

**APPROVED**  
**AUGUST 10, 2021**

Item #C-3  
August 10, 2021

**NEW UNITS OF INSTRUCTION, PUBLIC SERVICE,  
AND RESEARCH AT PUBLIC UNIVERSITIES**

**Submitted for:** Action.

**Summary:** This item requests approval of six degree programs and one center at five public universities.

**Action Requested:** That the Illinois Board of Higher Education approve the following:

Southern Illinois University Carbondale

- Master of Science in Aviation Management in the Southern Region
- Center for Autism Spectrum Disorders in the Southern Region

University of Illinois Chicago

- Bachelor of Science in Pharmaceutical Science in the Chicago Region

University of Illinois Springfield

- Master of Public Policy in the Central Region

University of Illinois Urbana-Champaign

- Bachelor of Science in Liberal Arts and Sciences in Linguistics and Teaching English as a Second Language in the Prairie Region
- Master of Science in Weather and Climate Risk and Analytics in the Prairie Region

Western Illinois University

- Master of Science in Teaching Mathematics in the Western Region



STATE OF ILLINOIS  
BOARD OF HIGHER EDUCATION

**NEW UNITS OF INSTRUCTION, PUBLIC SERVICE,  
AND RESEARCH AT PUBLIC UNIVERSITIES**

By statute, the Illinois Board of Higher Education (IBHE) is responsible for approving new on-campus and off-campus units of instruction, organized research, and public service, and units of administration proposed by public university governing boards. The Board's approval criteria, defined in rules adopted for administering the statute, addresses university mission, academic control, faculty and staff, support services, financial resources, student demand, curriculum, statewide need, and congruence with Board policies and priorities. In addition to the approval criteria in rules, each new program was reviewed for its contributions to the goals of *A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth*, which sets forth priorities and strategies to guide Illinois higher education. Staff recommendations are based on analyses of application materials and responses to staff questions.

**Executive Summary – Public Institutions**

Southern Illinois University Carbondale

- Master of Science in Aviation Management in the Southern Region

Southern Illinois University Carbondale (SIUC or University) requests authorization to offer a Master of Science (MS) in Aviation Management in the Southern Region. The proposed online graduate program is designed to prepare working-professionals and full-time students for advancement in the aviation industry with organizations such as airlines, aerospace manufacturers, aviation consulting firms, government agencies, and more. The MS in Aviation Management requires 30 credit hours which consists of 21 credit hours of core courses and nine credit hours of elective courses in aviation statistics and information systems, law and regulation, safety, and international aviation, concluding in a capstone data analysis course. There are policies in place to ensure faculty members possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, staff, and financial resources in place to support the program.

Approval request summary, including staff conclusion, follows in Attachment A.

- Center for Autism Spectrum Disorders in the Southern Region

Southern Illinois University Carbondale (SIUC or the University) requests authorization to permanently establish the Center for Autism Spectrum Disorders (Center) in the Southern Region. The Center is one of four regionally based university centers instituted in 2003 as part of the Public Act 93-0395 that established The Autism Program of Illinois (TAP). This service network collaboration comprised of four universities and 11 organizations together operate 20 centers that serve and support persons with autism spectrum disorder (ASD) and their families while developing, utilizing,

and sharing best practices. The proposed Center for Autism Spectrum Disorders offers applied behavior analysis, speech-language pathology, and child clinical psychology services. Furthermore, the Center serves as a training ground for students in the following programs within the College of Health and Human Sciences at SIUC: Clinical Psychology, Behavior Analysis and Therapy, Communication Disorders and Sciences (Speech-Language Pathology). The University has sufficient library, technology, staff, and financial resources in place to support the Center.

Approval request summary, including staff conclusion, follows in Attachment B.

