

Program Name:

Communication Sciences and Disorders

Degree Designation:

Bachelor of Science in Communication Sciences and Disorders

Program Contact Person:

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Department:

Department of Otolaryngology-Head/Neck Surgery and Communicative Disorders

School:

School of Medicine

Implementation Date:

8/2024

Accreditation or Licensure Requirements:

Undergraduate programs in communication sciences and disorders are not accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA). The Master of Science in Communicative Disorders and the Doctor of Audiology degrees—currently in existence at UofL—are accredited by the CAA.

Lead Fiscal Officer's Confirmation and Signature:

As Lead Fiscal Officer of the School of Medicine at the University of Louisville, I have reviewed the budget calculations and approve this letter of intent.

Celeste Carter

Date

Interim Dean's Confirmation and Signature:

As Dean of the School of Medicine at the University of Louisville, I approve this letter of intent proposal and the related financial commitments.

Jeff Bumpous, MD

Date

I. Program Abstract:

The Bachelor of Science (BS) degree in communication sciences and disorders at the University of Louisville (UofL) is a four-year program (minimum 120 credit hours) that seeks to attract top students whose interests center on the biological, physical, sociocultural, and linguistic aspects of human communication and its disorders and differences. The degree exposes students to important questions within an interdisciplinary framework and contributes to the key enterprises within the university's strategic plan to be a great place to work, learn, and invest as well as ensure adherence to the university's Cardinal Principles. Moreover, the degree serves as a prerequisite for admission to graduate school in either audiology (4-year graduate degree) or speech-language pathology (2-year graduate degree). It is important to note that a graduate degree in one of the two fields is required for a student to enter the

workforce as a licensed and certified independent practitioner—Audiologist or Speech-Language Pathologist. The BS degree can be completed via one of two tracks:

- The Traditional Track is designed for students who have yet to decide whether they want to pursue graduate training in audiology or speech-language pathology.
- The 3+4 Accelerated Audiology Track allows certain undergraduate students to apply to UofL's Doctor of Audiology (AuD) graduate program during their junior year. Students fulfill their senior year of undergraduate credits and earn the BS degree after successfully completing the first year of AuD coursework.

II. Educational Program Objectives:

The guiding objectives of the BS in Communication Sciences and Disorders include:

- Students will understand the basic processes and influences related to human communication including developmental, biological, neurological, acoustic, psychological, and cultural conditions.
- Students will understand the basic foundational aspects of typical and disordered communication including areas of prevention, evaluation, intervention, and treatment.
- Students will develop their critical thinking and written/oral communication abilities and be knowledgeable consumers of the research literature as well as the fundamentals of evidence-based practice.
- Students will begin to appreciate their own individual and professional identities while learning how to learn with, from, and about each other through interprofessional paradigms.
- Students will have completed the necessary coursework and experiences to prepare them to apply for admission to graduate programs in speech-language pathology and audiology.

Admission Requirements:

Application to the BS in Communication Sciences and Disorders is made during the fall of a student's sophomore year. The minimum admission requirements are as follows:

- Completion of a minimum of 40 credit hours with a cumulative GPA of 3.00.
- Completion of CMDS 245 (Survey of Communication Disorders) with a grade of C or higher
- Completion of CMDS 270 (Clinical Observation) with a grade of "pass"
- Application

Graduation Requirements:

The following graduation requirements must be satisfied:

- Complete an online degree application by the specified date at the beginning of the semester of graduation.
- Complete an application for and be accepted for admission into a major program.
- Satisfy all Cardinal Core requirements.
- Complete all required courses and program requirements listed in the degree program of studies.
- Have a cumulative university GPA of at least 2.00, or higher if specified by the program.
- Complete a minimum of 120 credit hours of study.
- Complete at least 60 hours at an accredited four-year institution.
- Complete at least 25% of the total credit hours required for the degree in residence at UofL.
- Complete 30 of the last 36 hours in residence at UofL.
- Have neither missing nor outstanding I or X grades.
- Be formally recommended for the baccalaureate degree by the unit faculty and dean and approved by the Board of Trustees.

Curriculum:

- A total of 31 credit hours of Cardinal Core coursework is required.
- A total of 50 credit hours of major coursework is required (in the department).

- A total of 21 credit hours of coursework external to the department is required.
- A total of 18 credit hours of elective coursework is needed to bring the credit hour total to 120.

The suggested course sequence can be found in Appendix A.

Existing Courses:

The following required courses are currently offered, both within the Department and through collaboration with other units within the university.

- **PSYC 571:** Speech Science (3 credits)
- **PSYC 306:** Lifespan Developmental Psychology (3 credits)
- **EDSP 240:** Introduction to Exceptional Children (3 credits)
- **ITP 115:** Deaf Heritage and Culture (3 credits)
- **LING 325:** Introduction to Linguistics (3 credits)
- **LING 522:** Structure of Modern American English (3 credits)
- **HSS 393:** Medical Terminology (3 credits)
- **ASL 101:** American Sign Language 1 (3 credits)
- **ASL 201:** American Sign Language 2 (3 credits)
- **CMDS 270:** Clinical Observation (1 credit) | Course # to be changed.
- **CMDS 430:** Aural Rehabilitation (3 credits)
- **CMDS 463:** Clinical Phonetics (3 credits)
- **CMDS 464:** Normal Speech/Language Development (4 credits)
- **CMDS 405:** Introduction to Audiological Techniques (3 credits)
- **CMDS 471:** Functional Neuroanatomy (3 credits)
- **CMDS 430:** Aural Rehabilitation for the Speech/Language Pathologist (3 credits)
- **CMDS 474:** Multicultural Issues in Communicative Disorders (3 credits)
- **CMDS 245:** Survey of Communication Disorders (3 credits) | Course # to be changed.
- **CMDS 500:** Independent Study (3 credits) | Course # to be changed.
- **CMDS 595:** Special Topics (3 credits) | Course # to be changed.

The following required courses for the 3+4 Accelerated Audiology Track are currently offered within the Department; no new courses are needed. The courses below are graduate level courses. The program will develop undergraduate co-listings consistent with historical actions for CMDS courses and ensure differential requirements for undergraduate versus graduate enrollees.

- **AUDI 500:** Anatomy and Physiology for Communication Sciences (3 credits) | Course # to be changed.
- **AUDI 504:** Essential Techniques in Audiometry (3 credits) | Course # to be changed.
- **AUDI 506:** Acoustics (3 credits) | Course # to be changed.
- **AUDI 514:** Clinical Techniques I (1 credit) | Course # to be changed.
- **AUDI 510:** Clinical Clerkship I (1 credit) | Course # to be changed.
- **AUDI 526:** Assessment and Management of Vestibular Disorders (3 credits) | Course # to be changed.
- **AUDI 524:** Amplification Technology (3 credits) | Course # to be changed.
- **AUDI 522:** Electrophysiologic Techniques in Audiology (3 credits) | Course # to be changed.
- **AUDI 515:** Clinical Techniques II (2 credits) | Course # to be changed.
- **AUDI 510:** Clinical Clerkship I (1 credit) | Course # to be changed.

New Courses:

The following new courses (with descriptions) will require development and are consistent with the American Speech-Language-Hearing Association (ASHA) guidelines and review of similar undergraduate degree programs both statewide and nationally.

CMDS 272: Anatomy and Physiology: Speech/Hearing Mechanisms (3 credits)

Description: This course introduces students to the anatomical and physiological principles relevant to

communication sciences and disorders by integrating clinical information with everyday experiences.

CMDS 402: Speech Sound Disorders (3 credits)

Description: This course emphasizes causes, identification and treatment of articulation and phonological disorders.

CMDS 412: Disorders of Language (3 credits)

Description: This course presents an introduction to the various language disorders manifested by children and adolescents with a focus on characteristics, etiologies and general intervention approaches; includes an introduction to language analysis and language diversity.

CMDS 450: Diagnostics (3 credits)

Description: This course provides an overview of the principles and practices involved in performing in-depth diagnostic evaluations with individuals exhibiting speech and/or language dysfunction. Students will gain experience in taking case histories, formulating an assessment battery, evaluating patients, writing diagnostic reports and interpreting the data to parents and/or involved disciplines.

CMDS 490: Clinical Methods (3 credits)

Description: This course focuses on treatment principles, methods, and procedures often used in speech-language pathology practice; includes behavior modification.

CMDS 495: Clinical Experiences (1 credit)

Description: Students will learn practical and foundational clinical reasoning skills through guided observations, field-based experiences, and virtual simulations under the direct supervision of a licensed and ASHA certified speech-language pathologist; may include international experiences/service.

III. Linkage with the Mission and Strategic Plan:

The BS in Communication Sciences and Disorders is designed to reflect the tenets within UofL's mission and strategic plan overall as well as the unit's and department's individual targets by:

- Partnering with UofL's Office of Diversity and International Affairs as well as the Woodford Porter Scholars program and other campus organizations to recruit and retain underrepresented groups,
- Partnering with UofL's Office of Study Abroad and International Travel to develop opportunities for global cross-cultural study, research, and/or service-learning projects,
- Harnessing cooperative interdependence in each course by championing team-based learning and team-based projects; cooperation over competition,
- Including CMDS 495 (Clinical Experiences) as a required course allowing students opportunities to practice clinical reasoning skills through guided observations, field-based experiences, and virtual simulations,
- Including CMDS 500 (Independent Study) as a required course connecting student interests with faculty initiatives to facilitate collaborations, mentorship, and an overall improved culture of research, and
- Including CMDS 474 (Multicultural Issues in Communicative Disorders) as a required course highlighting the impact of culture and cultural variation on language and communication.

IV. Diversity and Inclusion:

The BS in Communication Sciences and Disorders is poised to address diversity, equity, and inclusion (DEI) in the following tangible ways:

- Undergraduate and Graduate students in Communication Sciences and Disorders will be given opportunities—individually and in small groups—to identify and acknowledge the impact of both implicit and explicit bias with respect to clinical service delivery through surveys and regular (i.e., annual), mandatory workshops/trainings (virtually and face-to-face),
- The curriculum is designed to foster improved awareness regarding the tenets of DEI—in part—through required completion of: CMDS 270, CMDS 474, ITP 115 as well as cultural and linguistic variance embedded within other required coursework,

- Advisors within the program will work to enhance the visibility of financial aid and work-study opportunities to promote networking, opportunities for research, and to help ease the cost-burden often associated with higher education.
- The admissions processes will involve the removal of standardized tests as a requirement for admission and will partner with UofL’s Office of Diversity and International Affairs well as the Woodford Porter Scholars program and other campus organizations to recruit and retain underrepresented groups.
- The program will also capitalize on the Metroversity program to facilitate outreach to prospective students at Simmons College, Boyce College and other institutions within the Louisville Metro.

V. Student Demand:

The MS graduate program in Communicative Disorders at UofL currently allows undergraduate Junior and Senior level students to enroll in our leveling program. The students are allowed to complete approximately 23 credit hours of elective speech-language pathology coursework. Many of these students go on to apply to our graduate program in communicative disorders, seek admission to other speech-language pathology graduate programs in the state of Kentucky, or pursue other graduate or professional degrees here at UofL or elsewhere. Current UofL undergraduate students routinely attend prospective student meetings and inquire as to “why” UofL does not have an undergraduate option (in communication sciences and disorders). Table 1 provides a sample of “unedited” emails (redacted for privacy) highlighting interest in the undergraduate program.

Table 1. “Unedited” Emails

| |
|--|
| <p>I am very interested in UofL's Speech-Language Pathology and I want to be able to apply to the core program. I am an undergraduate at UofL. Do you know of certain classes I need to take in order to make it into the program. For example, what classes at UofL work for the Audiology or Speech/Hearing Science prerequisites?</p> |
| <p>Good afternoon. My name is Olivia [REDACTED] and I am a junior undergraduate psychology student at UofL. I am highly interested in attending UofL to continue my education through the speech-language pathology graduate school program. Would you be available to meet with me within the next few weeks to discuss a plan for taking preparatory phase courses and discussing details of graduate school? I look forward to hearing from you.</p> |
| <p>I am working with a student that is attending HCC for the fall and spring semester. She is interested attended U of L but since a undergraduate in speech pathology isn’t offered, is there any possibility that she could complete a BS or BA with U of L in another curriculum?</p> |
| <p>My name is Devyn [REDACTED] and I am a undergraduate student at UofL. I am interested in pursuing a career in speech pathology and was told to reach out to the program when I am a junior to see if I qualify to take classes. I am a sophomore this year but I will have completed 71 credit hours at the end of the fall semester. I was given your contact information from a student currently taking speech pathology classes. I am not sure what the hours required to be considered a junior are but I wanted to reach out and see if I would be able to take classes at your school next semester.</p> |
| <p>Hello, I am currently a first semester freshman at UofL. I’m really interested in becoming a speech pathologist, however, the school does not offer any undergraduate major or courses that I know of which would help with getting prerequisites out of the way before graduate school. I was wondering if you know of any majors at UofL that would best prepare me for the coursework. I am currently Education with an English and Learning and Behavior Disorders Track.</p> |
| <p>Hi, I am a senior in high school and I am considering pursuing the career of speech pathology. I have a few questions regarding the program. First, the website says that the program is accredited until 2023, will the university renew the accreditation after that? Also my second question is, when applying to Louisville what major should I select for speech pathology? I read on the website that it is best to have a major in speech pathology before entering the masters program but that major does not show up on the application.</p> |

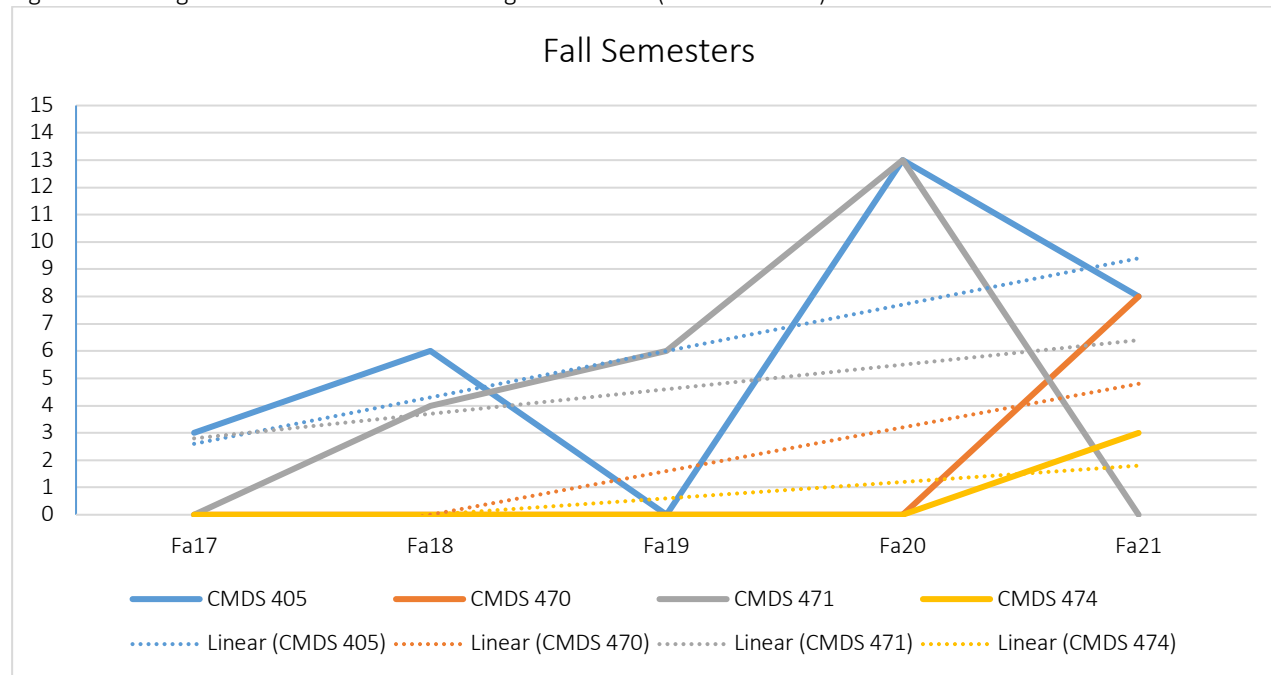
Table 2 shows an overall increase in the percentage of undergraduate students enrolling in the six of eight allowed leveling courses. Data is not available for PSYC 571 (Speech Science) and CMDS 474 (Multicultural Issues); CMDS 474 is a new course for fall 2021. Figures 1 and 2 present the same information in visual form that includes positive

trendlines for both fall and spring undergraduate enrollment. It is important to note that our courses are only taught once a year.

