



# School of Speech, Language, Hearing, and Occupational Sciences 2020-2022 Assessment Report

SLP-A/A Certificate | CSD Leveling Certificate | CSD B.A. | SLP M.S. | SLHS Ph.D.

All areas shaded in gray are to be completed by the department/program.  
This document will be posted online and must be [accessible electronically](#) (including appendices).

## MISSION STATEMENT

The mission of the School of Speech, Language Hearing & Occupational Sciences (SLHOS) is to prepare students for progressive, collaborative, and research-minded careers in speech-language pathology, audiology, and related fields through rigorous academic and clinical training. We strive to be innovative in the use of technology and program delivery to provide services to traditionally underserved regions and populations. Through our emphasis on typical and atypical speech, language, cognition, swallowing, and hearing function, students gain knowledge and skills along with ethical and culturally competent values that foster a commitment to lifelong learning and civic engagement.

Our breadth and depth of programming includes:

- Speech-Language Pathology/Audiology-Assistant (SLP/A-A) Certificate,
- Leveling Post-Baccalaureate Certificate in Communicative Sciences and Disorders (CSD),
- Bachelors of Arts Degree in Communicative Sciences and Disorders (CSD B.A.),
- Masters of Science Degree in Speech-Language Pathology (SLP M.S.), and
- PhD in Speech, Language, and Hearing Sciences (SLHS Ph.D.).

## DEPARTMENT ALIGNMENT WITH PRIORITIES FOR ACTION

After listing each departmental objective, indicate which of the five [Priorities for Action](#) the objective supports. In this section, you may also briefly describe any innovative or noteworthy programs/initiatives that support the Priorities for Action.

SLHOS Objectives:	<i>Priority for Action</i> to which objectives are aligned:
1. SLHOS will continue expand accessible offerings in remote and on-campus ways to provide accessible programming for individuals in all rural areas.	<u>PFA 4: Partner with place</u> Noteworthy actions include: SLHOS has maintained existing and fostered additional community partners to provide clinical training externships across the state, region, and beyond. SLHOS has strategically encouraged alumni to provide clinical services, filling needs resulting from a 20-year gap in graduate SLP program offerings in the state of Montana. Not only has this unit prepared students to be SLP practitioners, we have also instilled deep sense of community engagement through their willingness to take on the supervision and training of preservice SLPs, particularly in rural and tribal communities, where SLP services are notoriously limited.
2. SLHOS will continue to invest in faculty and staff through systematic review and update of roles and responsibilities to	<u>PFA 3: Embody the principle of “mission first, people always”</u> Noteworthy initiatives include: <u>Objective 1, Retain excellent and diverse talent at UM</u> , was addressed through the development of faculty mentorship program. <u>Objective 2, Recruit excellent and diverse talent to UM</u> , was addressed through the inclusion of evidence-based hiring

