

Guide to a Degree

in

Speech, Language

and Hearing

Sciences

I N D E X

Speech Language and Hearing Sciences—Promising Professions	2
American Speech-Language-Hearing Association	7
National Student Speech-Language-Hearing Association	8
Letter to Fellow Students	9
Undergraduate Student Manual	10
Includes student review program, the major and minor in speech- language and hearing, objectives of undergraduate training, financial assistance, and post baccalaureate training.	
Course Outline—Speech, Language and Hearing Sciences	13
Requirements for the Certificate of Clinical Competence (CCC)	17

SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY PROMISING PROFESSIONS

There is a big job to do in the growing area of professional specialization called Speech, Language and Hearing Sciences. These fields are expected to grow faster than average through the year 2012. Members of the baby boom generation are now entering middle age, when the possibility of neurological disorders and associated speech, language, swallowing and hearing impairments increases. Medical advances are also improving the survival rate of premature infants and stroke and head trauma victims.

An estimated 22 million Americans suffer from communicative problems associated with impaired hearing, speech and/or language. About one-fourth of the communication problems in this country are seen in individuals between the age of 5 and 21.

*This brochure is organized and written in an effort to share the most meaningful information about the speech and hearing profession with interested individuals. Whenever possible, technical terminology and professional jargon is minimized. Because of the comprehensive nature of the brochure, you may want to be somewhat selective when you initially review it. The **Index** should provide you with an overview of the topical areas.*

All the very best,

*The Faculty of the Speech, Language
and Hearing Sciences Department*

Communication and swallowing are two of our most important abilities. What happens when these functions are disordered? Individuals with communication disabilities -- unable to speak clearly or hear normally -- are potentially the most isolated of humans and suffer numerous problems and rejections. Speech, language and hearing disorders are often compared to an iceberg, in that ten to twenty-five percent of the handicapping condition is what the listener sees and hears when the person speaks. Seventy-five percent of the conditions are beneath the surface and comprise of the feelings and attitudes brought about by the communication or swallowing disorder.

Speech-Language Pathologists and Audiologists find a deep personal reward in their efforts to reduce or eliminate the frustration, loneliness, ridicule and reduced quality of life associated with communication and swallowing disorders. Swallowing disorders can impact the ability to enjoy meals and receive proper nutrition and result in increased health care costs when the need for tube feeding arises. Speech-Language Pathologists can make significant differences in the health and well-being of those who suffer from swallowing difficulties.

A Fast Track Profession:

Speech-Language Pathology and Audiology will be among the hottest professions in the country in the next decade according to recent employment growth projections in the U.S. Bureau of Labor Statistics 2002-2003 Occupational Outlook Handbook. The professions ranked among the top 3 (out of 700) fastest growing professions with the number of audiology positions expected to grow 45% in the next decade and speech-language pathology positions expected to grow 39% by 2010.

*Learn more about these professions at www.asha.org/students/professions.

TYPES OF SPEECH AND LANGUAGE PROBLEMS:

APHASIA:	Disorders of expressing or understanding language associated with brain injury or stroke.
CLEFT PALATE:	Problems which affect speech intelligibility resulting from a facial opening or an abnormal opening between the roof of the mouth and the nose cavity.
STUTTERING:	Involuntary hesitations and/or repetitions of speech often accompanied by a fear of speaking, embarrassment, and some type of bodily struggle when speaking.
VOICE DISORDERS:	Abnormal variations in pitch, quality, loudness, and flexibility of voice.
MISARTICULATION:	Speech sounds may be omitted, substituted, or distorted when speaking.
LANGUAGE:	Any difficulty with the reception and/or production of meaningful linguistic units which may range from reduced vocabulary and sentence length, to restricted verbal expression in the form of omission of articles, prepositions, tense and plural markers and paucity of modifiers. Typically refers to a childhood disorder.
DYSPHAGIA:	A disorder in swallowing that may involve the oral cavity, the pharynx, throat and/or the esophagus.