Table 2. Undergraduate Enrollment in Leveling Coursework

| | Sp17 | Fa17 | Sp18 | Fa18 | Sp19 | Fa19 | Sp20 | Fa20 | Sp21 | Fa21 | Sp22 |
|----------|-----------|-----------|-----------|-----------|------------|-----------|------------|------------|------------|-----------|-----------|
| CMDS 464 | 30% (n=3) | --- | 20% (n=3) | --- | 67% (n=14) | --- | 50% (n=9) | --- | 55% (n=11) | --- | 21% (n=3) |
| CMDS 463 | 33% (n=5) | --- | 33% (n=5) | --- | 68% (n=15) | --- | 50% (n=10) | --- | 50% (n=9) | --- | 50% (n=7) |
| CMDS 430 | 29% (n=4) | --- | 18% (n=3) | --- | 36% (n=5) | --- | 38% (n=8) | --- | 45% (n=10) | --- | 21% (n=3) |
| CMDS 405 | --- | 23% (n=3) | --- | 33% (n=6) | --- | --- | --- | 54% (n=13) | --- | 50% (n=8) | --- |
| CMDS 471 | --- | --- | --- | 36% (n=4) | --- | 40% (n=6) | --- | 54% (n=13) | --- | --- | 50% (n=7) |
| CMDS 470 | --- | --- | --- | --- | --- | --- | --- | --- | 100% (n=8) | 57% (n=8) | --- |
| CMDS 474 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19% (n=3) | --- |

Figure 1. Undergraduate Enrollment in Leveling Coursework (Fall Semesters)



*Students were not permitted to enroll in CMDS 405 during fall 2019.

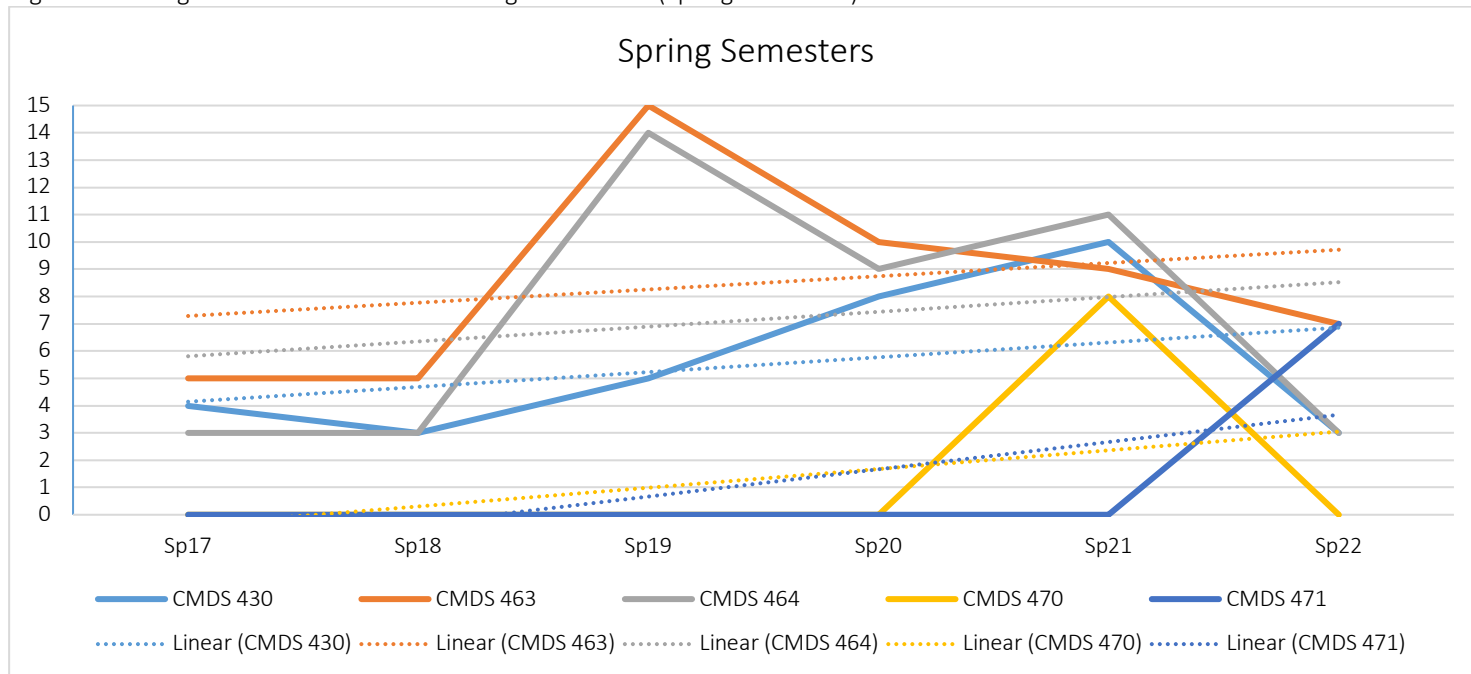
*CMDS 471 was cancelled for fall 2021 and moved to spring 2022.

*CMDS 474 was a new course for fall 2021.

Table 2. Undergraduate Enrollment in Leveling Coursework (Repeated)

| | Sp17 | Fa17 | Sp18 | Fa18 | Sp19 | Fa19 | Sp20 | Fa20 | Sp21 | Fa21 | Sp22 |
|----------|-----------|-----------|-----------|-----------|------------|-----------|------------|------------|------------|-----------|-----------|
| CMDS 464 | 30% (n=3) | --- | 20% (n=3) | --- | 67% (n=14) | --- | 50% (n=9) | --- | 55% (n=11) | --- | 21% (n=3) |
| CMDS 463 | 33% (n=5) | --- | 33% (n=5) | --- | 68% (n=15) | --- | 50% (n=10) | --- | 50% (n=9) | --- | 50% (n=7) |
| CMDS 430 | 29% (n=4) | --- | 18% (n=3) | --- | 36% (n=5) | --- | 38% (n=8) | --- | 45% (n=10) | --- | 21% (n=3) |
| CMDS 405 | --- | 23% (n=3) | --- | 33% (n=6) | --- | --- | --- | 54% (n=13) | --- | 50% (n=8) | --- |
| CMDS 471 | --- | --- | --- | 36% (n=4) | --- | 40% (n=6) | --- | 54% (n=13) | --- | --- | 50% (n=7) |
| CMDS 470 | --- | --- | --- | --- | --- | --- | --- | --- | 100% (n=8) | 57% (n=8) | --- |
| CMDS 474 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19% (n=3) | --- |

Figure 2. Undergraduate Enrollment in Leveling Coursework (Spring Semesters)



* CMDS 471 was cancelled for fall 2021 and moved to spring 2022.

Projected Enrollment

It is anticipated that student enrollment will increase slowly with an initial conservative cohort of around 10 students. Projected (eventual) plans are to enroll 20-25 students each fall cycle with a total undergraduate program consisting of around 80-100 students. These numbers are consistent with the other programs in the state of Kentucky. The overall (total) number is also consistent with most programs similar in composition to UofL's Health Sciences Center campus (e.g., School of Nursing, School of Public Health and Information Sciences, and School of Medicine) as well as benchmark institutions to which UofL is often compared (see Appendix B). Additionally, in 2018 a simple convenience sample survey was emailed to 690 current undergraduate students at UofL who identified as "pre-health". The survey queried whether students would choose to complete (or be interested in) a BS in Communication Sciences and Disorders if the degree was available at UofL. Forty-nine students indicated that "yes" they would be interested in the degree program. While the overall response percentage is low (7%), anecdotal evidence is strong, when referencing Table 2, regarding actual undergraduate involvement in leveling coursework. Table 3 provides a very conservative five-year enrollment projection as well as revenues based on the current budget model where academic units receive \$333.00 per credit hour instructed (see Appendix A). Additionally, Table 3 also accounts for a 1 (one) student reduction per cohort beginning in year 2 in effort to plan for possible attrition. This model is in comparison to the Schools of Dentistry and Public Health on the HSC campus. It also parallels the intermittent attrition rates seen—historically—in the existing MS program in Communicative Disorders.

Table 3. Projected Enrollment and Revenue; Attrition Considered

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---------------------|--------|-----------------------|------------------------|------------------------|------------------------|
| Incoming | 10* | 15* | 20* | 25* | 25* |
| Yr 1 Retained | | 10 (-1) = 9 x \$2,331 | 15 (-1) = 14 x \$2,331 | 20 (-1) = 19 x \$2,331 | |
| Yr 2 Retained | | | 10 (-1) = 9 x \$9,324 | 15 (-1) = 14 x \$2,331 | 25 (-1) = 24 x \$2,331 |
| Yr 3 Retained | | | | 10 (-1) = 9 x \$9,324 | 20 (-1) = 19 x \$9,324 |
| Yr 4 Retained | | | | | 15 (-1) = 14 x \$4,995 |
| Total | 10 | 24 | 43 | 67 | 82 |
| Full-Time | 10 | 24 | 43 | 67 | 82 |
| Revenue (\$) | \$0 | \$20,979 | \$116,550 | \$219,780 | \$303,030 |

* Students completing Cardinal Core.

VI. Market Demand:*National Implications*

There are employment needs in the field of communication sciences and disorders with respect to audiology and speech-language pathology. According to the National Bureau of Labor Statistics, the projected job outlook for speech-language pathology (2020-2030) is 29% and 16% for audiology during the same time period.⁴ This is substantially faster than the average growth of 8% for all occupations.⁴ In 2018, ASHA's *Schools Report* suggested that 54% of school-based speech-language pathologists (SLPs) reported more job openings than job seekers per their type of employment facility and geographic area.¹ Additionally, the 2019 *Health Care Survey Report* suggested that 33% of medical-based SLPs reported that job openings exceeded job seekers in their type of employment facility and geographic area.² Moreover, the same survey reported that from 2005-2019, SLPs in home health care settings, outpatient clinics/offices, and skilled nursing facilities were more likely than SLPs in hospitals to report that job openings exceeded job seekers in their type of facility and geographic area.² ASHA also reported in their *Trends in Educational Audiology* report that "in 2020, 15% of audiologists reported having unpaid student debt with the median amount owed being \$50,379". The market demand data from the Lightcast Q1 2023 Regional (i.e., Louisville) data set is included in this report as Appendix C.

Kentucky Implications

In 2020, there were a reported 63.6 Speech-Language Pathologists per 100,000 residents in the state of Kentucky; there were 56.4 Speech-Language Pathologists per 100,000 residents in the United States.⁵ The state of Kentucky ranks 19th in personnel-to-population ratio (for Speech-Language Pathologists) in the United States.⁵ In 2020, there were a reported 3 Audiologists per 100,000 residents in the state of Kentucky; there were 4.1 Audiologists per 100,000 residents in the United States.⁵ The state of Kentucky ranks 47th in personnel-to-population ratio (for Audiologists) in the United States.⁵ The market demand data from the Lightcast Q1 2023 Kentucky and the United States data sets are included in this report as Appendix D and E, respectively.

The BS in Communication Sciences and Disorders will not replace another program at UofL.

VII. Employer Demand:

The BS in Communication Sciences and Disorders is not designed for students to enter the workforce immediately. It is important to note that a graduate degree in either audiology or speech-language pathology is required for a student to enter the workforce as a licensed and certified independent practitioner—Audiologist or Speech-Language Pathologist. Nonetheless, employer demand data is available as Appendix F (Table 8) and includes data retrieved from the aforementioned Lightcast Q1 2023 information overall.

VIII. Academic Demand:

1) The BS in Communication Sciences and Disorders is not designed for students to enter the workforce immediately as a graduate degree in audiology or speech-language pathology is required for licensure and certification.

1a) *As such, graduates of the undergraduate program will attain the following skills:*

- Students will understand the basic processes and influences related to human communication including developmental, biological, neurological, acoustic, psychological, and cultural conditions.
- Students will understand the basic foundational aspects of typical and disordered communication including areas of prevention, evaluation, intervention, and treatment.
- Students will develop their critical thinking and written/oral communication abilities and be knowledgeable consumers of the research literature as well as the fundamentals of evidence-based practice.
- Students will begin to appreciate their own individual and professional identities while learning how to learn with, from, and about each other through interprofessional paradigms.
- Students will have completed the necessary coursework and experiences to prepare them to apply for admission to graduate programs in speech-language pathology and audiology.

1b) *Graduates of the undergraduate program will be able to attend the following types of graduate programs:*

- MA/MS in speech-language pathology
- AuD in audiology
- MA/MS in allied health, education, human services, life sciences, or public health
- Professionals Schools: medicine or dentistry

1c) *Graduates of the undergraduate program may eventually seek employment in the following in the following sectors of society:*

- media
- education
- sales
- public relations
- health and human services
- government

Graduates of MA/MS programs (in speech-language pathology) or AuD (in audiology) tend to seek employment in the following sectors of society:

- hospitals (in-patient)
- hospitals (out-patient)
- community clinics
- skilled nursing facilities (SNF)
- private practice
- home health
- schools

2) The BS in Communication Sciences and Disorders will not replace other existing programs, tracks, concentrations, or specializations at UofL. The undergraduate degree will enhance both the existing MS in communicative disorders (i.e., speech-language pathology) and the AuD in audiology graduate degrees at UofL in the following ways:

- Facilitate continuity between undergraduate and graduate research activities and relationships,
- Familiarity with program faculty areas of expertise,
- Established peer relationships,
- Possible reduction of the financial burden associated with in-state versus out-state tuition costs and associated living arrangements (i.e., familiarity with the area/city),
- May attract new students to Kentucky from other states but also to Louisville from other areas of the state, and
- Solidify the viability of both graduate programs in audiology and speech-language pathology at UofL.

