

Master of Science in Health Sciences (MSHS)

Doisy College of Health Sciences

Submitted June 03, 2014

PRELIMINARY PROGRAM ASSESSMENT PLAN

Program Background

The Master of Science in Health Sciences (MSHS) was originally proposed in 2011 as an accelerated one-year, 36-credit hour, research intensive program. At that time, a formal assessment plan was not required for program approval. The program was designed for students interested in a career in research and/or academia, as well as students seeking to strengthen their academic packets for admission into graduate medical, health-related or other professional programs. Due to a number of issues including administrative changes in the Dean's office, the launch of the MSHS program was delayed until the fall of 2013. During this time the program curriculum was evaluated and revised. A new traditional 2-year completion option was developed and approved. Thus, students entering into the program in the fall of 2013 had two completion options from which to choose. The accelerated option was evaluated at the end of the fall 2013 semester. Based on first semester experience and the varied backgrounds of the students, it became clear that more faculty contact hours were needed in order to achieve program goals related to student outcomes. As a result, only the two year option is now available for entering students.

Current Program Description

Saint Louis University's Master of Science in Health Sciences (MSHS) program is designed for individuals with an undergraduate degree, preferably in a health sciences discipline. The MSHS is a 36-credit hour degree program that will equip graduates with the tools and skills necessary to assume a variety of roles in health care that may involve teaching, administrative responsibilities and critical inquiry. It is important to note that this program is not an MCAT preparation course. Rather, the program is in alignment with the rigor expected of students in graduate level professional programs. The program has the potential to enhance applications to such programs by way of exposure to directed research. Students will complete a significant research project suitable for publication in a peer-reviewed journal, professional presentation

or scholarly equivalent by program completion. The ultimate goal of the program is to advance students' knowledge of health sciences fields and critical inquiry.

Program Goals

The purpose of the MSHS program is to:

1. Introduce students to research methods applicable for the health sciences fields.
2. Equip students with the statistical background necessary to perform health sciences research.
3. Provide students with science-based philosophical issues and concepts for consideration.
4. Provide an environment for students to design and conduct health sciences research under the direction of a designated faculty mentor.
5. Give students the opportunity to critically evaluate the literature (with emphasis on journal articles).
6. Provide a suitable environment for students to present research concepts and projects to their colleagues.

Historical and Current State of Program Assessment

The MSHS core team (consisting of five faculty members and one administrative assistant) meet (and continues to meet) every week to conduct an evaluation/assessment of all aspects of the program including but not limited to: student progress, course content, other student issues, course planning, applicant packets, and marketing strategies. Decisions are made as appropriate and evaluated on a regular basis in this format. Meeting minutes are recorded with identified action items assigned to team members as appropriate. Progress on action items is reported, recorded in the meeting minutes, and monitored on a regular basis.

The team began conversations about participation in the university-wide request for key assessment information in the fall 2013. A team meeting took place with Ms. Kathleen Thatcher on March 19, 2014. Ms. Thatcher provided the team with an overview and guidelines of the assessment process as well as reference documents. The MSHS Team is currently in process of developing draft documents for review by Ms. Thatcher. The target time line for the MSHS team to generate a complete draft process for review is end of summer 2014.

A preliminary draft document in the form of two grids that reflects (1) program learning outcomes (descriptions of which are under development); (2) assessment methods; (3) assessment results; and (4) use of assessment data is attached.

SUBMITTED BY:
Elizabeth A. Gockel-Blessing, PhD, MLS(ASCP)^{CM}
Associate Dean for Graduate Education
Interim Associate Dean for Student and Academic Affairs
Program Director | Master of Science in Health Sciences (MSHS)
Associate Professor | Biomedical Laboratory Science
Doisy College of Health Sciences
314.977.8691 | eblessin@slu.edu

