

Feedback was given to students in oral dissertation proposal exams with regard to research achievements and future objectives.

Feedback was given to selected students during student/mentor meetings with the IAS Program Director pursuant to written annual reports.

Feedback was given to students in the IAS 6030 Current Topics course with respect to communication skills in research presentations.

4. In what ways have you **used assessment findings** to celebrate student achievements and/or to improve the curriculum this past year? (*e.g. prizes to students, hosting student parties, changes to curriculum, student projects, learning goals, assessment strategies, etc.*)

N/A

5. Describe any changes to your assessment plans, or any challenges or educational experiences with the **assessment process** this past year that you would like to share.

The drop in research presentations is precipitous and should be cause for concern. Research PhD students should be giving public presentations of their research. It may be prudent to investigate with primary mentors why this might be the case. If the reasons are primarily financial, the college should consider providing additional financial assistance to faculty to help send their IAS PhD students to present at conferences, symposia or other scientific meetings.

We have developed rubrics for PhD Dissertation Research Proposals, PhD Dissertations, and PhD final Defenses (attached). These should be used in the upcoming year by dissertation committee members.

*Please submit any **revised/updated assessment plans** to the University Assessment Coordinator along with this report.*