THE SPEECH-LANGUAGE PATHOLOGIST:

The Speech-Language Pathologist helps children and adolescents who have language disorders to understand and give directions, ask and answer questions, convey ideas and improve the language skills that lead to better academic performance; helps people who have had strokes or experienced brain trauma to regain lost speech, language and/or swallowing; helps those who stutter to regain their fluency; counsels individuals and families to understand and deal with speech, language and swallowing disorders.

THE AUDIOLOGIST:

The Audiologist measures hearing ability, identifies hearing disorders, provides rehabilitative services, assesses amplification devices and instructs in their care, provides training in speech reading, and serves as consultant to government and industry on issues concerning environmental, noise-induced hearing loss.

The Speech, Language and Hearing Scientist:

The Speech, Language and Hearing Scientist investigates the complex processes underlying human communication, explores the impact of psychological, social, and psychophysiological factors on communication; they collaborate with experts in other fields to develop new approaches to treating those with speech, language and hearing disorders.

TYPE OF WORK:

Speech and hearing are so interrelated that the speech-language pathologist and the audiologist must have an understanding of one another's profession. These professionals can find employment in schools, hospitals, public health departments, research agencies, universities, and industrial audiology. Group and private practices settings are also popular. For further information on these settings refer to www.asha.org/students/professions/settings.

Entry Requirements for Careers in the Communication Sciences:

A strong liberal arts focus is recommended on the undergraduate level—typically students obtain a degree in Communication Sciences and Disorders. Graduate work is necessary for ASHA certification and a Master's degree is the entry degree in most work settings.

To work effectively with speech, language, and hearing impaired, one must have strong critical thinking skills, be sensitive, patient, possess personal warmth, and be motivated by the wish to be of service to humanity.

EDUCATION:

A bachelor's degree in speech pathology qualifies the student to apply for further professional training at the master's degree level in order to acquire more specialized skills in speech pathology and/or audiology. The **master's degree** is required to be a certified speech-language pathologist or audiologist. As of 2012, audiologists will need a **Doctor of Audiology (Au.D.)** degree to be certified. A **Doctor of Philosophy (Ph.D.)** degree in speech pathology and/or audiology is critical for research and university level teaching positions. The individual interested in working in public school systems is also often required to attain additional **state licensure** and credentials beyond the bachelor's and/or master's degree. These additional credentials vary with each state.

(Refer to p. 10 of this guide for information on Northern Michigan University's undergraduate program requirements.)

AMERICAN SPEECH- LANGUAGE-HEARING ASSOCIATION

The American Speech-Language-Hearing Association (ASHA) is the professional, scientific, and credentialing association for more than 123,000 members and affiliates who are speech-language pathologists, audiologists and speech-language and hearing scientists in the U.S. and internationally. Activated in 1925 as the American Academy of Speech Correction, the organization became the American Society for the Study of Disorders of Speech in 1927, the American Speech Correction Association in 1934, and assumed its present name in 1978. Formal annual conventions have been held since 1925 and membership records have been kept since 1926.

Mission: ASHA's mission is to promote interest of and provide the highest quality services for professionals in audiology, speech-language pathology, and speech, language and hearing sciences and to advocate for people with communication and swallowing disorders.

MEMBERSHIP: Members are required to hold: 1) a Master's Degree or equivalent with major emphasis in speech pathology, audiology, or speech and hearing science; or 2) a Master's Degree or equivalent with present evidence of active research, interest, and performance in the field of human communication. Members assume the ethical responsibilities designated in the Code of Ethics of ASHA. Members who have achieved unusual professional or scientific goals may be elected to Fellowship by the Committee of Honors. Members who have held membership for ten years and reached the age of 65 may apply for and receive life membership and full membership privileges and exemption from dues payments.

CLINICAL CERTIFICATION: ASHA carries on a program of clinical certification for members who provide clinical services. For these purposes, speech pathology and audiology are regarded as separate areas. Professional certification in ASHA requires successful completion of a Master's Degree in speech pathology or audiology; one year of paid, supervised clinical experience (Clinical Fellowship Year); and attainment of a passing score on the clinical competency (Praxis) examination. Certification of clinical competence is granted in speech pathology or in audiology and indicates that the holder has demonstrated ability to conduct clinical services, train others in the arts and skills of the profession, and is fully trained as a professional worker. A qualified member may be certified in both speech pathology and audiology, although a joint certificate is not issued.