3) Table 4 provides information about similar programs within state of Kentucky based on CIP code.

| | |
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| Similar Program 1 | |
| Institution: | Western Kentucky University |
| Comparison of Objectives/Focus/Curriculum to Similar Programs: | Undergraduate degree programs in Communication Sciences and Disorders are designed to prepare students to meet the rigors of graduate study in order to apply for licensure and certification. As such, the curricula between programs varies little. However, there are two significant differences between the program at WKU and the proposed program at UofL: #1: Undergraduate students at UofL will be <u>required</u> to earn a 12-credit hour certificate focusing on ethical |

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| | <p>leadership and service integrity OR complete a 12-credit hour certificate focusing on conflict analysis, conflict transformation, and peace building.</p> <p>#2: UofL is the only institution in the state of Kentucky to offer the AuD degree; traditionally a four-year clinical doctoral degree. Undergraduate students will be allowed to accelerate completion of the doctorate through a 3+4 approach where year 1 of the AuD degree is completed during the student’s senior year (as an undergraduate) at UofL.</p> |
| Comparison of Student Populations: | <p>WKU is second (16%) to UofL (23%) in terms of the composition of its undergraduate students (i.e., underrepresented minorities). Moreover, very few students from WKU have historically elected to attend graduate school in pursuit of the AuD. Our efforts per these targets are two-fold:</p> <p>#1: The program will partner with Simmons College—located in Louisville and one of two Historically Black Colleges and Universities in Kentucky—to recruit underrepresented minorities that might be interested in pursuing audiology or speech-language pathology through the established Metroversity program.</p> <p>#2: Students will have access to several faculty who hold degrees in audiology that can provide mentorship and guidance as they matriculate through the program; possibly electing the 3+4 option (leading to the AuD).</p> |
| Access to Existing Programs: | <p>UofL is poised to recruit a larger number of underrepresented minorities given its location within a large metropolitan area and its proximity to Simmons College and other institutions within the city.</p> <p>Moreover, UofL is the only institution in the state of Kentucky to offer the AuD degree.</p> |
| Feedback from Other Institutions: | See Appendix G |

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| <u>Similar Program 2</u> | |
| Institution: | University of Kentucky |
| Comparison of Objectives/Focus/Curriculum to Similar Programs: | <p>Undergraduate degree programs in Communication Sciences and Disorders are designed to prepare students to meet the rigors of graduate study in order to apply for licensure and certification. As such, the curricula between programs varies little. However, there are two significant differences between the program at UK and the proposed program at UofL:</p> <p>#1: Undergraduate students at UofL will be <u>required</u> to earn a 12-credit hour certificate focusing on ethical leadership and service integrity OR complete a 12-credit hour certificate focusing on conflict analysis, conflict transformation, and peace building.</p> <p>#2: UofL is the only institution in the state of Kentucky to offer the AuD degree; traditionally a four-year clinical doctoral degree. Undergraduate students will</p> |

| | |
|---|---|
| | be allowed to accelerate completion of the doctorate through a 3+4 approach where year 1 of the AuD degree is completed during the student’s senior year (as an undergraduate) at UofL. |
| Comparison of Student Populations: | UofL’s (23%) outranks UK’s (18%) in terms of the composition of its undergraduate students (i.e., underrepresented minorities). Moreover, very few students from UK have historically elected to attend graduate school in pursuit of the AuD. Our efforts per these targets are two-fold: #1: The program will partner with Simmons College—located in Louisville and one of two Historically Black Colleges and Universities in Kentucky—to recruit underrepresented minorities that might be interested in pursuing audiology or speech-language pathology through the established Metroversity program. #2: Students will have access to several faculty who hold degrees in audiology that can provide mentorship and guidance as they matriculate through the program; possibly electing the 3+4 option (leading to the AuD). |
| Access to Existing Programs: | UofL is poised to recruit a larger number of underrepresented minorities given its location within a large metropolitan area and its proximity to Simmons College and other institutions within the city. Moreover, UofL is the only institution in the state of Kentucky to offer the AuD degree. |
| Feedback from Other Institutions: | See Appendix G |

| | |
|---|--|
| <u>Similar Program 3</u> | |
| Institution: | Eastern Kentucky University |
| Comparison of Objectives/Focus/Curriculum to Similar Programs: | Undergraduate degree programs in Communication Sciences and Disorders are designed to prepare students to meet the rigors of graduate study in order to apply for licensure and certification. As such, the curricula between programs varies little. However, there are two significant differences between the program at ECU and the proposed program at UofL: #1: Undergraduate students at UofL will be <u>required</u> to earn a 12-credit hour certificate focusing on ethical leadership and service integrity OR complete a 12-credit hour certificate focusing on conflict analysis, conflict transformation, and peace building. #2: UofL is the only institution in the state of Kentucky to offer the AuD degree; traditionally a four-year clinical doctoral degree. Undergraduate students will be allowed to accelerate completion of the doctorate through a 3+4 approach where year 1 of the AuD degree is completed during the student’s senior year (as an undergraduate) at UofL. |
| Comparison of Student Populations: | UofL’s (23%) outranks ECU’s (12%) in terms of the composition of its undergraduate students (i.e., |

| | |
|--|---|
| | <p>underrepresented minorities). Moreover, very few students from ECU have historically elected to attend graduate school in pursuit of the AuD. Our efforts per these targets are two-fold:</p> <p>#1: The program will partner with Simmons College—located in Louisville and one of two Historically Black Colleges and Universities in Kentucky—to recruit underrepresented minorities that might be interested in pursuing audiology or speech-language pathology through the established Metroversity program.</p> <p>#2: Students will have access to several faculty who hold degrees in audiology that can provide mentorship and guidance as they matriculate through the program; possibly electing the 3+4 option (leading to the AuD).</p> |
| Access to Existing Programs: | <p>UofL is poised to recruit a larger number of underrepresented minorities given its location within a large metropolitan area and its proximity to Simmons College and other institutions within the city. Moreover, UofL is the only institution in the state of Kentucky to offer the AuD degree.</p> |
| Feedback from Other Institutions: | See Appendix G |

| | |
|---|---|
| Similar Program 4 | |
| Institution: | Murray State University |
| Comparison of Objectives/Focus/Curriculum to Similar Programs: | <p>Undergraduate degree programs in Communication Sciences and Disorders are designed to prepare students to meet the rigors of graduate study in order to apply for licensure and certification. As such, the curricula between programs varies little. However, there are two significant differences between the program at MSU and the proposed program at UofL:</p> <p>#1: Undergraduate students at UofL will be <u>required</u> to earn a 12-credit hour certificate focusing on ethical leadership and service integrity OR complete a 12-credit hour certificate focusing on conflict analysis, conflict transformation, and peace building.</p> <p>#2: UofL is the only institution in the state of Kentucky to offer the AuD degree; traditionally a four-year clinical doctoral degree. Undergraduate students will be allowed to accelerate completion of the doctorate through a 3+4 approach where year 1 of the AuD degree is completed during the student’s senior year (as an undergraduate) at UofL.</p> |
| Comparison of Student Populations: | <p>UofL’s (23%) outranks MSU’s (11%) in terms of the composition of its undergraduate students (i.e., underrepresented minorities). Moreover, very few students from MSU have historically elected to attend graduate school in pursuit of the AuD. Our efforts per these targets are two-fold:</p> <p>#1: The program will partner with Simmons College—located in Louisville and one of two Historically Black</p> |

| | |
|--|---|
| | Colleges and Universities in Kentucky—to recruit underrepresented minorities that might be interested in pursuing audiology or speech-language pathology through the established Metroversity program. #2: Students will have access to several faculty who hold degrees in audiology that can provide mentorship and guidance as they matriculate through the program; possibly electing the 3+4 option (leading to the AuD). |
| Access to Existing Programs: | UofL is poised to recruit a larger number of underrepresented minorities given its location within a large metropolitan area and its proximity to Simmons College and other institutions within the city. Moreover, UofL is the only institution in the state of Kentucky to offer the AuD degree. |
| Feedback from Other Institutions: | See Appendix G |

IX. Funding Sources:

1) *Will additional faculty be needed?*

The BS in Communication Sciences and Disorders will require one (1) new faculty line (salary + fringe) (\$83,000 + \$18,260) = \$101,260.

2) *Faculty Workload*

The current doctoral faculty composition for the MS in communicative disorders consists of four full-time faculty members, one part-time faculty member, and three gratis faculty member appointments. The AuD doctoral program in audiology also consists of four full-time faculty members. Since the MS in communicative disorders program includes “a leveling year” for some applicants (23 credit hours), a portion of the undergraduate curriculum is already in-place. CMDS 245 (3 credit hours), CMDS 595 (3 credit hours), and CMDS 500 will be team-taught by current faculty members from both the MS in communicative disorders and the AuD doctoral program in audiology. As such, the current faculty will be able to assume 35 credit hours of the proposed 47-credit hour plan of studies for the major requirement; 24 credit hours of required courses are outside of the department. The new program will impact existing faculty workloads in three primary ways: #1) increased number of students in their existing courses, #2) the addition of 2-3 lectures for team-taught courses, and #3) additional students to advise. Appendix A provides the suggested sequence for the undergraduate program.

The requested additional one (1) faculty member will be responsible for teaching 12 credit hours annually and advising students. This model is consistent with the majority of the other faculty members in the department. The additional faculty line will ensure that both the MS in communicative disorders and the AuD doctoral program in audiology programs’ accreditation remains stable as the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) regularly monitors doctoral faculty-to-student ratios. Undergraduate programs are not accredited by the CAA. There are no plans in place regarding distance education.

3) *Budgetary Rationale*

The projected enrollment and revenue for the program is listed/repeated in Table 5 and considers possible attrition rates.

Table 5. Projected Enrollment and Revenue

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|----------------------|--------|----------|-----------|-----------|-----------|
| Incoming | 10 | 15 | 20 | 25 | 25 |
| Yr 1 Retained | | 9 | 14 | 19 | |
| Yr 2 Retained | | | 9 | 14 | 24 |
| Yr 3 Retained | | | | 9 | 19 |
| Yr 4 Retained | | | | | 14 |
| Full-Time | 10 | 24 | 43 | 67 | 82 |
| Revenue (\$) | \$0 | \$20,979 | \$116,550 | \$219,780 | \$303,030 |

The largest expenditure of the program at its onset will be the additional faculty line as requested above. It is anticipated that the costs associated with the faculty lines, in addition to the initial costs of the program will be debited from existing monies (i.e., internal reallocation) generated by the current MS program in communicative disorders (75% of tuition), the AuD doctoral program in audiology (75% of tuition), and the revenue generated by the existing undergraduate preparatory coursework and the future undergraduate program (\$333.00 per credit hour per student). Certainly, this is dependent upon approval from the Dean of the School of Medicine.

The historical composition of undergraduate students electing to complete our existing leveling coursework appear to come from six majors at UofL: public health, business/marketing, individualized major, psychology, communication, and education. It is possible these programs may be negatively affected somewhat by the creation of the B.S. in Communication Sciences and Disorders; however, it is anticipated that the impact will be minimal.

4) *Provide a reasonable estimate of program expenditures related to marketing and outreach, as well as expenditures incurred by additional personnel need to provide faculty training and/or assistance with instructional design.*

The program is requesting a conservative internal reallocation of \$125,000 in order to meet the teaching, marketing, and personnel needs necessary to initiate the degree. As previously indicated, the largest expenditure centers on the faculty line request at (n=\$101,260) [years 1-5; see Table 6 below]. Five percent will be allocated for marketing and outreach (n=\$6,250) [years 1-5; see Table 6 below]. The remaining funds (n=\$17,490) will be used to help offset the costs associated with faculty training, facilities, and/or technology needs in effort to ease any prospective burdens on other departments within the university [years 1-5; see Table 6 below].

5) *Financial Resources and Program Impact*

The projected financial resources and program impact is listed in Table 6. Revenues are based on the current budget model where academic units receive \$333.00 per credit hour instructed.

Table 6. Financial Resources

| Projected Revenues | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Five-Year Total |
|---|-----------|-----------|-----------|-----------|-----------|-----------------|
| General Funds: Internal Reallocation | \$125,000 | \$125,000 | \$125,000 | \$125,000 | \$125,000 | \$625,000 |
| Grants or Gifts | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other Revenues: Tuition | \$0 | \$20,979 | \$116,550 | \$219,780 | \$303,030 | \$660,339 |
| Total Projected Revenues | \$125,000 | \$145,979 | \$241,550 | \$344,780 | \$428,030 | \$1,285,339 |

6) *New Resource Requirements*

Table 7 provides an overview of projected expenses.

Table 7. Projected Expenses

| Projected Expenses | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | | Five-Year Total | |
|---------------------------------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|-----------------|-----------|
| | # | Cost | # | Cost | # | Cost | # | Cost | # | Cost | # | Cost |
| Faculty Lines | 1 | \$101,260 | 1 | \$101,260 | 1 | \$101,260 | 1 | \$101,260 | 1 | \$101,260 | 1 | \$506,300 |
| Graduate Assistants | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0 | \$0 |
| Library Support | | \$0 | | \$0 | | \$0 | | \$0 | | \$0 | | \$0 |
| Facilities/Technology | | \$10,000 | | \$10,000 | | \$10,000 | | \$10,000 | | \$10,000 | | \$50,000 |
| Other (Marketing) | | \$6,250 | | \$6,250 | | \$6,250 | | \$6,250 | | \$6,250 | | \$31,250 |
| Other (Misc) | | \$7,490 | | \$7,490 | | \$7,490 | | \$7,490 | | \$7,490 | | \$37,450 |
| Total Projected Expenses | | \$125,000 | | \$125,000 | | \$125,000 | | \$125,000 | | \$125,000 | | \$625,000 |

X. Online Delivery:

There are no plans in place regarding distance education.