<p>recognize and support growth expertise.</p>	<p>practices to promote equity, diversity, and inclusion. <u>Objective 3, Improve systems to empower employees and create efficiencies in workload</u>, was addressed through the addition of streamlined interdepartmental communications through the adoption of Teams and development of explicit procedures for workflow using UM Box.</p>
<p>3. SLHOS will continue to establish interprofessional opportunities for collaborative, high-quality, applied research, teaching, and rehabilitation community outreach.</p>	<p><u>PFA 2: Drive excellence and innovation in teaching, learning, and research.</u>  Noteworthy actions include:  <u>Objective 1, Design academic structures and offerings that empower students and faculty as creators and problem solvers</u>, was addressed through our participation in the didactic IPE seminars, IPE committees, and by offering multiple IPE courses.   <u>Objective 2, Expand the types of learners UM serves through enhanced and new learning opportunities</u>, was addressed through community outreach programs, such as UMHM’s inaugural Interprofessional Concussion Clinic that served to provide concussion assessment for community members seeking baseline or post-concussion management. This innovative clinic brings faculty and students from multiple disciplines together to the growing need in the community to improve academic and vocational success post-concussion. Two intensive clinical programs offered in SLHOS (i.e., BSAP and YETI) included participation from faculty and students outside of this department.   <u>Objective 3, Maintain and leverage UM’s R1 status to further expand research and creative scholarship</u>, was evidenced through the numerous opportunities resulting from interprofessional collaborations. During the 2020-2021 and 2021-2022 academic years, SLHOS published nine interprofessional manuscripts in peer-reviewed journals, conducted 11 interprofessional presentations, and submitted four interprofessional grant proposals.</p>
<p>4. SLHOS will establish stackable certificates and degrees for accessible pathways of programming for all students of all levels.</p>	<p><u>PFA 1: Place student success at the center of all we do</u>  Noteworthy actions include:  <u>Objective 1, Increase student persistence and graduation rates</u>, was addressed through the development of these “stackable” programs. Through incremental successes, students have gained greater confidence and persistence to continue their education. Additionally, by offering certificates upon completion of a 1- or 2-year program, students increase their employment opportunities, which in turn helps fund further education (e.g., many students become speech-language pathology assistants upon receiving an SLP-A/A certificate, increasing their earning potential while decreasing the number of hours they work per week, thereby facilitating their ability to complete B.A. while they work).  <u>Objective 3, Strengthen support for students from historically underserved populations</u>, was addressed through expansion of online course offerings. Students who are unable to relocate to Missoula can now earn an SLP-A/A certificate, post-baccalaureate leveling certificate, a B.A. in CSD, and/or an M.S. in SLP.</p>
<p>5. SLHOS will foster faculty research, scholarship, and external funding opportunities by developing and sustaining research agendas.</p>	<p><u>PFA 5: Proudly tell the UM Story</u>  Noteworthy actions include:  <u>Objective 2, Increase positive public sentiment toward and awareness of UM</u>, was addressed through several invited presentations conducted by SLHOS faculty that specifically focus on innovative practices employed and through the recent presentation of a prestigious national award to a recent alumna from the SLP M.S. program. Alumna, Shanna Stack was awarded the <a href="#">Louis M. DiCarlo Award for Recent Clinical Achievement</a> by the American Speech-Language-Hearing Foundation. There is only one individual selected for this prestigious award among a national pool of nominees.</p>

# SLP-A/A CERTIFICATE | LEVELING CERTIFICATE | CSD B.A.

## STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

*These learning outcomes and measurement tools apply to the SLP-A/A Certificate, Leveling Certificate, and CSD B.A. programs unless otherwise specified*

Student Learning Outcomes	Measurement Rubric Tool (applied in specified course and assignment)		Exit &/or Advising Survey
1. Students will <ul style="list-style-type: none"> <li>• classify typical processes of speech and hearing sciences with a criterion of 70% of students scoring greater than 70% on the rubric tool.</li> <li>• rate their learning experience with an average rating of agree to strongly agree on a 4-point scale on an exit survey or advising survey.</li> </ul>	CSD 210 Language Dev	CSD 331 Cranial Nerve Examination Rubric	X
2. Students will <ul style="list-style-type: none"> <li>• classify atypical processes of speech and hearing sciences with a criterion of 70% of students scoring greater than 70% on the rubric tool</li> <li>• rate their learning experience with an average rating of agree to strongly agree on a 4-point scale on an exit survey or advising survey.</li> </ul>	CSD 365 Disorder Paper/ Presentation	CSD 331 Discussion Assignment: Atypical neurological systems	X
3. Students will <ul style="list-style-type: none"> <li>• appraise cultural and ethical qualities for service delivery in speech and hearing sciences with a criterion of 70% of students scoring greater than 70% on the rubric tool.</li> <li>• rate their learning experience with an average rating of agree to strongly agree on a 4-point scale on an exit survey or advising survey.</li> </ul>	CSD 210 Culture Assignment	CSD 320 Dialect Transcription	X
4. Students will <ul style="list-style-type: none"> <li>• demonstrate knowledge of evidence-based practice in clinical processes with a criterion of 70% of students scoring greater than 70% on the rubric tool.</li> <li>• rate their learning experience with an average rating of agree to strongly agree on a 4-point scale on an exit survey or advising survey.</li> </ul>	CSD 205 Case Study Plan	CSD 430 Final Paper  <i>This measurement only applies to the CSD B.A.</i>	X
5. Students will <ul style="list-style-type: none"> <li>• use professional clinical communication skills (in oral &amp; written expression) with a criterion of 70% of students scoring greater than 70% on the rubric tool.</li> <li>• rate their learning experience with an average rating of agree to strongly agree on a 4-point scale on an exit survey or advising survey.</li> </ul>	CSD 205 Case Study Plan	CSD 430 Final Paper  <i>This measurement only applies to the CSD B.A.</i>	X