Employment Resources: ASHA's online career center contains employment resources. These include resources for establishing a career and access to the Job Placement Center at the annual ASHA convention.

*Further career information can be accessed at www.asha.org/students/professions/overview.

PUBLICATIONS: ASHA publishes these journals: the *American Journal of Audiology*, the *American Journal of Speech-Language Pathology*, the *Journal of Speech, Language and Hearing Research*, and *Language, Speech and Hearing Services in the Schools*. Published every three weeks, the *ASHA Leader* provides timely news articles and features on issues and trends affecting the Speech-Language pathology and Audiology Professions.

NATIONAL STUDENT SPEECH LANGUAGE AND HEARING ASSOCIATION (NSSLHA)

NSSLHA is a national organization with 11,000 members from chapters in over 294 colleges and universities. Benefits of membership include professional journals, discount rates on conferences, and financial support for student projects. Applications for joining the Association are available in the Speech Language and Hearing Sciences Department.

The NMU Chapter of NSSLHA was begun in the spring of 1978. Speech Pathology majors are not required to belong to the organization, although it is mandatory that each Chapter has ten members who belong to NSSLHA at the national level. Five major objectives of the NMU Chapter are:

- to provide an open channel of communication between faculty and students.
- to make students more aware of their professional field of Speech Pathology.
- to be of service to university departments and local organizations.
- to represent and work with students within the department; to listen to their concerns and serve their needs.

Activities to date have included a variety of fundraisers for local agencies as well as for students who wish to attend the annual ASHA convention, assisting with Bingo at a local nursing home, assisting with children's activities at the local library and at a community center located near campus. NSSLHA members also organize social activities for students in the major.

HELLO, FELLOW STUDENT:

In the midst of educational training in the field of Speech Pathology and Audiology at NMU, I feel rather like a medium-size hemlock in a densely filled forest. Surrounding me are vast numbers of maples, birches, blue spruces and jack pines; some of which are greater in height than I and some of which are sturdier and heartier than I. In spite of the differences among us, we share the same air, the same soil, the same weather. Although the taller trees are more likely to shade the sun and hide the brilliant sky from us at times, they protect us from the wind and give us new heights to which we can aspire. Luckily, nature has decided that, although we all belong to the same general family, each of us is unique and beautiful in our own way. It is from the point of view that each of us is unique with different perceptions, sensitivities and feelings that I undertake the task of giving one student's view of the Department of Speech Language and Hearing Sciences. My position is that of the hemlock in the middle of the forest, or the view of the explorer who is trying to find the way -- and at times cannot see the forest for the trees. Many of my views may not be shared by my fellow students; just as some of my views will probably be very familiar to many students. I welcome you to a journey through my thoughts, but must warn you that there may be other less hazardous or more beautiful paths you should also consider.

In a helping profession such as speech pathology, it is necessary to develop some amount of empathy, and I think the faculty members within the department have greatly assisted students in developing this trait. The relative small enrollment together with the quality of the faculty contributes to making the department one of the best on campus in terms of faculty openness and cooperation with students.

Overall, the curriculum in Speech Language and Hearing Sciences is not an easy one; but, as usual, the amount of time and energy one puts into a course will eventually determine how much one gets in return. Few students are able to escape the pressures that inevitably crop up; competition often becomes a way of life, unfortunately, in order to maintain the required 3.0 GPA and make the grade for graduate school. Whereas the size of the department makes individual attention possible, it may also contribute to feelings of pressure in that students are more easily monitored and expectations based on performance may be generalized. It becomes necessary to realize that pressures are a way of life and ways of minimizing their importance is vital.

I am aware of one theme that keeps recurring in my life; whether as a student or as an employee, life might seem to be a never-ending succession of pitfalls, deadlines, and dilemmas at times, but if one can only look beyond the temporary difficulties, there is usually something of beauty to be found - something worth extracting and savoring. A great source of beauty may be found in people - fellow students within the department are such a source. Whether in need of support or just a friendly face, I have discovered friendships that have been of invaluable worth to me. Take time to search for beauty - that is what makes life so enjoyable.

I wish you luck and perseverance in your journey through the field of study in Speech Pathology.