Appendix A

Cardinal Core Coursework

Skills

| | |
|------------------------|----------------|
| Written Communication | 6 Credit Hours |
| Oral Communication | 3 Credit Hours |
| Quantitative Reasoning | 3 Credit Hours |

Disciplinary Perspectives

| | |
|---|----------------|
| Arts and Humanities | 6 Credit Hours |
| Social/Behavioral Sciences | 3 Credit Hours |
| Social/Behavioral Sciences (Historical Perspective) | 3 Credit Hours |
| Natural Sciences | 6 Credit Hours |
| Natural Science Lab | 1 Credit Hour |

Diversity

| | |
|-----------------------|----------------------|
| US Diversity (D1) | (incorporated above) |
| Global Diversity (D2) | (incorporated above) |

| | |
|--------------|------------------------|
| Total | 31 Credit Hours |
|--------------|------------------------|

Example Flight Plan

Freshman Year (Fall)

| | |
|--|----------------|
| Written Communication 1 | 3 Credit Hours |
| Oral Communication | 3 Credit Hours |
| Quantitative Reasoning | 3 Credit Hours |
| Social-Behavioral Science Historical Perspective + US Diversity (D1) | 3 Credit Hours |
| Natural Science | 3 Credit Hours |

NOTES and/or Suggested Courses (Cardinal Core)

| |
|--|
| ENGL 101 Introduction to College Writing |
| COMM 111 Public Speaking |
| MATH 109 Elementary Statistics (meets ASHA Req) |
| ITP 115/ASL 115 Introduction to Deaf Culture (Program Requirement) |
| CHEM 105 Chemistry and Contemporary Society (meets ASHA Req) |

Freshman Year (Spring)

| | |
|---|----------------|
| Written Communication 2 | 3 Credit Hours |
| Social-Behavioral Science | 3 Credit Hours |
| Arts & Humanities 1 + Global Diversity (D2) | 3 Credit Hours |
| Arts & Humanities 2 | 3 Credit Hours |
| Natural Science | 3 Credit Hours |
| Natural Science Lab | 1 Credit Hour |

| |
|--|
| ENGL 102 Intermediate College Writing |
| PSYC 201 Introduction to Psychology (meets ASHA Req) |
| Any AHD2 Course |
| PHIL 211 Critical Thinking |
| BIOL 102 Biology: Current Issues & Applications (meets ASHA Req) |
| BIOL 104: Laboratory for Biology: Current Issues & Applications |

Revenue to Academic Unit (\$0 per student) [Freshman Semesters Combined]

Sophomore Year (Fall) [Students will apply to the program after completion of the fall semester.]

| | |
|---|----------------|
| *CMDS 245: Survey of Communication Sciences & Disorders (CSD) | 3 Credit Hours |
| **ASL 101: American Sign Language 1 | 3 Credit Hours |
| **PSYC 306: Lifespan Developmental Psychology | 3 Credit Hours |
| *CMDS 270: Clinical Observation | 1 Credit Hour |

Change Course #: [Team](#)

Change Course #: [Haley](#)

Electives

Revenue to Academic Unit (\$1332 per student) [Sophomore Fall]

Sophomore Year (Spring)

| | |
|--|----------------|
| **EDSP 240: Introduction to Exceptional Children | 3 Credit Hours |
| *CMDS 272: Anatomy and Physiology: Speech/Hearing Mechanisms | 3 Credit Hours |
| **ASL 201: American Sign Language 2 | 3 Credit Hours |

[Kellyanna](#)

Electives

Revenue to Academic Unit (\$999 per student) [Sophomore Spring]

Revenue to Academic Unit (\$2331 per student) [Sophomore Semesters Combined]

Junior Year (Fall)

| | |
|---|----------------|
| **LING 325: Introduction to Linguistics | 3 Credit Hours |
|---|----------------|

| | | |
|---|----------------|--------------------------------------|
| *PSYC 571: Speech Science | 3 Credit Hours | Maria |
| *CMDS 463: Clinical Phonetics | 3 Credit Hours | Alan |
| *CMDS 405: Introduction to Audiology/Techniques | 3 Credit Hours | Brittany² |
| *CMDS 471: Functional Neuroanatomy | 3 Credit Hours | Kellyanna |

Revenue to Academic Unit (\$3996 per student) [Junior Fall]

Junior Year (Spring)

| | | |
|---|----------------|--------------------------|
| *CMDS 464: Normal Speech/Language Development | 4 Credit Hours | Karen |
| *CMDS 450: Diagnostics | 3 Credit Hours | Brittany |
| *CMDS 402: Speech Sound Disorders | 3 Credit Hours | Brittany |
| *CMDS 430: Aural Rehabilitation | 3 Credit Hours | Cheryl |
| *CMDS 412: Disorders of Language | 3 Credit Hours | Kinva |

Revenue to Academic Unit (\$5328 per student) [Junior Spring]

Revenue to Academic Unit (\$9324 per student) [Junior Semesters Combined]

Senior Year (Fall)

| | | |
|--|----------------|--------------------------|
| **LING 522: Structure of Modern American English | 3 Credit Hours | |
| *CMDS 474: Multicultural Issues in CSD | 3 Credit Hours | Brittany |
| **HSS 393: Medical Terminology | 3 Credit Hours | |
| *CMDS 490: Clinical Methods in CSD | 3 Credit Hours | |

Electives

Revenue to Program (\$1998 per student) [Senior Fall]

Senior Year (Spring)

| | | |
|--|----------------|----------------------|
| *CMDS 500: Independent Study in CSD | 3 Credit Hours | Team |
| *CMDS 595: Special Topics in CSD | 3 Credit Hours | Team |
| *CMDS 495: Clinical Experiences in CSD | 3 Credit Hours | |

Electives

Revenue to Academic Unit (\$2997 per student) [Senior Spring]

Revenue to Academic Unit (\$4995 per student) [Senior Semesters Combined]

Credit Hours Summary

| | | |
|---------------------------------------|-----------------|-----------|
| Cardinal Core | 31 Credit Hours | |
| *Required Courses Inside Department | 47 Credit Hours | |
| **Required Courses Outside Department | 24 Credit Hours | |
| Electives | 18 Credit Hours | (Minimum) |

| | |
|--------------|-------------------------|
| Total | 120 Credit Hours |
|--------------|-------------------------|

Optional Track

Early Admission to AuD Track

Students may apply for early admission to the AuD program and complete year one (of the AuD program) beginning their senior year of the undergraduate program. Students would replace CMDS coursework with the AuD courses listed below. The BS in CSD would be awarded after successful completion of the first year of the AuD program.

Senior Year (Fall)

| | |
|---|----------------|
| AUDI 500: Anatomy and Physiology for Communication Sciences | 3 Credit Hours |
| AUDI 504: Essential Techniques in Audiometry | 3 Credit Hours |
| AUDI 506: Acoustics | 3 Credit Hours |
| AUDI 514: Clinical Techniques 1 | 1 Credit Hour |
| AUDI 510: Clinical Clerkship 1 | 1 Credit Hour |

Senior Year (Spring)

| | |
|---|----------------|
| AUDI 526: Assessment and Management of Vestibular Disorders | 3 Credit Hours |
| AUDI 524: Amplification Technology | 3 Credit Hours |
| AUDI 522: Electrophysiologic Techniques in Audiology | 3 Credit Hours |
| AUDI 515: Clinical Techniques 2 | 2 Credit Hours |
| AUDI 510: Clinical Clerkship 1 | 1 Credit Hour |

| | |
|--------------|------------------------|
| Total | 23 Credit Hours |
|--------------|------------------------|

Appendix B

CSD Programs Housed in Schools/Colleges of Medicine

| University | Location | UG | G | Doctoral Faculty |
|---|---------------------|------|---------------|------------------|
| University of Louisville | School of Medicine | None | 63 | 5 |
| Washington State University | College of Medicine | 57 | 50 | 10 |
| University of Nevada, Reno | School of Medicine | 200 | 50 | 12 |
| University of North Carolina, Chapel Hill | School of Medicine | None | 60 | 12 |
| University of Hawaii, Manoa | School of Medicine | None | 31 | 3 |
| | | | <i>M=50.8</i> | <i>M=8.4</i> |

CSD Programs Housed in Schools of Nursing, Public Health, and/or Health Sciences

| University | Location | UG | G | Doctoral Faculty |
|--------------------------------------|---|------|---------------|------------------|
| Eastern Washington University | College of Health Science and Public Health | 69 | 50 | 9 |
| Jackson State University | School of Public Health | 80 | 38 | 5 |
| Temple University | College of Public Health | 250 | 62 | 20 |
| University of Florida, Gainesville | College of Public Health and Health Professions | 215 | 59 | 16 |
| University of Massachusetts, Amherst | School of Public Health and Health Sciences | 238 | 50 | 16 |
| University of South Carolina | School of Public Health | None | 224* | 18 |
| Arkansas State University | College of Nursing | 371 | 52 | 7 |
| CUNY, Hunter College | School of Nursing and Health Professions | None | 46 | 5 |
| Florida International University | College of Nursing and Health Sciences | None | 92 | 7 |
| La Salle University | School of Nursing and Health Sciences | 106 | 62 | 8 |
| Minnesota State University-Mankato | College of Allied Health and Nursing | 118 | 49 | 15 |
| Mississippi University for Women | College of Nursing and Health Sciences | 100 | 28 | 3 |
| Southeastern Louisiana University | College of Nursing and Health Sciences | 205 | 67 | 7 |
| Texas Christian University | College of Nursing and Health Sciences | 135 | 42 | 13 |
| University of Vermont | College of Nursing and Health Sciences | 77 | 36 | 6 |
| | | | <i>M=63.8</i> | <i>M=10.3</i> |

*Includes Doctoral Program

Benchmark Institutions with CSD Programs

| University | Location | UG | G | Doctoral Faculty |
|---|--|------|---------------|------------------|
| University of Louisville | School of Medicine | None | 63 | 5 |
| State University of New York, Buffalo | College of Arts and Sciences | 256 | 70* | 9 |
| Temple University | College of Public Health | 250 | 62* | 20 |
| University of New Mexico | College of Arts and Sciences | 135 | 71 | 9 |
| University of Iowa | College of Arts and Sciences | 287 | 45 | 20 |
| University of North Carolina, Chapel Hill | School of Medicine | None | 60* | 12 |
| University of Pittsburgh | School of Health and Rehabilitation Sciences | 130 | 73* | 12 |
| University of South Carolina | School of Public Health | None | 224* | 18 |
| University of South Florida | College of Behavioral and Community Sciences | 387 | 166* | 21 |
| University of Utah | College of Health | 90 | 96* | 14 |
| Wayne State University | College of Arts and Sciences | 103 | 84* | 15 |
| | | | <i>M=92.2</i> | <i>M=14.1</i> |

*Includes Doctoral Program

CSD Programs in Kentucky

| University | Location | UG | G | Doctoral Faculty |
|-----------------------------|---|--------------|--|------------------|
| University of Louisville | School of Medicine | None | 63 | 5 |
| Eastern Kentucky University | College of Education and Applied Human Sciences | 90 | 62 | 7 |
| Murray State University | College of Education and Human Services | 131 | 64 | 5 |
| University of Kentucky | College of Health Sciences | 95 | 65* | 18 |
| Western Kentucky University | College of Health and Human Services | 102 | 177** | 11 |
| Brescia University | Department of Mathematics and Natural Sciences | Not Reported | Not Reported | Not Reported |
| | | | <i>M=86.2 w/WKU M=63.5 w/o WKU</i> | <i>M=9.2</i> |

Appendix C

Program Overview

Communication Disorders Sciences and Services

Lightcast Q1 2023 Data Set

February 2023

University of Louisville



Kentucky

Parameters

Completions Year: 2021

Jobs Timeframe: 2019 - 2020

Job Postings Timeframe: Jan 2010 - Dec 2022

Programs:

| Code | Description |
|-------|---|
| 51.02 | Communication Disorders Sciences and Services |

Regions:

| Code | Description |
|-------|------------------------------------|
| 31140 | Louisville/Jefferson County, KY-IN |

Education Level:

| Description |
|-------------------|
| Bachelor's degree |

Tuition Type: Tuition & Fees

Graduate Status: Undergraduate

Residency: In-State

There are no regional training providers for your selection.

Program Overview

| | | Completions (2021) | % Completions | Institutions (2021) | % Institutions |
|------------------|---------------------------------|-----------------------|------------------|------------------------|-------------------|
| 0 Completions | ● All Programs | 0 | 0% | 0 | 0% |
| | ● Distance Offered Programs | 0 | 0% | 0 | 0% |
| | ● Non-Distance Offered Programs | 0 | 0% | 0 | 0% |

Market Share by Institution Type

There are no regional Completions for your selection.

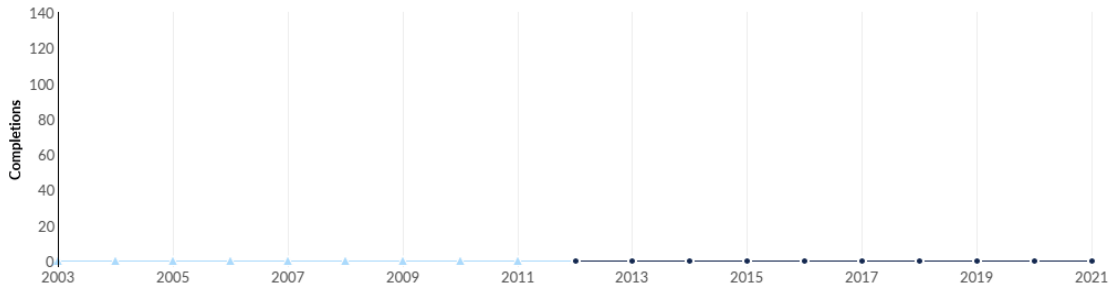
Market Share by Program

There are no regional Completions for your selection.

Completions by Institution

There are no regional training providers for your selection.

Regional Trends



| | 2012 Completions | 2021 Completions | % Change |
|---------------------------------|------------------|------------------|----------|
| ● Distance Offered Programs | 0 | 0 | 0.0% |
| ■ Non-Distance Offered Programs | 0 | 0 | 0.0% |
| ▲ All Programs | 0 | 0 | 0.0% |

Regional Completions by Award Level

Not enough data for this chart.