## RESULTS and MODIFICATIONS

Student Learning Outcomes results	Modifications made to enhance learning
<p><b>OUTCOME 1- ACHEIVED</b>            Typical processes results:</p> <ul style="list-style-type: none"> <li>• <b>100%</b> of students earned a score <math>\geq 70\%</math> on the CSD 210 Language Development Rubric in the fall 2020</li> <li>• <b>100%</b> of students earned a score <math>\geq 70\%</math> on the CSD 210 Language Development Rubric in the fall 2021</li> <li>• <b>86%</b> of students earned a score of <math>\geq 70\%</math> on the CSD 331 Cranial Nerve Examination Rubric in the spring of 2021</li> <li>• <b>88%</b> of students earned a score of <math>\geq 70\%</math> on the CSD 331 Cranial Nerve Examination Rubric in the spring of 2022</li> </ul> <hr/> <p>Exit/Advising Survey:</p> <ul style="list-style-type: none"> <li>• Students completing the Leveling and SLP-A/A programs rated the overall experience on a 4-point scale               <ul style="list-style-type: none"> <li>○ With an average of <b>3.4</b> in 2021</li> <li>○ With an average of <b>3.4</b> in 2022</li> </ul> </li> <li>• Students completing the Bachelor of the Arts program rated the overall experience on a 4-point scale               <ul style="list-style-type: none"> <li>○ With an average of <b>3.6</b> in 2021</li> <li>○ With an average of <b>3.5</b> in 2022</li> </ul> </li> </ul>	<p>Two primary changes have occurred that warrant ongoing modification. First, the SLHOS school transitioned their self-support online leveling certificate to that of University code to allow for ease of transition and transfer of credits across stackable SLP/A-A, leveling, and CSD BA programming. Second, a fully online BA program in CSD was launched, making higher education to individuals in rural areas and to individuals who wish to pursue higher education without interrupting their employment. Because of this substantial growth, the curriculum committee will develop a plan for maintaining quality control as the programs in this unit grow and change.</p>
<p><b>OUTCOME 2- ACHEIVED</b>            Atypical processes results:</p> <ul style="list-style-type: none"> <li>• <b>90%</b> of students earned a score <math>\geq 70\%</math> on the CSD 365 Disorder Paper/Presentation Rubric in the fall 2020</li> <li>• <b>97%</b> of students earned a score <math>\geq 70\%</math> on the CSD 365 Disorder Paper/Presentation Rubric in the fall 2021</li> <li>• <b>90%</b> of students earned a score <math>\geq 70\%</math> on the CSD 331 Discussion Assignment in the spring of 2021</li> <li>• <b>91%</b> of students earned a score <math>\geq 70\%</math> on the CSD 331 Discussion Assignment in the spring of 2022</li> </ul> <hr/> <p>Exit/Advising Survey:</p> <ul style="list-style-type: none"> <li>• Students completing the Leveling and SLP-A/A programs rated the overall experience on a 4-point scale               <ul style="list-style-type: none"> <li>○ With an average of <b>3.4</b> in 2021</li> <li>○ With an average of <b>3.4</b> in 2022</li> </ul> </li> <li>• Students completing the Bachelor of the Arts program rated the overall experience on a 4-point scale               <ul style="list-style-type: none"> <li>○ With an average of <b>3.6</b> in 2021</li> </ul> </li> </ul>	<p>Two primary changes have occurred that warrant ongoing modification. First, the SLHOS school transitioned their self-support online leveling certificate to that of University code to allow for ease of transition and transfer of credits across stackable SLP/A-A, leveling, and CSD BA programming. Second, a fully online BA program in CSD was launched, making higher education to individuals in rural areas and to individuals who wish to pursue higher education without interrupting their employment. Because of this substantial growth, the curriculum committee will develop a plan for maintaining quality control as the programs in this unit grow and change.</p>