A Speech Pathology Major

SPEECH LANGUAGE AND HEARING SCIENCES UNDERGRADUATE STUDENT MANUAL

Department Faculty and Staff

HELEN J. KAHN, Ph.D., PROFESSOR
LORI A. NELSON, M.A., ASSISTANT PROFESSOR
JEANNE VERBRIGGHE, M.A., ADJUNCT FACULTY
REBECCA BRESSETTE, ADJUNCT FACULTY
SARAH CLEMENT, M.A., ADJUNCT FACULTY

Before concentrating on the specialized study of speech and hearing disorders, the undergraduate is expected to complete courses in the liberal studies program. This program is based on the principle that well-educated persons need to know more than can be learned from their areas of concentration. Courses are typically completed by the end of the third semester of enrollment. Major professional training courses in speech pathology and audiology and minor area professional emphasis courses are typically completed primarily during the junior and senior years. Additional elective courses in the area of learning disabilities, sociology, psychology, writing and public speaking are selected under the direction of the advisor. These additional elective courses lend themselves to a comprehensive professional training experience.

The liberal studies requirements are designed to help each student acquire the general knowledge, values, and skills needed to attain personal and professional goals and to perform the duties of citizenship in a responsible manner. Courses required to meet the liberal studies requirements fall into six categories:

Division I	Foundations of Communication
Division II	Foundations of Humanities
Division III	Foundations of Natural Sciences-Mathematics
Division IV	Foundations of Social Sciences
Division V	Formal Communication Studies
Division VI	Foundations of Visual and Performing Arts

Each student is required to complete a minimum of 40 credit hours taken from liberal studies divisional courses or from departmental courses especially designated or approved to fulfill the liberal studies requirements. At least 6-8 credit hours shall be taken in each of the above Divisions I-IV. Divisions V and VI require 3-4 credits each. The credits are granted upon achievement of (a) passing grades in designated or approved courses or (b) passing scores on designated or approved proficiency examinations. *Note: A grade of C or better in EN 111 and EN 211 writing courses is required for the Speech, Language and Hearing Sciences major.*

Graduation requirements include completion of a course that has an approved laboratory component, a world cultures course and a health promotion requirement.

Students are advised that it will be necessary for them to earn a Master's Degree in order to achieve certification by the American Speech Language and Hearing Association, which is the national accrediting agency of the speech and hearing profession. Entrance into Graduate Schools in the area of Speech Language and Hearing Sciences typically would require the applicant to demonstrate an undergraduate over-all grade point average (GPA) at or above a 3.0. Additional requirements would be three letters of recommendation describing the student's character, clinical achievement, critical reading and writing skills, and completion of the graduate record examination (GRE).

Student Review Program

The faculty of the Speech Language and Hearing Sciences department regularly review students' progress in the curriculum. A 3.0 GPA is recommended in the major. The students' academic and clinical skills and ability to relate to professional personnel are routinely reviewed. This allows faculty to determine particular strengths and weaknesses of students and to provide them with appropriate advisement.

FINANCIAL ASSISTANCE:

Funding sources may be available from federal, state and local programs, private agencies, foundations and service organizations. Colleges and universities also offer a limited number of awards to students on a competitive basis. Information on student aid at Northern Michigan University is available from the Financial Aids Office (2107 Hedgcock). Other sources of information and scholarships are listed below:

AMBUCS Scholarships for Therapists National AMBUCS provides scholarships to junior or senior undergraduates or those studying at the graduate level in the fields of Speech-Language Pathology, Audiology, Occupational Therapy and Physical Therapy.

AAUW Scholarship The Marquette Branch of the American Association of University Women offers scholarships to undergraduate women who can demonstrate financial need and have clear scholastic and career goals.

www.asha.org/students/financial-aid

www.nmu.edu/foundation/ways_to_give/scholarships

***Funding Sources: A Guide for Future Audiologists, Speech-Language Pathologists and Speech-, Language and Hearing Scientists.* Published by ASHA. Call 888-498-6699 to order. Item #0112018 \$20**

The Major in Speech, Language and Hearing Sciences

This program provides the necessary preparation to be admitted into a graduate program accredited by the Council for Academic Accreditation of the American Speech-Language-and-Hearing Association.