Similar Programs

| | |
|----------------------|-------------------------|
| 0 Programs (2021) | 0 Completions (2021) |
|----------------------|-------------------------|

Target Occupations

*Filtered by the proportion of the national workforce in these occupations with a Bachelor's degree

| | | | |
|---|---|---|-----------------------------------|
| <p>127</p> <p>Jobs (2019)*</p> <p>7% <i>below</i> National average*</p> | <p>+1.6%</p> <p>% Change (2019-2020)*</p> <p>Nation: -0.2%*</p> | <p>\$35.62/hr</p> <p>\$74.1K/yr</p> <p>Median Earnings</p> <p>Nation: \$29.02/hr;</p> <p>\$60.4K/yr</p> | <p>20</p> <p>Annual Openings*</p> |
|---|---|---|-----------------------------------|

| Occupation | 2019 Jobs* | Annual Openings* | Median Earnings | Growth (2019 - 2020)* | Location Quotient (2019)* |
|---------------------------------------|------------|------------------|-----------------|-----------------------|---------------------------|
| Speech-Language Pathologists | 63 | 9 | \$45.64/hr | 0.00% | 0.96 |
| Healthcare Support Workers, All Other | 59 | 10 | \$20.21/hr | +3.39% | 0.91 |
| Audiologists | <10 | Insf. Data | \$38.88/hr | Insf. Data | Insf. Data |

Job Postings Summary

| | | |
|---|--|--|
| <p>381</p> <p>Unique Postings</p> <p>1,338 Total Postings</p> | <p>4 : 1</p> <p>Posting Intensity</p> <p>Regional Average: 4 : 1</p> | <p>15 days</p> <p>Median Posting Duration</p> <p>Regional Average: 18 days</p> |
|---|--|--|

There were 1,338 total job postings for your selection from January 2010 to December 2022, of which 381 were unique. These numbers give us a Posting Intensity of 4-to-1, meaning that for every 4 postings there is 1 unique job posting.

This is close to the Posting Intensity for all other occupations and companies in the region (4-to-1), indicating that they are putting average effort toward hiring for this position.

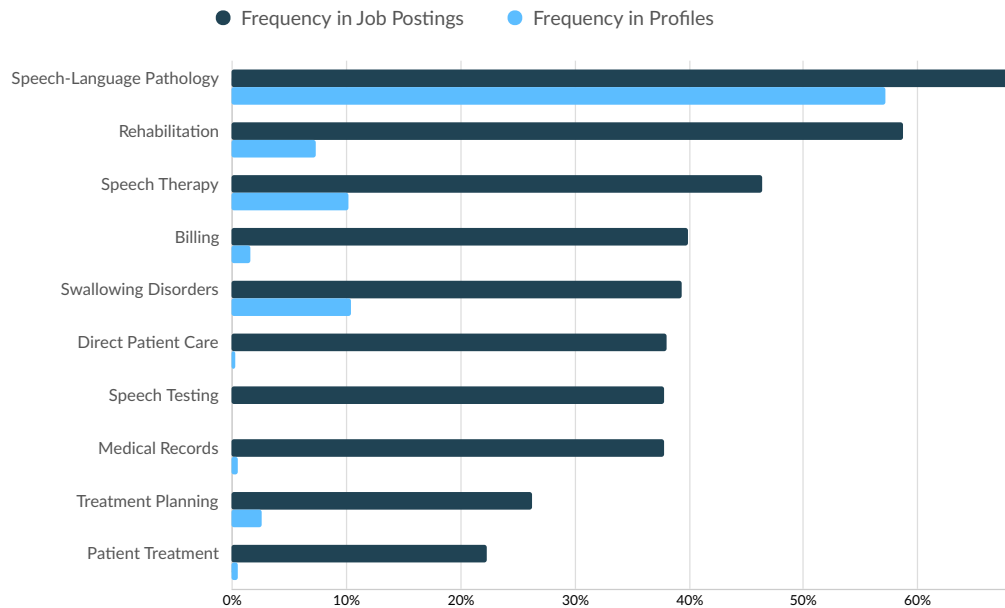
Top Companies Posting

| Company | Total/Unique (Jan 2010 - Dec 2022) | Posting Intensity | Median Posting Duration |
|---------------------------------|------------------------------------|-------------------|-------------------------|
| Kindred Healthcare | 62 / 34 | 2 : 1 | 28 days |
| Harrison Healthcare Center | 232 / 31 | 7 : 1 | n/a |
| Wedgewood Healthcare Center | 124 / 20 | 6 : 1 | n/a |
| Norton Healthcare | 101 / 18 | 6 : 1 | 15 days |
| Sellersburg Healthcare Center | 148 / 18 | 8 : 1 | n/a |
| Rolling Hills Healthcare Center | 79 / 17 | 5 : 1 | n/a |
| Communicare Health Services | 82 / 15 | 5 : 1 | 14 days |
| BrightSpring Health Services | 16 / 10 | 2 : 1 | 0 days |
| Indian Creek Healthcare Center | 32 / 9 | 4 : 1 | 20 days |
| Legacy Healthcare Services | 15 / 9 | 2 : 1 | 52 days |

Top Posted Job Titles

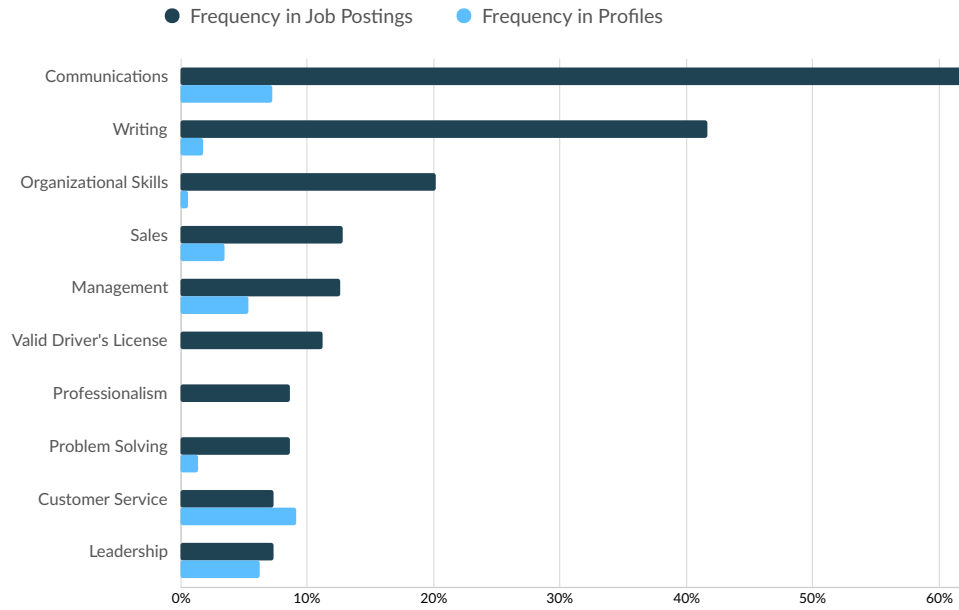
| Job Title | Total/Unique (Jan 2010 - Dec 2022) | Posting Intensity | Median Posting Duration |
|---|------------------------------------|-------------------|-------------------------|
| Speech Language Pathologists | 933 / 210 | 4 : 1 | 5 days |
| Clinical Nurse Liaisons | 47 / 24 | 2 : 1 | 39 days |
| Speech Therapists | 38 / 21 | 2 : 1 | 0 days |
| Child Therapists | 29 / 12 | 2 : 1 | 10 days |
| Day Support Professionals | 13 / 6 | 2 : 1 | 6 days |
| Outpatient Speech Language Pathologists | 9 / 5 | 2 : 1 | n/a |
| Clinical Advisors | 9 / 4 | 2 : 1 | 0 days |
| Medical Social Workers | 15 / 4 | 4 : 1 | 40 days |
| Specialized Consultants | 11 / 4 | 3 : 1 | 12 days |
| Directors of Rehabilitation | 3 / 3 | 1 : 1 | n/a |

Top Specialized Skills



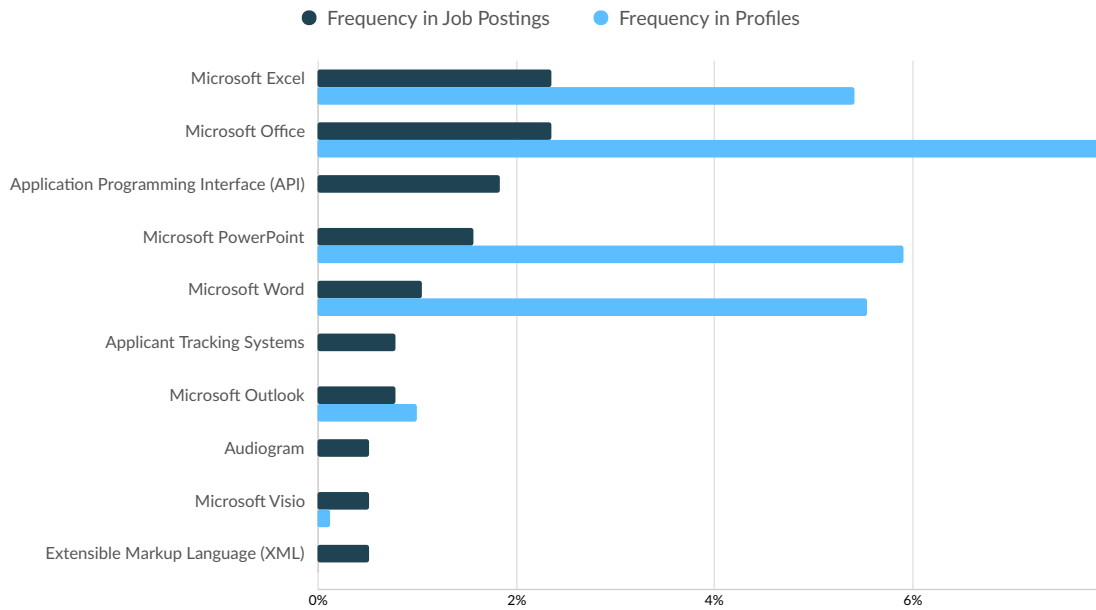
| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|---------------------------|----------|---------------------|----------|---------------------|
| Speech-Language Pathology | 262 | 69% | 455 | 57% |
| Rehabilitation | 224 | 59% | 59 | 7% |
| Speech Therapy | 177 | 46% | 81 | 10% |
| Billing | 152 | 40% | 13 | 2% |
| Swallowing Disorders | 150 | 39% | 83 | 10% |
| Direct Patient Care | 145 | 38% | 3 | 0% |
| Speech Testing | 144 | 38% | 0 | 0% |
| Medical Records | 144 | 38% | 4 | 1% |
| Treatment Planning | 100 | 26% | 21 | 3% |
| Patient Treatment | 85 | 22% | 4 | 1% |

Top Common Skills



| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|------------------------|----------|---------------------|----------|---------------------|
| Communications | 237 | 62% | 58 | 7% |
| Writing | 159 | 42% | 14 | 2% |
| Organizational Skills | 77 | 20% | 5 | 1% |
| Sales | 49 | 13% | 28 | 4% |
| Management | 48 | 13% | 43 | 5% |
| Valid Driver's License | 43 | 11% | 0 | 0% |
| Professionalism | 33 | 9% | 0 | 0% |
| Problem Solving | 33 | 9% | 11 | 1% |
| Customer Service | 28 | 7% | 73 | 9% |
| Leadership | 28 | 7% | 50 | 6% |

Top Software Skills



| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|---|----------|---------------------|----------|---------------------|
| Microsoft Excel | 9 | 2% | 43 | 5% |
| Microsoft Office | 9 | 2% | 63 | 8% |
| Application Programming Interface (API) | 7 | 2% | 0 | 0% |
| Microsoft PowerPoint | 6 | 2% | 47 | 6% |
| Microsoft Word | 4 | 1% | 44 | 6% |
| Applicant Tracking Systems | 3 | 1% | 0 | 0% |
| Microsoft Outlook | 3 | 1% | 8 | 1% |
| Audiogram | 2 | 1% | 0 | 0% |
| Microsoft Visio | 2 | 1% | 1 | 0% |
| Extensible Markup Language (XML) | 2 | 1% | 0 | 0% |

Top Qualifications

| Qualification | Postings with Qualification |
|---|-----------------------------|
| Registered Nurse (RN) | 50 |
| Certificate Of Clinical Competence In Speech-Language Pathology (CCC-SLP) | 31 |
| Teaching Certificate | 10 |
| Basic Life Support (BLS) Certification | 10 |
| Certified Child Life Specialist | 7 |
| Licensed Clinical Social Worker (LCSW) | 6 |
| Certified Therapeutic Recreation Specialist | 5 |
| Licensed Social Worker | 5 |
| Licensed Practical Nurse (LPN) | 4 |
| Functional Skills Qualification | 3 |

Appendix A

Program Selection Details

| CIP Code | Program Name |
|----------|---|
| 51.02 | Communication Disorders Sciences and Services |

Appendix B - Data Sources and Calculations

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Occupation Data

Emsi occupation employment data are based on final Emsi industry data and final Emsi staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates are also affected by county-level Emsi earnings by industry.

Lightcast Job Postings

Job postings are collected from various sources and processed/enriched to provide information such as standardized company name, occupation, skills, and geography.

State Data Sources

This report uses state data from the following agencies: Indiana Department of Workforce Development; Kentucky Center for Statistics

Appendix D

Program Overview

Communication Disorders Sciences and Services

Lightcast Q1 2023 Data Set

February 2023

University of Louisville



Kentucky

Parameters

Completions Year: 2021

Jobs Timeframe: 2019 - 2020

Job Postings Timeframe: Jan 2010 - Dec 2022

Programs:

| Code | Description |
|-------|---|
| 51.02 | Communication Disorders Sciences and Services |

Regions:

| Code | Description |
|------|-------------|
| 21 | Kentucky |

Education Level:

| Description |
|-------------------|
| Bachelor's degree |

Tuition Type: Tuition & Fees

Graduate Status: Undergraduate

Residency: In-State

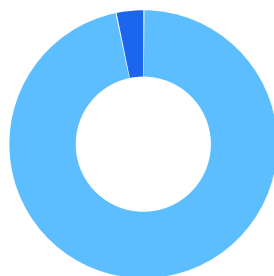


Program Overview



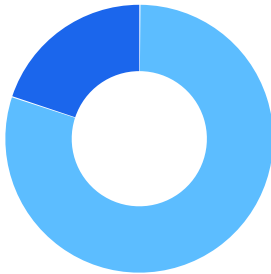
| | Completions (2021) | % Completions | Institutions (2021) | % Institutions |
|---------------------------------|--------------------|---------------|---------------------|----------------|
| ● All Programs | 150 | 100% | 5 | 100% |
| ● Distance Offered Programs | 30 | 20% | 1 | 20% |
| ● Non-Distance Offered Programs | 120 | 80% | 4 | 80% |

Market Share by Institution Type



| Institution Type | Completions (2021) | Market Share |
|---|--------------------|--------------|
| ● Public, 4-year or above | 145 | 96.7% |
| ● Private not-for-profit, 4-year or above | 5 | 3.3% |