Student Learning Outcomes results	Modifications made to enhance learning
<ul style="list-style-type: none"> <li>○ With an average of <b>3.5</b> in 2022</li> </ul>	
<p><b>OUTCOME 3- ACHEIVED</b> Culture and Ethics Results:</p> <ul style="list-style-type: none"> <li>● <b>90%</b> of students earned a score <math>\geq 70\%</math> on the CSD 210 Culture Assignment Rubric in the fall 2020</li> <li>● <b>94%</b> of students earned a score <math>\geq 70\%</math> on the CSD 210 Culture Assignment Rubric in the fall 2021</li> <li>● <b>97%</b> of students earned a score <math>\geq 70\%</math> on the CSD 320 Dialect Transcription Rubric in the fall of 2020</li> <li>● <b>88%</b> of students earned a score <math>\geq 70\%</math> on the CSD 320 Dialect Transcription Rubric in the fall of 2021</li> </ul> <hr/> <p>Exit/Advising Survey: See results in Outcome 1</p>	<p>The SLHOS curriculum committee and the DeWit RiteCare Speech, Language, &amp; Hearing Clinic Director will continue to meet regularly to develop plans to ensure that issues of cultural and linguistic diversity and ethical practices are being integrated into undergraduate programming.</p>
<p><b>Outcome 4- ACHEIVED</b> Research and Evidence-Based Practice Results:</p> <ul style="list-style-type: none"> <li>● <b>100%</b> of students earned a score <math>\geq 70\%</math> on the CSD 205 Sequential Teaching Plan Rubric in 2020</li> <li>● <b>98%</b> of students earned a score <math>\geq 70\%</math> on the CSD 205 Sequential Teaching Plan Rubric in 2021</li> <li>● <b>100%</b> of students earned a score <math>\geq 70\%</math> on the CSD 430 Final Paper Rubric in the fall of 2020</li> <li>● <b>93%</b> of students earned a score <math>\geq 70\%</math> on the CSD 430 Final Paper Rubric in the fall of 2021</li> </ul> <hr/> <p>Exit/Advising Survey: See results in Outcome 1</p>	<p>The SLHOS curriculum committee will continue to meet regularly to develop plans to ensure that issues regarding research foundations and evidence-based practices are being integrated into undergraduate programming.</p>
<p><b>Outcome 5- ACHEIVED</b> Professional Clinical Communication Results:</p> <ul style="list-style-type: none"> <li>● <b>100%</b> of students earned a score <math>\geq 70\%</math> on the CSD 205 Goal Writing Rubric in 2020</li> <li>● <b>96%</b> of students earned a score <math>\geq 70\%</math> on the CSD 205 Goal Writing Plan Rubric in 2021</li> <li>● <b>100%</b> of students earned a score <math>\geq 70\%</math> on the CSD 430 Final Presentation Rubric in the fall of 2020</li> <li>● <b>93%</b> of students earned a score <math>\geq 70\%</math> on the CSD 430 Final Presentation Rubric in the fall of 2021</li> </ul> <hr/> <p>Exit/Advising Survey: See results in Outcome 1</p>	<p>The SLHOS curriculum committee and the DeWit RiteCare Speech, Language, &amp; Hearing Clinic Director will continue to meet regularly to develop plans to ensure that professional clinical communication skills are being sufficiently represented in undergraduate programming.</p>