Total Credits Required for Degree 124

Liberal Studies 30-40

Health Promotion 2

Required Courses in Major 52 credit hours

SLHS 150 Introduction to Speech, Language and Hearing
SLHS 160 Anatomy of the Speech and Hearing Mechanism
SLHS 200 Phonetics
SLHS 220 Speech and Voice Science
SLHS 351 Introduction to Audiology
SLHS 355 Language Development
SLHS 455 Language Disorders
SLHS 357 Fluency Disorders
SLHS 359 Introduction to Neurogenic Disorders
SLHS 400 Phonological Disorders
SLHS 459 Cognitive Neuroscience
SLHS 460 Cognition and Aging
SLHS 464 Methods of Diagnosis

Other Required Courses 15 credit hours

This program requires a major/minor in Speech, Language and Hearing Sciences with the following courses added to the curriculum instead of a traditional minor:

BI 104 Human Anatomy and Physiology **OR**
BI 111 Introductory Biology: Principles
PH 101 Eureka: Einstein, the Universe and Everything **OR**
PH 102 Physics of Sound and Music
PY 100S, L, H or G Psychology
PY 305 Psychological Statistics **OR**
MA 171 Introduction to Probability and Statistics

Objectives of Undergraduate Training

- 1) To provide a foundation in basic speech science, anatomy and physiology of the speech and hearing mechanism, phonetics, and acoustics.
- 2) To provide exposure to the intricacies of a variety of communication and swallowing disorders in terms of diagnosis, treatment, and psycho-social ramifications.
- 3) To prepare students for the Master's Degree experience.
- 4) Students will acquire necessary foundation skills in evaluating evidence-based practice.
- 5) Attainment of requisite academic insights and clinical experiences necessary for attainment of the certificate of clinical competence.
- 6) To generate the most effective, efficient, professional interaction with clients.
- 7) To allow more efficient, professional interaction with both the departmental faculty and fellow students.

FALL SEMESTER

WINTER SEMESTER

Freshman Year

EN 111	4 cr.	EN 211D	4 cr.
SLHS 150	4	SLHS 160 (Anatomy and Phys.)	4
PY 100	4	BI 104 or 111	4
Liberal Studies Course		Liberal Studies Course	

Sophomore Year

PH 101 (fall option for Physics)	4	PH 102 (Winter option for Physics)	4
SLHS 200 (Phonetics)	4	SLHS 351 (Audiology)	4
SLHS 220 (Speech/Voice Science)	4	Liberal Studies course	4
Liberal Studies Course		Elective	
		HP 200	

Junior Year

SLHS 355 (Language Devel.)	4	SLHS 356 (Language Disorders)	4
SLHS 357 (Fluency)	4	SLHS 359 (Neurogenics)	4
PY 305 (Psych. Stats.) or MA 171	4	Liberal studies course (300 Level or above)	
Liberal Studies Course (World Cultures)		SLHS 400 (Phonological Disorders)	4

Senior Year

SLHS 459 (Neuroscience)	4	SLHS 465 (Methods of Treatment opt.)	4
SLHS 464 (Diagnostics)	4	SLHS 460 (Cognition and Aging)	4
HP course		Liberal Studies	
Elective		Elective	

Liberal Studies	40 credits
Health Promotion	2 credits
Major/Minor (CD)	67 credits
Electives	15 credits

Total Credits Required for Degree 124 credit hours

MINOR IN SPEECH LANGUAGE AND HEARING SCIENCES

<u>COURSE</u>	<u>TITLE</u>	<u>CREDIT</u>	<u>SEMESTER</u>
SLHS 150	Introduction to Speech, Language and Hearing	4	Fall, Winter
SLHS 200	Phonetics	4	Winter
SLHS 220	Speech and Voice Science	4	Fall
SLHS 351	Introduction to Audiology	4	Winter
SLHS 355	Language Development	4	Fall
SLHS 359	Introduction to Neurogenic Disorders	4	Winter
or			
SLHS 456	Language and Learning Disabilities	4	Winter

It is recommended that the student minoring in Speech, Language and Hearing Sciences complete a minimum of 20 credit hours with courses completed in numbered sequence. This minor is recommended for students majoring in:

Special Education
Education
Nursing
Psychology
Sociology

*Suggestions for Electives include:

- SLHS 252, 253, and 254 (Sign Language)
- SLHS 456 (Language and learning Disabilities- if interest lies in working in education settings)
- SLHS (Methods of Treatment) This course includes a practicum component. It can only be taken with instructor permission through an application process.