Market Share by Program

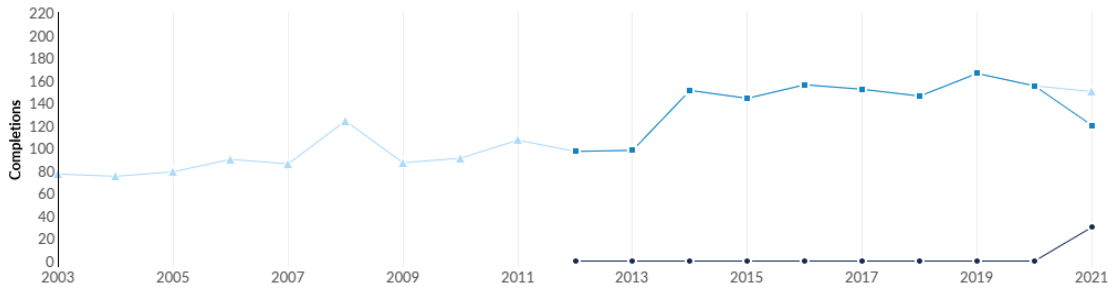


| Program | Completions (2021) | Market Share |
|---|--------------------|--------------|
| ● Audiology/Audiologist and Speech-Language Pathology/Pathologist (51.0204) | 120 | 80.0% |
| ● Communication Sciences and Disorders, General (51.0201) | 30 | 20.0% |

Completions by Institution

| Institution | Bachelor's Degree Completions (2021) | Growth % YOY (2021) | Market Share (2021) | IPEDS Tuition & Fees (2021) | Completions Trend (2017-2021) |
|-----------------------------|--------------------------------------|---------------------|---------------------|-----------------------------|-------------------------------|
| University of Kentucky | 54 | 1.9% | 36.0% | \$12,610 | |
| Eastern Kentucky University | 31 | -6.1% | 20.7% | \$9,752 | |
| Murray State University | 30 | 7.1% | 20.0% | \$9,252 | |
| Western Kentucky University | 30 | -16.7% | 20.0% | \$10,992 | |
| Brescia University | 5 | 0.0% | 3.3% | \$26,950 | |

Regional Trends



| | 2012 Completions | 2021 Completions | % Change |
|---------------------------------|------------------|------------------|------------|
| ● Distance Offered Programs | 0 | 30 | Insf. Data |
| ■ Non-Distance Offered Programs | 97 | 120 | +23.7% |
| ▲ All Programs | 97 | 150 | +54.6% |

Regional Completions by Award Level



| Award Level | Completions (2021) | Percent |
|---------------------|--------------------|---------|
| ● Bachelor's Degree | 150 | 100.0% |

Similar Programs


| 2 Programs (2021) | | 150 Completions (2021) | |
|----------------------|---|--------------------------------------|--|
| CIP Code | Program | Bachelor's Degree Completions (2021) | |
| 51.0204 | Audiology/Audiologist and Speech-Language Pathology/Pathologist | 120 | |
| 51.0201 | Communication Sciences and Disorders, General | 30 | |

Target Occupations

**Filtered by the proportion of the national workforce in these occupations with a Bachelor's degree*

| 430 <i>Jobs (2019)*</i> 11% <i>above</i> National average* | 0.0% <i>% Change (2019-2020)*</i> Nation: <i>-0.2%*</i> | | \$29.71/hr \$61.8K/yr Median Earnings Nation: \$29.02/hr; \$60.4K/yr | 68 <i>Annual Openings*</i> | |
|--|---|------------------|--|-------------------------------|---------------------------|
| Occupation | 2019 Jobs* | Annual Openings* | Median Earnings | Growth (2019 - 2020)* | Location Quotient (2019)* |
| Speech-Language Pathologists | 229 | 23 | \$35.85/hr | -1.31% | 1.23 |
| Healthcare Support Workers, All Other | 189 | 42 | \$18.36/hr | +0.53% | 1.02 |
| Audiologists | 12 | 2 | \$32.93/hr | +16.67% | 0.79 |











Job Postings Summary

| | | |
|--|--|---|
| <p>741</p> <p>Unique Postings 1,672 Total Postings</p> | <p>2 : 1</p> <p>Posting Intensity</p>  <p>Regional Average: 3 : 1</p> | <p>15 days</p> <p>Median Posting Duration Regional Average: 16 days</p> |
|--|--|---|

There were 1,672 total job postings for your selection from January 2010 to December 2022, of which 741 were unique. These numbers give us a Posting Intensity of 2-to-1, meaning that for every 2 postings there is 1 unique job posting.

This is close to the Posting Intensity for all other occupations and companies in the region (3-to-1), indicating that they are putting average effort toward hiring for this position.

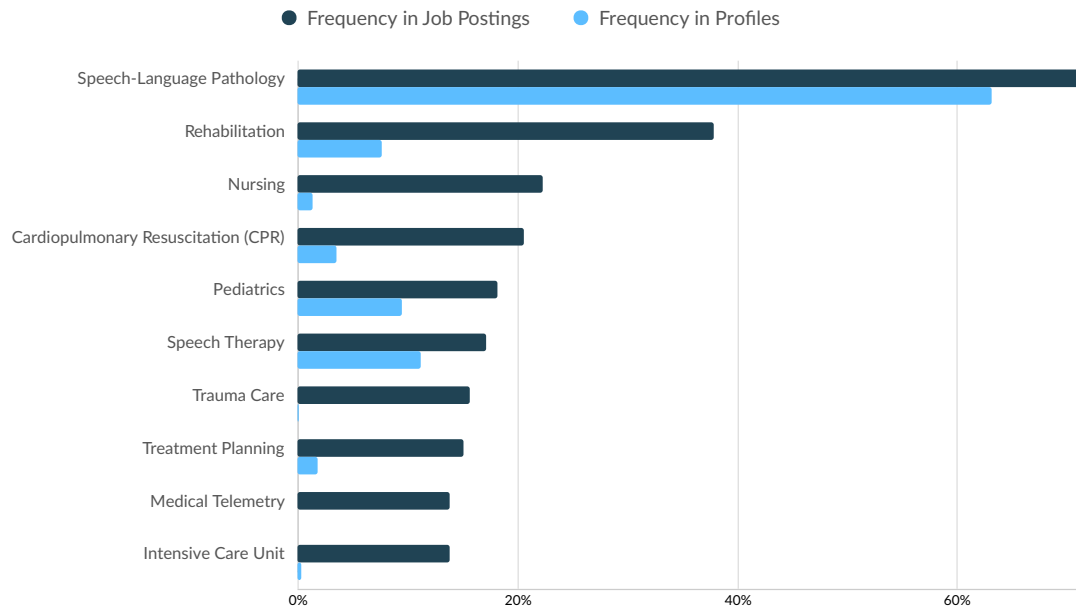
Top Companies Posting

| Company | Total/Unique (Jan 2010 - Dec 2022) | Posting Intensity | Median Posting Duration |
|-----------------------------|------------------------------------|---|-------------------------|
| Encompass Health | 306 / 75 | 4 : 1  | 20 days |
| Kindred Healthcare | 78 / 39 | 2 : 1  | 28 days |
| Aegis Therapies | 33 / 20 | 2 : 1  | n/a |
| Norton Healthcare | 101 / 18 | 6 : 1  | 15 days |
| LifePoint Health | 44 / 17 | 3 : 1  | 6 days |
| Communicare Health Services | 71 / 16 | 4 : 1  | 19 days |
| LHC Group | 26 / 14 | 2 : 1  | 6 days |
| Intrepid International Ltd | 38 / 13 | 3 : 1  | 0 days |
| CommonSpirit Health | 18 / 12 | 2 : 1  | n/a |
| Genesis HealthCare | 54 / 12 | 5 : 1  | 6 days |

Top Posted Job Titles

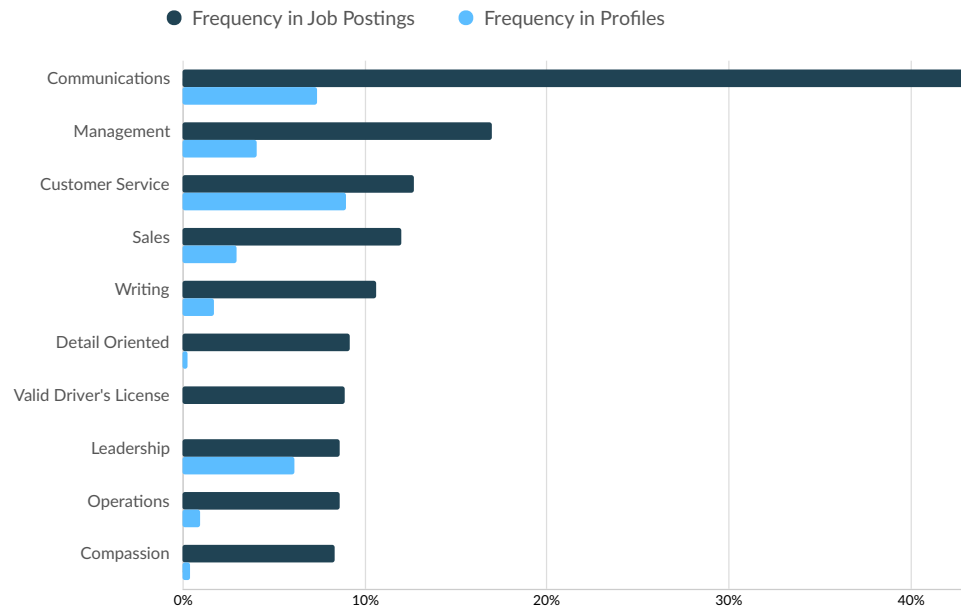
| Job Title | Total/Unique (Jan 2010 - Dec 2022) | Posting Intensity | Median Posting Duration |
|--|------------------------------------|-------------------|-------------------------|
| Speech Language Pathologists | 733 / 353 | 2 : 1 | 8 days |
| Speech Therapists | 114 / 59 | 2 : 1 | 2 days |
| Clinical Nurse Liaisons | 53 / 28 | 2 : 1 | 39 days |
| Audiologists | 34 / 21 | 2 : 1 | 0 days |
| Home Health Speech Language Pathologists | 27 / 15 | 2 : 1 | 30 days |
| Therapists/Speech Language Pathologists | 30 / 15 | 2 : 1 | n/a |
| Child Therapists | 29 / 12 | 2 : 1 | 10 days |
| Directors of Rehabilitation | 34 / 12 | 3 : 1 | 39 days |
| Speech Language Pathologist Assistants | 17 / 12 | 1 : 1 | 8 days |
| Medical Social Workers | 29 / 11 | 3 : 1 | 40 days |

Top Specialized Skills



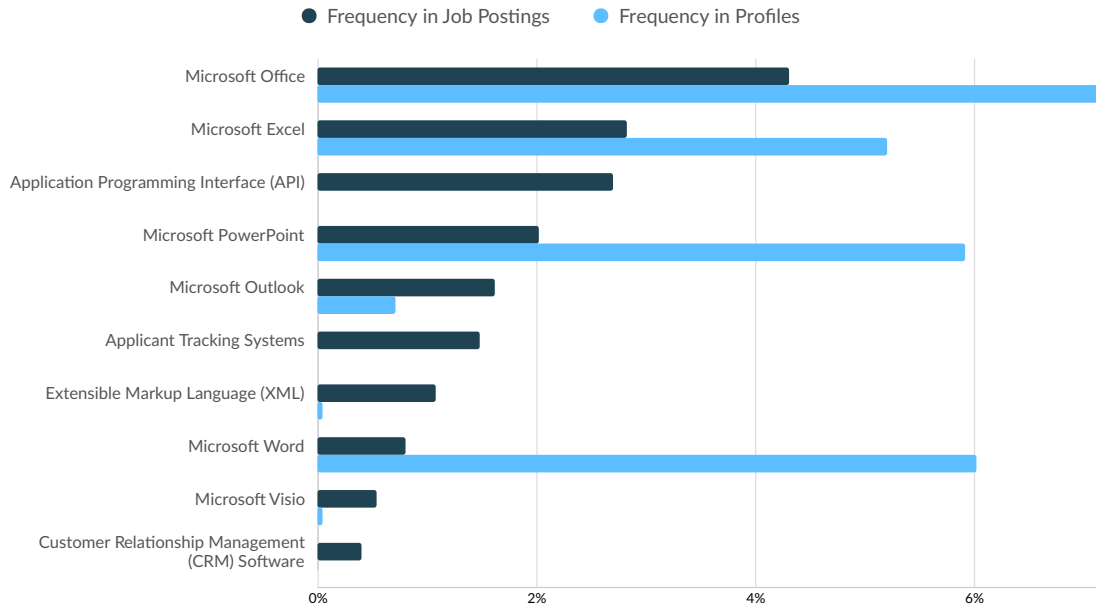
| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|-------------------------------------|----------|---------------------|----------|---------------------|
| Speech-Language Pathology | 530 | 72% | 1,248 | 63% |
| Rehabilitation | 281 | 38% | 151 | 8% |
| Nursing | 165 | 22% | 27 | 1% |
| Cardiopulmonary Resuscitation (CPR) | 153 | 21% | 69 | 3% |
| Pediatrics | 135 | 18% | 188 | 10% |
| Speech Therapy | 127 | 17% | 221 | 11% |
| Trauma Care | 116 | 16% | 3 | 0% |
| Treatment Planning | 112 | 15% | 37 | 2% |
| Medical Telemetry | 103 | 14% | 0 | 0% |
| Intensive Care Unit | 103 | 14% | 7 | 0% |

Top Common Skills



| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|------------------------|----------|---------------------|----------|---------------------|
| Communications | 320 | 43% | 146 | 7% |
| Management | 126 | 17% | 81 | 4% |
| Customer Service | 94 | 13% | 177 | 9% |
| Sales | 89 | 12% | 59 | 3% |
| Writing | 79 | 11% | 34 | 2% |
| Detail Oriented | 68 | 9% | 6 | 0% |
| Valid Driver's License | 66 | 9% | 0 | 0% |
| Leadership | 64 | 9% | 122 | 6% |
| Operations | 64 | 9% | 19 | 1% |
| Compassion | 62 | 8% | 8 | 0% |

Top Software Skills



| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|---|----------|---------------------|----------|---------------------|
| Microsoft Office | 32 | 4% | 142 | 7% |
| Microsoft Excel | 21 | 3% | 103 | 5% |
| Application Programming Interface (API) | 20 | 3% | 0 | 0% |
| Microsoft PowerPoint | 15 | 2% | 117 | 6% |
| Microsoft Outlook | 12 | 2% | 14 | 1% |
| Applicant Tracking Systems | 11 | 1% | 0 | 0% |
| Extensible Markup Language (XML) | 8 | 1% | 1 | 0% |
| Microsoft Word | 6 | 1% | 119 | 6% |
| Microsoft Visio | 4 | 1% | 1 | 0% |
| Customer Relationship Management (CRM) Software | 3 | 0% | 0 | 0% |

Top Qualifications

| Qualification | Postings with Qualification |
|---|-----------------------------|
| Registered Nurse (RN) | 161 |
| Certificate Of Clinical Competence In Speech-Language Pathology (CCC-SLP) | 83 |
| Basic Life Support (BLS) Certification | 34 |
| Certificate Of Clinical Competence In Audiology (CCC-A) | 14 |
| Teaching Certificate | 12 |
| Licensed Clinical Social Worker (LCSW) | 12 |
| Licensed Social Worker | 10 |
| Certified Child Life Specialist | 7 |
| Certified Occupational Therapy Assistant | 7 |
| Master Of Business Administration (MBA) | 7 |

Appendix A

Program Selection Details

| CIP Code | Program Name |
|----------|---|
| 51.02 | Communication Disorders Sciences and Services |

Appendix B - Data Sources and Calculations

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Occupation Data

Emsi occupation employment data are based on final Emsi industry data and final Emsi staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates are also affected by county-level Emsi earnings by industry.