# MASTER OF SCIENCE IN SPEECH-LANGUAGE PATHOLOGY

## STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

*These learning outcomes and measurement tools apply to the SLP M.S. program unless otherwise specified*

Student Learning Outcomes	Rubric by Course <i>See appendix for rubric and course mapping</i>	Praxis Exam	Exit or Employee Survey
1. Students will demonstrate knowledge (measured as an average score above moderate support on performance rating rubric) of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases, and integrate information pertaining to normal and abnormal human development.	X	X	X
2. Students will demonstrate current knowledge (measured as an average score above moderate support on performance rating rubric) of the principles and methods of prevention, assessment, and intervention and associated clinical application skills for persons with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates of the following disorders in:	X	X	X
<ul style="list-style-type: none"> <li>• Speech Sound Production, to encompass articulation, motor planning and execution, phonology, and accent modification</li> </ul>	X	X	X
<ul style="list-style-type: none"> <li>• Fluency and Fluency Disorders</li> </ul>	X	X	X
<ul style="list-style-type: none"> <li>• Voice and resonance, including respiration and phonation</li> </ul>	X	X	X
<ul style="list-style-type: none"> <li>• Receptive and expressive language to include phonology, morphology, syntax, semantics, pragmatics, prelinguistic/paralinguistic communication and literacy in speaking, listening, reading, and writing</li> </ul>	X	X	X
<ul style="list-style-type: none"> <li>• Hearing including the impact on speech and language</li> </ul>	X	X	X
<ul style="list-style-type: none"> <li>• Swallowing/Feeding, including (a) structure and function of orofacial myology and (b) oral, pharyngeal, laryngeal, pulmonary, esophageal, gastrointestinal, and related functions across the lifespan</li> </ul>	X	X	X
<ul style="list-style-type: none"> <li>• Cognitive aspects of communication, including attention, memory, sequencing, problem solving, and executive functioning</li> </ul>	X	X	X
<ul style="list-style-type: none"> <li>• Social aspects of communication, including challenging behavior, ineffective social skills, and lack of communication opportunities</li> </ul>	X	X	X
<ul style="list-style-type: none"> <li>• Augmentative and alternative communication modalities</li> </ul>	X	X	X
3. Students will demonstrate knowledge and skills (measured as an average score above moderate support on performance rating skill rubric) used in research and of the integration of research principles into evidence-based clinical practice (as evidenced by achieving a level of <i>moderate support</i> [or less] on performance rubrics).	X	X	X

Student Learning Outcomes	Rubric by Course <i>See appendix for rubric and course mapping</i>	Praxis Exam	Exit or Employee Survey
4. Students will have demonstrated the knowledge of standards of ethical conduct, contemporary professional issues and applied clinical skills of oral and written communication sufficient for entry into professional practice (as evidenced by achieving a level of <i>moderate support</i> [or less] on performance rubrics).	X	X	X
5. Students will score a passing rating of 90% or greater on the Praxis Exam, and at least 90% those seeking employment will secure a job within one year of graduation.		X	X