MSHS Program Learning Outcomes Assessment Plan

Program Learning Outcomes	Assessment Methods	Assessment Results	Use of Assessment Data
	Direct Measures	Indirect Measures	Analyze Assessment Results
Disciplinary knowledge base (models and theories): Students will be able to explain fundamental concepts in their major area.	Exam and homework assignments	Classroom participation, classroom preparation, writing workshops	95% of students will show proficiency in identifying and explain models and theories in their major area upon completion of the program.
Disciplinary methods: Students will be able to discern best practice in methodology for their research project.	Exams and homework assignments	Research paper, classroom participation, classroom preparation, thesis proposal	95% of students will show proficiency in identifying and explaining best practice in methodology in their major area upon completion of the program.
Disciplinary applications: Students will be able to apply principles and practices in their research.	Exams and homework assignments	Thesis proposal	95% of students will show proficiency in the ability to apply principles and practices in their major area upon completion of the program.
Analysis and use of evidence: Students will be able to analyze data and to use the results to produce evidence relative to their major area.		Classroom preparation, classroom participation, reflective journals, thesis proposal and final thesis	80% of students will be proficient in the ability to analyze data and use the results to provide evidence relative to their major area upon completion of the program.
Evaluation, selection and use of sources of information: Students will have the skills necessary to evaluate, select and use a variety of sources of information in their major area.	Literature review	Project paper, thesis preparation, acquisition of data (primary or secondary means)	<ul style="list-style-type: none"> 95% of students will be proficient in the ability to evaluate, select and use a variety of sources of information in their major area upon completion of the program. 80% of students will be proficient in the ability to analyze data and use the results to provide evidence relative to their major area upon completion of the program. Consider the most positive results – what practices contributed to this success. Consider the most negative results – what practices contributed to this result. Develop a timetable for implementing changes and for

<p>Written communication skills: Students will be able to write proficiently in major area.</p>	<p>Class assignments</p>	<p>Short paper, thesis proposal, briefs, research paper, review of literature, reflections, poster presentations.</p>	<p>80% of students will be proficient in the ability to write proficiently in major area upon completion of the program.</p>	<p>following up to see if the changes made had the intended effect.</p>
<p>Oral communication skills: Students will be able to orally defend proficiently in major area.</p>		<p>Presentations, classroom preparation, classroom participation, practice thesis defense, oral proposal defense, oral final thesis defense</p>	<p>80% of students will be proficient in the ability to orally defend proficiently in major area upon completion of the program.</p>	<p>Decided on the program's focus for the next assessment task.</p>
<p>Disciplinary ethical standards: Student will take all training relative to the Institutional Review Board (IRB).</p>	<p>IRB/Conflict of Interest Training</p>	<p>Submission of proposal to the IRB for research approval</p>	<p>100% of students will take all training relative to the Institutional Review Board (IRB).</p>	
<p>Academic integrity: Students will be able to practice and explain academic integrity.</p>	<p>Exam questions</p>	<p>Thesis proposal, IRB submission</p>	<p>95% of students will be proficient in the ability to practice and explain academic integrity.</p>	
<p>Interpersonal and team skills: Students will be able to work with and solve projects/problems with teams.</p>	<p>Homework assignments</p>	<p>Presentation, discussion board, classroom participation, classroom presentation</p>	<p>90% of students will be proficient in the ability to work with and solve project/problems with teams.</p>	
<p>Self-regulation and metacognition skills: Students will learn to learn and make adjustments to the learning process in response to feedback.</p>		<p>Research proposal, systematic literature review, verbal presentations, poster presentation, practice thesis, IRB submission, Final thesis</p>	<p>90% of students will be proficient in the ability to learn to learn and make adjustments to the learning process in response to feedback.</p>	

MSHS Course and Assessment Map

The emphasis and measurement of success is with the attainment of the Bloom’s taxonomy level associated with the Student Learning Outcomes (SLO). Considering the variability of the desired research topics of individual graduate students and the consistent change in the healthcare environment, the curricular considerations may change with great frequency, but the student learning outcomes would remain consistent over longer periods of time.

		HSC1500 Science and Philosophy	HSC1505 Foundations of US HC System	HSC1510 Seminar I	HSC1515 Seminar II	HSC1520 Seminar III	HSC1525 Qualitative Methods for HS Research	HSC1530 Research I	HSC1535 Research II	HSC1540 Research III
		Content								
SLO 1: Disciplinary knowledge base (models & theories)		Exam questions	Classroom preparation and participation	Exam questions and homework assignments	Classroom preparation and participation	Classroom preparation and participation	Classroom preparation and participation	Exam questions and homework assignments	Classroom preparation and participation	Exam questions and homework assignments
SLO 2: Disciplinary methods	Short paper – research proposal	Research paper	Classroom participation	Classroom participation	Classroom participation	Classroom participation	Classroom participation	Exam questions and homework assignments	Participation by meeting with thesis advisor	Participation by meeting with thesis advisor
SLO 3: Disciplinary applications	Short paper – research proposal		Verbal presentations	Practice thesis proposal defense	Draft research question, introduction, literature review, methods, research matrix, project findings	Thesis Proposal	Thesis Proposal	Final Thesis Preparation		
		Critical Thinking								
SLO 4: Analysis & use of evidence		Classroom preparation and participation, systematic review of the literature	Classroom participation	Classroom participation	Classroom participation	Classroom preparation and participation, reflective journal entries, creative	Thesis Proposal	Preliminary analysis of data.	Analysis of data	