Lightcast Job Postings

Job postings are collected from various sources and processed/enriched to provide information such as standardized company name, occupation, skills, and geography.

State Data Sources

This report uses state data from the following agencies: Kentucky Center for Statistics

Appendix E

Program Overview

Communication Disorders Sciences and Services

Lightcast Q1 2023 Data Set

February 2023

University of Louisville



Kentucky

Parameters

Completions Year: 2021

Jobs Timeframe: 2019 - 2020

Job Postings Timeframe: Jan 2010 - Dec 2022

Programs:

| Code | Description |
|------|-------------|
|------|-------------|

| | |
|-------|---|
| 51.02 | Communication Disorders Sciences and Services |
|-------|---|

Regions:

| Code | Description |
|------|-------------|
|------|-------------|

| | |
|---|---------------|
| 0 | United States |
|---|---------------|

Education Level:

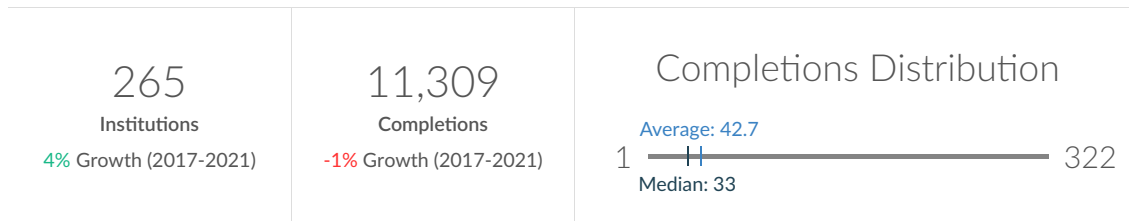
| Description |
|-------------|
|-------------|

| |
|-------------------|
| Bachelor's degree |
|-------------------|

Tuition Type: Tuition & Fees

Graduate Status: Undergraduate

Residency: In-State

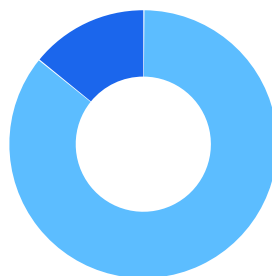


Program Overview



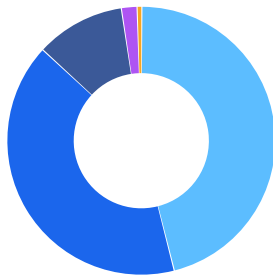
| | Completions (2021) | % Completions | Institutions (2021) | % Institutions |
|---------------------------------|--------------------|---------------|---------------------|----------------|
| ● All Programs | 11,309 | 100% | 265 | 100% |
| ● Distance Offered Programs | 877 | 8% | 18 | 7% |
| ● Non-Distance Offered Programs | 10,432 | 92% | 248 | 94% |

Market Share by Institution Type



| Institution Type | Completions (2021) | Market Share |
|---|--------------------|--------------|
| ● Public, 4-year or above | 9,698 | 85.8% |
| ● Private not-for-profit, 4-year or above | 1,611 | 14.2% |

Market Share by Program

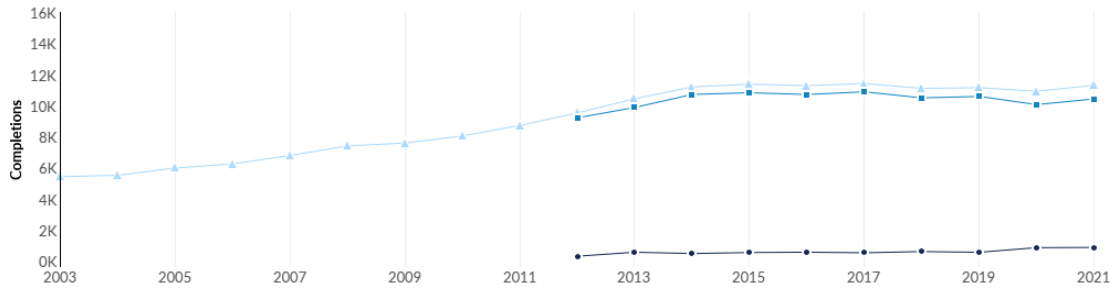


| Program | Completions (2021) | Market Share |
|---|--------------------|--------------|
| ● Communication Sciences and Disorders, General (51.0201) | 5,199 | 46.0% |
| ● Audiology/Audiologist and Speech-Language Pathology/Pathologist (51.0204) | 4,616 | 40.8% |
| ● Speech-Language Pathology/Pathologist (51.0203) | 1,216 | 10.8% |
| ● Audiology/Audiologist (51.0202) | 213 | 1.9% |
| ● Other | 65 | 0.6% |

Completions by Institution

| Institution | Bachelor's Degree Completions (2021) | Growth % YOY (2021) | Market Share (2021) | IPEDS Tuition & Fees (2021) | Completions Trend (2017-2021) |
|---|--------------------------------------|---------------------|---------------------|-----------------------------|-------------------------------|
| Utah State University | 322 | -4.7% | 2.8% | \$8,960 | |
| University of Central Florida | 239 | -7.4% | 2.1% | \$6,368 | |
| California State University-Los Angeles | 179 | 27.9% | 1.6% | \$6,785 | |
| University of South Florida | 171 | -14.5% | 1.5% | \$6,410 | |
| California State University-Fullerton | 156 | 0.6% | 1.4% | \$6,976 | |
| San Diego State University | 137 | 18.1% | 1.2% | \$8,136 | |
| California State University-Sacramento | 129 | -9.8% | 1.1% | \$7,392 | |
| California State University-Fresno | 125 | 8.7% | 1.1% | \$6,653 | |
| California State University-Northridge | 124 | 37.8% | 1.1% | \$7,043 | |
| The Pennsylvania State University | 124 | -15.1% | 1.1% | \$15,890 | |

Regional Trends



| | 2012 Completions | 2021 Completions | % Change |
|---------------------------------|------------------|------------------|----------|
| ● Distance Offered Programs | 311 | 877 | +182.0% |
| ■ Non-Distance Offered Programs | 9,217 | 10,432 | +13.2% |
| ▲ All Programs | 9,528 | 11,309 | +18.7% |

Regional Completions by Award Level



| Award Level | Completions (2021) | Percent |
|---------------------|--------------------|---------|
| ● Bachelor's Degree | 11,309 | 100.0% |

Similar Programs

| 9 Programs (2021) | | 11,958 Completions (2021) |
|----------------------|---|--------------------------------------|
| CIP Code | Program | Bachelor's Degree Completions (2021) |
| 51.0201 | Communication Sciences and Disorders, General | 5,199 |
| 51.0204 | Audiology/Audiologist and Speech-Language Pathology/Pathologist | 4,616 |
| 51.0203 | Speech-Language Pathology/Pathologist | 1,216 |
| 51.0899 | Allied Health and Medical Assisting Services, Other | 630 |
| 51.0202 | Audiology/Audiologist | 213 |
| 51.0299 | Communication Disorders Sciences and Services, Other | 65 |
| 51.0816 | Speech-Language Pathology Assistant | 19 |
| 51.0814 | Radiologist Assistant | 0 |
| 51.3799 | Energy and Biologically Based Therapies, Other | 0 |


Target Occupations

**Filtered by the proportion of the national workforce in these occupations with a Bachelor's degree*

| | | | |
|-------------------------------|---------------------------------------|---|----------------------------------|
| 33,395 <i>Jobs (2019)*</i> | -0.2% <i>% Change (2019-2020)*</i> | \$29.02/hr \$60.4K/yr Median Earnings | 5,111 <i>Annual Openings*</i> |
|-------------------------------|---------------------------------------|---|----------------------------------|

| Occupation | 2019 Jobs* | Annual Openings* | Median Earnings | Growth (2019 - 2020)* |
|---------------------------------------|------------|------------------|-----------------|-----------------------|
| Speech-Language Pathologists | 16,067 | 1,323 | \$37.98/hr | -3.80% |
| Healthcare Support Workers, All Other | 15,992 | 3,612 | \$18.22/hr | +3.61% |
| Audiologists | 1,336 | 176 | \$37.97/hr | -2.62% |











Job Postings Summary

| | | |
|---|---|---|
| <p>74,112 Unique Postings 211,086 Total Postings</p> | <p>3 : 1 Posting Intensity  Regional Average: 3 : 1</p> | <p>16 days Median Posting Duration Regional Average: 18 days</p> |
|---|---|---|

There were 211,086 total job postings for your selection from January 2010 to December 2022, of which 74,112 were unique. These numbers give us a Posting Intensity of 3-to-1, meaning that for every 3 postings there is 1 unique job posting.

This is close to the Posting Intensity for all other occupations and companies in the region (3-to-1), indicating that they are putting average effort toward hiring for this position.

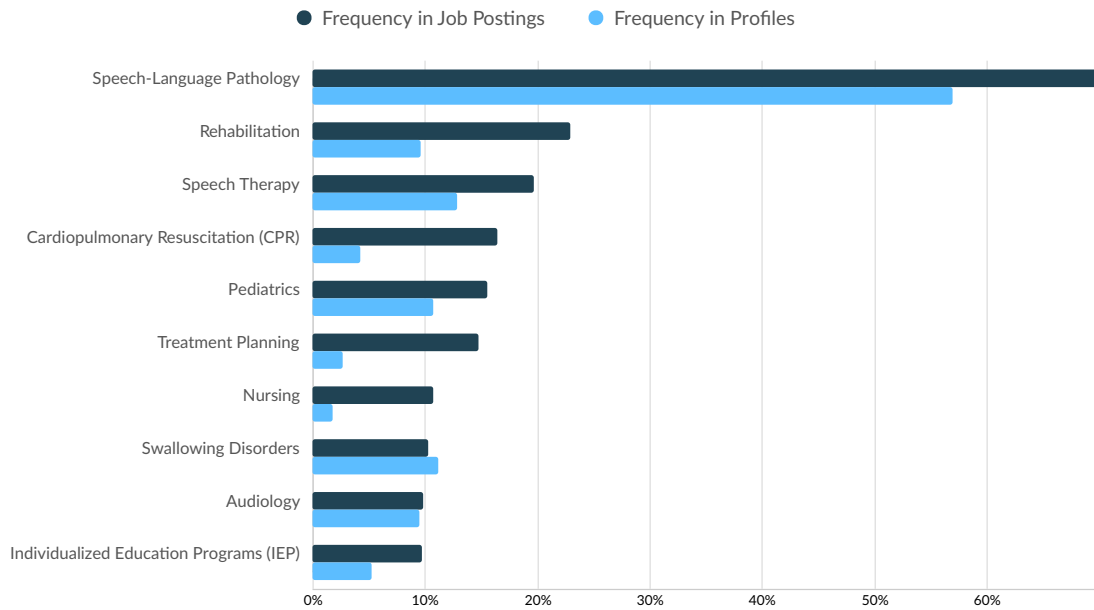
Top Companies Posting

| Company | Total/Unique (Jan 2010 - Dec 2022) | Posting Intensity | Median Posting Duration |
|------------------------------|------------------------------------|---|-------------------------|
| Encompass Health | 10,437 / 2,636 | 4 : 1  | 22 days |
| Soliant Health | 7,436 / 2,075 | 4 : 1  | 33 days |
| Supplemental Health Care | 3,940 / 861 | 5 : 1  | 16 days |
| Kindred Healthcare | 2,440 / 843 | 3 : 1  | 17 days |
| Legacy Healthcare Services | 2,065 / 785 | 3 : 1  | 45 days |
| Amazon | 3,696 / 764 | 5 : 1  | 26 days |
| EBS Healthcare | 832 / 736 | 1 : 1  | 0 days |
| BrightSpring Health Services | 2,239 / 728 | 3 : 1  | 7 days |
| Sunbelt Staffing | 1,313 / 582 | 2 : 1  | 20 days |
| ProCare Therapy | 1,150 / 546 | 2 : 1  | 14 days |

Top Posted Job Titles

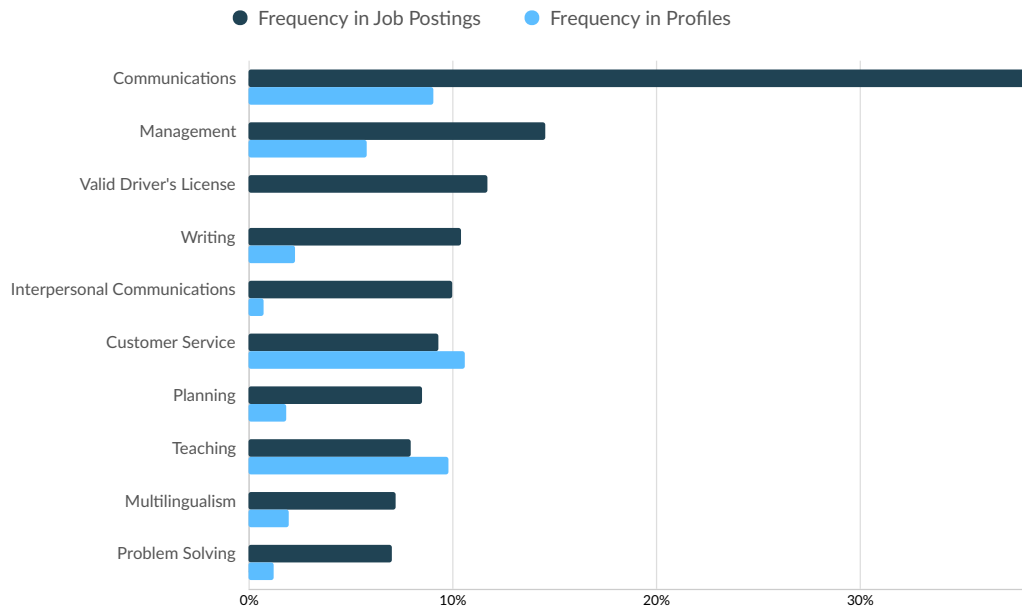
| Job Title | Total/Unique (Jan 2010 - Dec 2022) | Posting Intensity | Median Posting Duration |
|--|------------------------------------|-------------------|-------------------------|
| Speech Language Pathologists | 91,219 / 31,297 | 3 : 1 | 17 days |
| Speech Therapists | 11,197 / 4,576 | 2 : 1 | 9 days |
| Speech Language Pathologist Assistants | 15,595 / 4,255 | 4 : 1 | 24 days |
| Direct Support Professionals | 3,342 / 1,220 | 3 : 1 | 27 days |
| Pediatric Speech Language Pathologists | 5,384 / 1,152 | 5 : 1 | 17 days |
| Travel Therapists/Speech Language Pathologists | 4,205 / 1,150 | 4 : 1 | n/a |
| Therapeutic Support Staff | 2,200 / 1,088 | 2 : 1 | 19 days |
| School Speech Language Pathologists | 4,539 / 910 | 5 : 1 | 15 days |
| Therapists/Speech Language Pathologists | 2,762 / 855 | 3 : 1 | 8 days |
| Audiologists | 2,002 / 738 | 3 : 1 | 17 days |