## RESULTS and MODIFICATIONS

Student Learning Outcomes results	Modifications made to enhance learning
<p>OUTCOMES 1 and 2: <b>ACHEIVED</b></p> <ul style="list-style-type: none"> <li>Students demonstrated knowledge and applied skills the areas of typical and atypical processes of and typical processes) of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases (Outcome 1) and in the core content areas of speech, fluency, voice, language, hearing, cognition, swallowing, cognition, and AAC (Outcome 2). <b>96.8%</b> of students (70 total students across 2 graduating classes) graduated and demonstrated competencies in all areas.</li> <li>Exit survey data revealed that students rated the overall program attributes positively; an average score of <b>3.4</b> was reported from the cohorts who graduated in 2021 and 2022, which falls between <i>Strongly Agree</i> and <i>Agree</i> on the four-point scale provided. Items related to typical processes were rated with an average score of 3.2 on this 4-point scale.</li> </ul>	<p>Because all students pursuing a Master of Science degree in SLHOS participate in courses synchronously whether they are on the UM campus or at a distance, the curriculum committee and the DeWit RiteCare Speech, Language, &amp; Hearing Clinic Director will continue to seek and incorporate innovative solutions to didactic and clinical education. This will include development of clinical simulations, increasing the number of interprofessional education (IPE) opportunities, introduction of the FASST Friday model, and a research symposium. The curriculum committee plans to meet regularly to intentionally reflect on each academic year to determine which aspects of our program should be modified to best serve our students. Recent changes that have been adopted in response to students' needs include the addition of a required Motor Speech Disorders course and the addition of a Client and Caregiver Counseling in Communication Disorders elective.</p>
<p>OUTCOME 3: <b>ACHIEVED</b></p> <ul style="list-style-type: none"> <li><b>98.6%</b> of the 71 students who graduated in 2021 and 2022 and demonstrated competency in all areas.</li> <li>Exit Survey data revealed an average student rating of <b>3.18</b> (i.e., <i>Agree</i> to <i>Strongly Agree</i>) on items related to research and evidence-based practices.</li> </ul>	<p>Because all students pursuing a Master of Science degree in SLHOS participate in courses synchronously whether they are on the UM campus or at a distance, the curriculum committee and the DeWit RiteCare Speech, Language, &amp; Hearing Clinic Director will continue to seek and incorporate innovative solutions to didactic and clinical education. This will include development of clinical simulations, increasing the number of interprofessional education (IPE) opportunities, introduction of the FASST Friday model, and a research symposium. The curriculum committee plans to meet regularly to intentionally reflect on each</p>

Student Learning Outcomes results	Modifications made to enhance learning
	<p>academic year to determine which aspects of our program should be modified to best serve our students. Recent changes that have been adopted in response to students' needs include the addition of a required Motor Speech Disorders course and the addition of a Client and Caregiver Counseling in Communication Disorders elective.</p>
<p><b>OUTCOME 4: ACHIEVED</b></p> <ul style="list-style-type: none"> <li>• In the standards of ethical conduct, contemporary professional issues and applied clinical skills of oral and written or other forms of communication, <b>98.6%</b> of students (71 total in 2 graduating classes) graduated and demonstrated competencies in all areas.</li> <li>• Exit Survey: Overall, all survey items related to ethical and clinical professional practice were rated as <b>3.44</b> (<i>Agree to Strongly Agree</i>). Graduates' perceptions of their professional communication skills were rated <b>3.32</b> on a 4-pt scale (<i>Agree to Strongly Agree</i>).</li> </ul>	<p>SLHOS graduate students have consistently adhered to standards of ethical conduct in clinical practice. One student was awarded second place in a national student ethics essay competition through the American Speech-Language-Hearing Association in 2022. SLHOS will continue to maintain these high standards by conducting ongoing program reviews to ensure that ethical standards are well understood and practiced.</p>
<p><b>OUTCOME 5: ACHIEVED</b></p> <ul style="list-style-type: none"> <li>• <b>100%</b> of the students who graduated in 2021 and 2022 passed the Praxis Exam.</li> <li>• <b>84.5%</b> of the students who graduated in 2021 and 2022 secured employment. 41.7% of the students employed in their field were employed in the state of Montana.</li> </ul>	<p>SLHOS will continue to improve how we inform graduating students of how to seek SLP positions (e.g., notify them of job fairs, post job listings to a shared forum, etc.)</p>



# DOCTOR OF PHILOSOPHY IN SPEECH, LANGUAGE, AND HEARING SCIENCES

## STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

*These learning outcomes and measurement tools apply to the SLHS PhD program unless otherwise specified*

Student Learning Outcomes	Classroom and Research (Lab) Performance	Comprehensive Portfolio	Presentations, posters, proposals, and publications	Dissertation
1. Students will demonstrate foundational and fundamental speech, language, and hearing science concepts and knowledge.	X	X	X	X
2. Students will synthesize research that reflects best evidence standards and practices and prepare a feasible and defensible proposal to address a research question.	X	X	X	X
3. Students will plan, collect, create protocols/tools, manage, and analyze data for research projects.				X
4. Students will effectively summarize and Interpret findings that include appropriate reflections on implications in both written and spoken modalities.			X	X
5. Students will prepare or present a competitive research grant proposal, abstract, and/ or manuscript worthy of peer-review.		X	X	