A number of courses in Psychology are also very related to the field of Speech, Language and Hearing Sciences. These courses include:

- PY 211 (Psychology of Learning)
- PY 241 (Child Psychology)
- PY 311 (Thinking and Cognition)
- PY 344 (Lifespan Developmental Psychology)
- PY 345 (Psychology of Exceptional Children)
- PY 351 (Psychology of Personality)
- PY 355 (Abnormal Psychology)
- PY 358 (Meaning and Development of Play)

Post-Baccalaureate

It should be noted that persons working as speech pathologists with less than a Master's Degree in Speech Language and Hearing Sciences are in violation of the Code of Ethics of ASHA.

Prior to application to graduate schools, the student must take the Graduate Record Exam. This exam consists of two separate tests: the General Test and the Subject test. The General Test is composed of three parts: verbal, quantitative and analytical writing. For more information on this test, refer to the following website: <http://gradschool.about.com/cs/aboutthegre/a/gre.htm>. A list of graduate programs in Speech-Language Pathology and Audiology can also be found at: www.asha.org/gradguide/

For those who do not wish to go on to graduate study, other avenues to pursue include the following:

- Employment as a Speech-Language Pathology Assistant. These assistants are used to supplement the services of an ASHA-certified Speech-Language Pathologist. They perform tasks, prescribed, directed and supervised by the SLP. Not all states yet employ Speech-Language Pathology Assistants.
- Employment in Education or Early Childhood Education
- Development, promotion or sales of materials, tests, books for use in clinical, education or health care fields
- Rehabilitation counseling, community Outreach
- Health-related professions

Requirements for the Certificate of Clinical Competence (C.C.C.)

For further details on any of the certification requirements, please see the documents at the bottom of the following web page (www.asha.org/about/membership-certification/handbooks/kasa-tips.htm) or Google *KASA requirements by ASHA*.

I. COURSEWORK: 75 semester credit hours (including at least 36 at the graduate level)

Coursework must include transcript credit for each of the following areas: biological sciences, physical sciences, social/behavioral sciences and mathematics.

II. CLINICAL OBSERVATION/PRACTICUM REQUIREMENTS:

- A. Observation: 25 hours of supervised observation required.
- B. Practicum: 375 clock hours of supervised clinical practicum (at least 325 of these hours must be completed at the graduate level)

* Supervision must be provided by individuals who hold the Certificate of Clinical Competence in the appropriate area of practice.

III. CLINICAL FELLOWSHIP YEAR: (CFY)

After completion of the academic coursework and clinical practicum, the applicant must successfully complete a Clinical Fellowship. The Fellowship consists of at least 36 weeks of full-time professional experience or its part-time equivalent. The Fellowship must be completed under the supervision of an individual who holds the CCCs in the area for which certification is sought.

IV. NATIONAL EXAMINATION IN SPEECH PATHOLOGY AND AUDIOLOGY:

- A. After completion of the Master's Degree, the applicant must pass a national examination adopted by ASHA for purposes of certification in speech-language pathology and/or audiology. The Praxis Examinations in Speech-Language Pathology and Audiology are a requirement for ASHA certification and for most state licensing processes.
For further information refer to www.asha.org/students/praxis

Related websites of interest:

www.communicationdisorders.com

www.stutteringhomepage.com

www.isaac-online.org International Society for Augmentative and Alternative Communication

www.nidcd.nih.gov National Institute on Deafness and Other Speech Language and Hearing Sciences

www.advanceforspanda.com ADVANCE for Speech-Pathology and Audiology

www.caslpa.ca website for the Canadian Association of Speech-Language Pathologists and Audiologists

www.members.tripod.com/Caroline_Bowen/faqSLPcareer.html
Speech-Language Pathology Information for Families, Students and Professionals