Top Specialized Skills



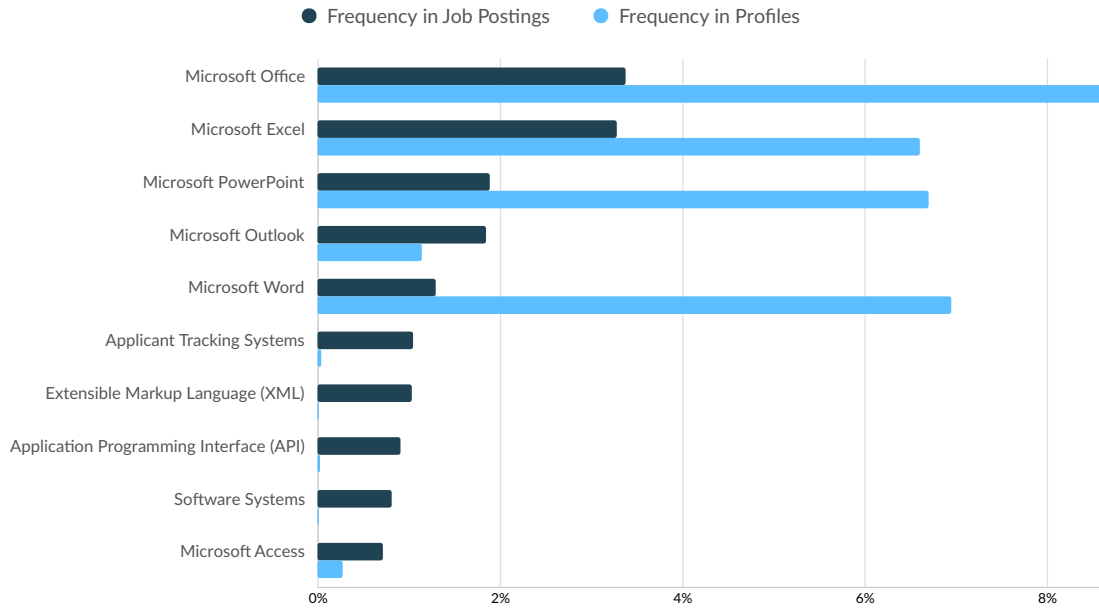
| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|---|----------|---------------------|----------|---------------------|
| Speech-Language Pathology | 51,842 | 70% | 97,246 | 57% |
| Rehabilitation | 17,011 | 23% | 16,469 | 10% |
| Speech Therapy | 14,613 | 20% | 21,925 | 13% |
| Cardiopulmonary Resuscitation (CPR) | 12,166 | 16% | 7,190 | 4% |
| Pediatrics | 11,570 | 16% | 18,435 | 11% |
| Treatment Planning | 10,981 | 15% | 4,647 | 3% |
| Nursing | 7,935 | 11% | 3,040 | 2% |
| Swallowing Disorders | 7,651 | 10% | 19,155 | 11% |
| Audiology | 7,287 | 10% | 16,192 | 9% |
| Individualized Education Programs (IEP) | 7,236 | 10% | 8,943 | 5% |

Top Common Skills



| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|------------------------------|----------|---------------------|----------|---------------------|
| Communications | 28,610 | 39% | 15,498 | 9% |
| Management | 10,799 | 15% | 9,914 | 6% |
| Valid Driver's License | 8,699 | 12% | 24 | 0% |
| Writing | 7,747 | 10% | 3,950 | 2% |
| Interpersonal Communications | 7,433 | 10% | 1,301 | 1% |
| Customer Service | 6,896 | 9% | 18,178 | 11% |
| Planning | 6,317 | 9% | 3,196 | 2% |
| Teaching | 5,916 | 8% | 16,752 | 10% |
| Multilingualism | 5,351 | 7% | 3,361 | 2% |
| Problem Solving | 5,235 | 7% | 2,098 | 1% |

Top Software Skills



| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|---|----------|---------------------|----------|---------------------|
| Microsoft Office | 2,504 | 3% | 14,708 | 9% |
| Microsoft Excel | 2,432 | 3% | 11,271 | 7% |
| Microsoft PowerPoint | 1,401 | 2% | 11,436 | 7% |
| Microsoft Outlook | 1,372 | 2% | 1,949 | 1% |
| Microsoft Word | 958 | 1% | 11,868 | 7% |
| Applicant Tracking Systems | 774 | 1% | 75 | 0% |
| Extensible Markup Language (XML) | 764 | 1% | 34 | 0% |
| Application Programming Interface (API) | 676 | 1% | 49 | 0% |
| Software Systems | 606 | 1% | 28 | 0% |
| Microsoft Access | 534 | 1% | 480 | 0% |

Top Qualifications

| Qualification | Postings with Qualification |
|---|-----------------------------|
| Certificate Of Clinical Competence In Speech-Language Pathology (CCC-SLP) | 13,018 |
| Registered Nurse (RN) | 6,793 |
| Basic Life Support (BLS) Certification | 4,507 |
| Teaching Certificate | 2,186 |
| Licensed Practical Nurse (LPN) | 870 |
| Certified Occupational Therapy Assistant | 632 |
| Certificate Of Clinical Competence In Audiology (CCC-A) | 594 |
| Certified Nursing Assistant | 520 |
| Hearing Instrument Specialist | 466 |
| Basic Cardiac Life Support | 397 |

Appendix A

Program Selection Details

| CIP Code | Program Name |
|----------|---|
| 51.02 | Communication Disorders Sciences and Services |

Appendix B - Data Sources and Calculations

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Occupation Data

Emsi occupation employment data are based on final Emsi industry data and final Emsi staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates are also affected by county-level Emsi earnings by industry.

Lightcast Job Postings

Job postings are collected from various sources and processed/enriched to provide information such as standardized company name, occupation, skills, and geography.

State Data Sources

This report uses state data from the following agencies: Alabama Department of Labor; Alaska Department of Labor and Workforce Development; Arizona Commerce Authority; Arkansas Division of Workforce Services; California Employment Development Department; Colorado Department of Labor and Employment; Connecticut Department of Labor; Delaware Office of Occupational and Labor Market Information; District of Columbia Department of Employment Services; Florida Department of Economic Opportunity; Georgia Labor Market Explorer; Hawaii Workforce Infonet; Idaho Department of Labor; Illinois Department of Employment Security; Indiana Department of Workforce Development; Iowa Workforce Development; Kansas Department of Labor; Kentucky Center for Statistics; Louisiana Workforce Commission; Maine Department of Labor; Maryland Department of Labor; Commonwealth of Massachusetts, Mass.gov; Michigan Department of Technology, Management and Budget; Minnesota Department of Employment and Economic Development; Mississippi Department of Employment Security; Missouri Economic Research and Information Center; Montana Department of Labor and Industry; Nebraska Department of Labor, NEworks; Nevada Department of Employment, Training and Rehabilitation; New Hampshire Employment Security; New Jersey Department of Labor and Workforce Development; New Mexico Department of Workforce Solutions; New York Department of Labor; North Carolina Department of Commerce; North Dakota Job Service; Ohio Department of Job and Family Services; Oklahoma Employment Security Commission; Oregon Employment Department; Pennsylvania Department of Labor and Industry, Center for Workforce Information and Analysis; Rhode Island Department of Labor and Training; South Carolina Department of Employment and Workforce; South Dakota Department of Labor and Regulation; Tennessee Department of Labor & Workforce Development; Texas Workforce Commission; Utah Department of Workforce Services; Vermont Department of Labor; Virginia Employment Commission; Washington State Employment Security Department; West Virginia Department of Commerce; Wisconsin Department of Workforce Development; Wyoming Department of Workforce Services

Appendix F

Table 8. Employer Demand (From Lightcast Q1 2023 Data Sets)

| Job Type | Regional Average Wage | Region # of Openings | Regional Growth Projections (%) | State Average Wage | State # of Openings | State Growth Projections (%) | National Average Wage | National # of Openings | National Growth Projections (%) |
|-----------------------------|-----------------------|----------------------|---------------------------------|--------------------|---------------------|------------------------------|-----------------------|------------------------|---------------------------------|
| Audiologist | \$38.88/hr | <10 | Insufficient Data | \$32.93/hr | 12 | +16.67% | \$37.97/hr | 16,067 | -3.80% |
| Speech-Language Pathologist | \$45.64/hr | 63 | 0% | \$35.85/hr | 229 | -1.31% | \$37.98/hr | 15,992 | -2.62% |

Appendix G

Eastern Kentucky University

Friday, August 25, 2023 at 09:54:20 Eastern Daylight Time

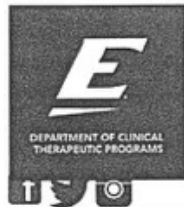
Subject: RE: [EXTERNAL] Undergraduate Program in CSD at UofL
Date: Wednesday, August 23, 2023 at 3:26:45 PM Eastern Daylight Time
From: Ellis, Kellie
To: Smith, Alan
Attachments: image002.jpg, image004.png, image005.png, image006.jpg,
image007.png, image003.jpg

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Alan,

Thank you for the message. I applaud your work and efforts to provide an undergraduate degree in Communication Sciences and Disorders at U of L. Having two tracks, with one using a 3+4 model, is a great idea! Please let me know if you need anything more formal than this email as documentation of my feedback.

Thanks,
Kellie



Kellie C. Ellis, Ph.D., CCC/SLP
Chair-Department of Clinical Therapeutic Programs
Professor of Speech-Language Pathology
College of Education and Applied Human Sciences
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From: Smith, Alan <alan.smith.1@louisville.edu>
Sent: Wednesday, August 23, 2023 12:44 PM
To: Ellis, Kellie <Kellie.Ellis@eku.edu>
Subject: [EXTERNAL] Undergraduate Program in CSD at UofL
Importance: High

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Hi Kellie.

I've been working on developing an UG program for some time now. Part of the process requires that I get input/approval from the other CSD programs in the state. I value your support in this endeavor. The abstract of the planned program is below. Please let me know your thoughts when able.

Alan

The Bachelor of Science (BS) degree in communication sciences and disorders at the University of Louisville (UofL) is a four-year program (minimum 120 credit hours) that seeks to attract top students whose interests center on the biological, physical, sociocultural, and linguistic aspects of human

1 of 2

University of Kentucky

Friday, August 25, 2023 at 09:53:59 Eastern Daylight Time

Subject: RE: Undergraduate Program in CSD at UofL
Date: Thursday, August 24, 2023 at 9:28:16 AM Eastern Daylight Time
From: Olson, Anne
To: Smith, Alan
Attachments: image003.jpg, image004.jpg

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Ah ok. It's a CPE requirement. It's not technically going to be in a graduate bulletin or live on a website someplace. That helps a lot. So here's my feedback.

- In principle, yes a BS degree in CSD will be a nice addition to the programming offered at UL as reflected in the planned "Two Year Track"
- The additional 3+4 track that leads to an AuD sounds very appealing for select and talented students. I like that students do earn the BS degree -- is the idea that the degree will be in CSD or in Audiology? That's not clear from the description provided.
 - I would think that you would need to be more clear on what you mean by "certain" students.
 - I wonder if you need to describe this as a "professional doctorate" degree rather than a graduate degree -- it's a subtle difference, but a very real difference.
 - I wonder if you need to say anything about delivery mode for folks at CPE

Good luck Alan! ADO

From: Smith, Alan <alan.smith.1@louisville.edu>
Sent: Wednesday, August 23, 2023 7:42 PM
To: Olson, Anne <aolso2@uky.edu>
Subject: Re: Undergraduate Program in CSD at UofL

CAUTION: External Sender

Hi Anne.

This is just a snapshot of the plan that I've pulled together for my university and possibly the CPE going forward. There is no word limit. I'm only asking if--as Division Director at UK--that you approve my moving forward with an UG program at UofL. This is a CPE requirement and I need feedback from all CSD programs in the state. You are certainly free to disagree with my plan. I hope you feel comfortable indicating such, if that's the case. No worries.

Alan

Alan F. Smith, EdD, CCC-SLP
 Associate Professor
 Division Chief | Communicative Disorders
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1 of 3

Western Kentucky University

Wednesday, August 30, 2023 at 09:27:43 Eastern Daylight Time

Subject: Re: [EXTERNAL] Seeking Feedback

Date: Wednesday, August 30, 2023 at 7:09:01 AM Eastern Daylight Time

From: Roden, Leigh Anne

To: Bland, Lauren

CC: Smith, Alan, kimberly.green@wku.edu

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This looks good to me as well and will be a great addition to our UG programs in the state.

Leigh Anne Roden, Ed.D., CCC-SLP
Clinical Associate Professor
Undergraduate Program Coordinator
Communication Sciences and Disorders
Western Kentucky University
2706701089 (C)
2707454236 (O)

On Aug 30, 2023, at 5:56 AM, Bland, Lauren <lauren.bland@wku.edu> wrote:

Good morning Alan,

I think the foundation of what you're starting is good. Since you're going for an accelerated audiology track, I think a 3 + 2 program in speech language pathology could be well received. CPE and your BOR might see it as unique.

Thanks for asking.

Lauren

Sent from my iPhone

On Aug 29, 2023, at 6:36 PM, Smith, Alan
<alan.smith.1@louisville.edu> wrote:

Hi Kimberly, Leigh-Anne, and/or Lauren.
I know you are all super busy right now with the fall semester getting

Murray State University

Hi Alan,

This looks great and I am really excited to see the impacts from offering an accelerated track for audiology. I think that option would be very appealing to students. I shared this with Megan Smetana, who is our undergraduate coordinator here at Murray State and she also thought it looked good. We are happy to help if you have any other needs along the way. Just let us know!

Best of luck as you move forward!

Stephanie Schaaf, Ed.D., CCC-SLP

Academic and Program Director/Assistant professor

Murray State University

Center for Communication Disorders

sschaaf@murraystate.edu

270-809-3783



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