## RESULTS and MODIFICATIONS

*These results and modifications apply to the SLHS PhD program unless otherwise specified*

Student Learning Outcomes results	Modifications made to enhance learning
<p>1. Students will demonstrate foundational and fundamental speech, language, and hearing science concepts and knowledge.</p> <p><b>GOAL MET.</b> One student successfully graduated from the PhD SLHS program, completing her full plan of study with exemplary grades reflecting her mastery of these concepts and knowledge. The other two students currently enrolled in the SLHS PhD program have consistently completed their coursework in the areas of cognition, neuroscience, vocal anatomy and physiology,</p>	<p>SLHOS has created a formal PhD working group to address the ongoing needs of the doctoral program, including experiences, pedagogy, research, and mentorship. Because this doctoral program is still in its infancy, this PhD working group plans to meet multiple times throughout the academic year to reflect on needs and respond to them in a timely fashion. One specific action item that this unit plans to address is the need to add a PhD-level seminar series to advance the rigor of coursework within SLHS.</p>

Student Learning Outcomes results	Modifications made to enhance learning
<p>and receptive and expressive language as they relate to basic and applied speech, language, and hearing sciences. PhD students enrolled in the SLHS program have demonstrated expertise by teaching and/or presenting in masters and undergraduate courses and/or supervision of clinical services in their respective areas of expertise.</p>	
<p>2. Students will synthesize research that reflects best evidence standards and practices and prepare a feasible and defensible proposal to address a research question.  <b>GOAL MET.</b> 100% of the students in the SLHS PhD program attended and successfully presented research proposals. Students have integrated research by working with their respective primary professors in their research labs. One student successfully defended her dissertation (2022).  In addition, another student has successfully completed her preliminary exam, in which she was required to provide foundational evidence and propose address a related research question. The other two PhD students are completing foundational coursework and are not yet ready for preliminary exams.</p>	<p>SLHOS has created a formal PhD working group to address the ongoing needs of the doctoral program, including experiences, pedagogy, research, and mentorship. Because this doctoral program is still in its infancy, this PhD working group plans to meet multiple times throughout the academic year to reflect on needs and respond to them in a timely fashion.</p>
<p>3. Students will plan, collect, create protocols/tools, manage, and analyze data for research projects.  <b>GOAL MET.</b> All current and former SLHS PhD students successfully engage in active research with the primary research mentor as part of the apprenticeship mentorship model. One student successfully completed and defended her dissertation research and one student has successfully planned, collected, created protocols/tools, managed, and analyzed data for research projects. These tools and analyses have been part of peer-reviewed publications and current grant proposals.</p>	<p>SLHOS has created a formal PhD working group to address the ongoing needs of the doctoral program, including experiences, pedagogy, research, and mentorship. Because this doctoral program is still in its infancy, this PhD working group plans to meet multiple times throughout the academic year to reflect on needs and respond to them in a timely fashion.</p>
<p>4. Students will effectively summarize and interpret findings that include appropriate reflections on implications in both written and spoken modalities.  <b>GOAL MET.</b> One student successfully defended her dissertation (2022) and one has demonstrated these learning outcomes as part of her comprehensive exams, and research course assignments. The other two PhD students have not yet reached this stage.</p>	<p>SLHOS has created a formal PhD working group to address the ongoing needs of the doctoral program, including experiences, pedagogy, research, and mentorship. Because this doctoral program is still in its infancy, this PhD working group plans to meet multiple times throughout the academic year to reflect on needs and respond to them in a timely fashion.</p>
<p>5. Students will prepare or present a competitive research grant proposal, abstract, and/ or manuscript worthy of peer-review.  <b>GOAL MET.</b> Two of the four PhD students have published manuscripts in peer-reviewed journals and both have prepared grant proposals. One student's grant proposal was funded.</p>	<p>SLHOS has created a formal PhD working group to address the ongoing needs of the doctoral program, including experiences, pedagogy, research, and mentorship. Because this doctoral program is still in its infancy, this PhD working group plans to meet multiple times throughout the academic year to reflect on needs and respond to them in a timely fashion.</p>