HSCI500 Science and Philosophy HSCI505 Foundations of US HC System HSCI510 Seminar I HSCI515 Seminar II HSCI520 Seminar III HSCI525 Qualitative Methods for HS Research		HSCI530 Research I	HSCI535 Research II	HSCI540 Research III				
SLO 5: Evaluation, selection & use of sources of information		summary of reading, Project Paper	Thesis Proposal	Acquisition of data (primary or secondary means)	Final Thesis Preparation			
Communication								
SLO 6: Written communication skills	Short paper – research proposal, glossary of terms, brief paper 1 and 2	Research paper	Systematic review of the literature	Reflections	Reflections, poster presentation	Journal entries, drafts of research question, introduction, literature review, methods, research matrix, project findings	Thesis Proposal	Prepare proposal for submission to the IRB.
SLO 7: Oral communication skills	Presentations		Classroom preparation and participation, presentation-led discussion of systematic literature review	Verbal presentations	Practice thesis defense	Student led discussions	Oral proposal defense	Oral Final Thesis Defense
Integrity/Values								
SLO 8: Disciplinary ethical standards	IRB/Conflict of Interest Training						IRB/Conflict of Interest Training/Thesis Proposal	Submission of proposal to the IRB for research approval

	HSCI500 Science and Philosophy	HSCI505 Foundations of US HC System	HSCI510 Seminar I	HSCI515 Seminar II	HSCI520 Seminar III	HSCI525 Qualitative Methods for HS Research	HSCI530 Research I	HSCI535 Research II	HSCI540 Research III
SLO 9: Academic integrity							Exam questions and Thesis Proposal	IRB submission	
Project Management									
SLO 10: Interpersonal & team skills	Presentation	Discussion board, discussion board expert	Classroom participation and presentation led discussion	Classroom participation and discussion	Classroom participation	Project presentation	Homework assignments		
SLO 11: Self- regulation & metacognition skills	Short paper – research proposal, brief papers 1 and 2		Systematic literature review	Verbal presentations and practice thesis defense	Poster presentation and practice thesis defense	Project Paper	Thesis Proposal	IRB submission	Final Thesis
	1,2,3	1,2,3	1,2,3,5	1,2,3,5	1,2,3,5	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6
Bloom's Taxonomy									

HSCI505 Foundations of US HC System		HSCI550 Advanced Consortium	HSCIXXX Statistics (in development)	Content
SLO 1: Disciplinary knowledge base (models & theories)	Exam questions			Exam questions
SLO 2: Disciplinary methods	Research paper			
SLO 3: Disciplinary applications				
SLO 4: Analysis & use of evidence		Classroom preparation and participation.	Statistical analysis of sample data	Critical Thinking
SLO 5: Evaluation, selection & use of sources of information				
SLO 6: Written communication skills	Research paper			Communication
SLO 7: Oral communication skills		Classroom preparation and participation.	Classroom participation	
SLO 8: Disciplinary ethical standards				Integrity/Values
SLO 9: Academic integrity				
SLO 10: Interpersonal & team skills	Discussion board, discussion board expert			Project Management
SLO 11: Self-regulation & metacognition skills			Analysis of sample data	Bloom's Taxonomy

HSCI505
Foundations of
US HC System

1,2,3

HSCI550
Advanced
Consortium

1,2,3,5

HSCIXXX
Statistics (in
development)

1,2,3,4

DRAFT

Bloom's Taxonomy

Taxonomy Level	Category	Definition	Verbs
1	Remember	Recall facts, terms, basic concepts of previously learned material	Choose, define, find
2	Understand	Determine meaning and demonstrate clarity of facts and ideas	Collect, depict, describe, explain, illustrate, recognize, summarize
3	Apply	Use differing methods, techniques and information to acquire knowledge and/or solve problems	Adhere to, apply, demonstrate, discover, educate, identify, implement, model, organize, plan, promote, protect, report, utilize, validate
4	Analyze	Contribute to the examination of information in part or aggregate to identify motives and causes	Analyze, benchmark, collaborate, examine, facilitate, format, map, perform, take part in, verify
5	Evaluate	Make judgments in support of established criteria and/or standards	Advocate, appraise, assess, compare, comply, contrast, determine, differentiate, engage, ensure, evaluate, interpret, leverage, manage, mitigate, oversee, recommend
6	Create	Generate new knowledge through innovation and assimilation of data and information	Build, compile, conduct, construct, create, design, develop, forecast, formulate, govern, integrate, lead, master, propose