## **FUTURE PLANS FOR CONTINUED ASSESSMENT**

SLHOS has grown and expanded its programming to meet the needs of the region, which is experiencing a critical shortage of speech-language pathologists and audiologists. As the only program in the state to provide speech-language pathology and hearing training, we continue to focus on ways to create pathways for high-quality training in accessible and sustainable ways and will continue to find ways to track the places from which our students are from and the communities in which our graduates go on to serve. As part of our commitment to serve the state, we in SLHOS are working closely with our state stakeholders (Montana Speech Language Hearing Association, Montana State Licensing Board) to create and advocate for the training required for state licensure, and most recently are helping to work to pass legislation requiring speech-language pathology assistant training (such as that developed by UM) to be licensed in the state. This training is also aligned with new American Speech Language Hearing Association SLP-Assistant (SLPA) certification and board examinations. We will work to continue to track our graduates to see if they go on to successfully obtain that licensure and pass their respective exams. We are also working with the UM graduate school to document and track students, and their respective state licensure requirements, according to the new federal State Authorization Reciprocity Agreement. Finally, across all programming we in SLHOS continue to work to secure funding assistance for our students. In addition to submitting and securing federal and state funding to serve critical shortages in rural and underserved areas, we now have one PhD-level graduate assistantship to help recruit and support doctoral students.

Substantial growth in undergraduate programming has resulted in adding multiple sections of courses and even offering some courses with greater frequency. Most of these undergraduate courses are offered online as well as on campus and are often taught by multiple instructors. The SLHOS Curriculum Committee will review course syllabi and assessments to ensure that quality across course sections and instructors is maintained.

The SLHOS Curriculum Committee will collect instructor and student feedback on the new graduate-level educational opportunities (e.g., FASST Fridays, research symposia, etc.) being presented to ensure that these opportunities add value to this graduate program and that the quality meets the rigor of this program of study.

## **APPENDICIES**

1. SLHOS Undergraduate Programs:
  - a. Undergraduate exit surveys for 2021 and 2022
  - b. Undergraduate course rubrics
  - c. Undergraduate curriculum map
  
2. SLHOS Graduate Programs:
  - a. Graduate exit surveys for 2021 and 2022
  - b. Graduate Cumulative Evaluations for 2021 and 2022
  - c. Professionalism rubric
  - d. Clinical Performance Rating Scale
  - e. Knowledge and Skills Acquisition Standards

**Communicative Sciences and Disorders Undergraduate Program Curriculum Map for the  
2020-2021 and 2021-2022 academic years**

Cognitive Skill Level Codes: I = Introductory, D = Developing, M = Mastery

A = Assessment

OUTCOMES:		1. Typical Processes	2. Atypical Processes	3. Culture/Ethics	4. Research	5. Professional Communication
Undergraduate Courses						
CSD 110	Field of CSD	I	I	I	I	I
CSD 210	Speech & language development	D, A		I, A		
CSD 222	Intro to audiology	I	D	I		
CSD 265	Developmental Speech & Language Disorders & Treatment	D, A	D, A	I		
CSD 320	Phonological development & phonetics	I	I	D, A		
CSD 330	Anatomy & physiology of the speech and hearing mechanisms	D	I			
CSD 365	Acquired speech & language disorders	D	D, A	I	I	I
CSD 205	The Clinical Process			D	D, A	D, A
CSD 331	Neurological Bases of Communication & Swallowing	D	D			
CSD 420	Speech Science	D	D			
CSD 430	Senior Capstone				D, A	D, A
CSD 450	Introduction to Aural Rehabilitation		D	D		
Additional sources:						
Undergraduate exit survey						