#### University of Illinois Chicago

- Bachelor of Science in Pharmaceutical Science in the Chicago Region

The University of Illinois Chicago (UIC or the University) requests authorization to offer the Bachelor of Science (BS) in Pharmaceutical Sciences in the Chicago Region. The proposed non-licensure program prepares students for graduate or professional study or immediate employment in pharmaceutical science and research, pharmaceutical administration and sales, biotechnology, drug manufacturing, regulatory affairs, and/or food and agricultural industries. The proposed program requires 120 credit hours to graduate comprised of 60-62 credit hours of Pre-Pharmaceutical Sciences and General Education coursework and 58-62 credit hours of major and elective coursework. There are policies in place to ensure faculty members possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, staff, and financial resources in place to support the program.

Approval request summary, including staff conclusion, follows in Attachment C.

#### University of Illinois Springfield

- Master of Public Policy in the Central Region

The University of Illinois Springfield (UIS or the University) requests authorization to offer a Master of Public Policy (MPP) in the Central Region. The MPP consists of 36 credit-hours including 24 core courses in analysis, policy and economics, and a capstone course. With the remaining 12 hours of electives, students have the option to complete a Graduate Certificate or concentration in one of the following areas: social policy, child advocacy and policy, policy analysis tools, education policy, or health policy. Graduates will be prepared with the skills and abilities to analyze and evaluate public policy to serve the public interest and encourage civic engagement. There are policies in place to ensure faculty members possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, staff, and financial resources in place to support the program.

Approval request summary, including staff conclusion, follows in Attachment D.

#### University of Illinois Urbana-Champaign

- Bachelor of Arts in Liberal Arts and Sciences in Linguistics and Teaching English in the Prairie Region

The University of Illinois Urbana-Champaign (UIUC or University) requests authorization to offer a Bachelor of Arts in Liberal Arts and Sciences (BALAS) in Linguistics and Teaching English as

a Second Language (TESL) in the Prairie Region. The proposed program is designed to provide students with broad training that will prepare them for careers in English language teaching in Pre-K-12 schools, higher education institutions, and adult education centers in the United States and around the world. The 120-credit-hour interdisciplinary program will introduce students to both general linguistics and educational linguistics through which they will gain a solid understanding of linguistic principles and linguistic developmental trajectories, as well as a practical training in teaching, assessment, and material development for English as a second (ESL) or foreign language (EFL). There are policies in place to ensure faculty members possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, staff, and financial resources in place to support the program.

Approval request summary, including staff conclusion, follows in Attachment E.

#### University of Illinois Urbana-Champaign

- Master of Science in Weather and Climate Risk and Analytics in the Prairie Region

The University of Illinois Urbana-Champaign (UIUC or the University) requests authorization to offer a Master of Science in Weather and Climate Risk and Analytics in the Prairie Region. This 32-credit hour online graduate program is for working professionals who wish to advance or establish their careers in atmospheric science and related fields. The program curriculum will provide post-baccalaureate education and training in the following areas: computational analysis and analytics of weather and climate data; implementation and use of predictive models for the weather-climate interface; and assessment of weather- and climate-related risk. Graduates will be prepared for jobs in areas such as risk assessment, data analytics applications, client-specific weather and climate modeling, big data management and curation, and sub seasonal-to-seasonal prediction. There are policies in place to ensure faculty members possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, staff, and financial resources in place to support the program.

Approval request summary, including staff conclusion, follows in Attachment F.

#### Western Illinois University

- Master of Science in Teaching Mathematics in the Western Region

Western Illinois University (WIU or the University) requests authorization to offer a Master of Science in Teaching Mathematics in the Western Region. The proposed online program prepares students who already possess a Bachelor's degree in Mathematics and a secondary teaching license for professional advancement as a postsecondary leader or teacher and for teaching dual credit courses in Mathematics. The proposed two-year program requires 33 semester credit hours including a capstone research experience with options for research, internship(s), or a thesis. There are policies in place to ensure faculty members possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, staff, and financial resources in place to support the program.

Approval request summary, including staff conclusion, follows in Attachment G.

The staff recommends adoption of the following resolutions:

*The Illinois Board of Higher Education hereby grants to Southern Illinois University Carbondale authorization to grant the Master of Science in Aviation Management in the Southern Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.*

*The Illinois Board of Higher Education hereby grants to Southern Illinois University Carbondale authorization to establish the Center for Autism Spectrum Disorders in the Southern Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.*

*The Illinois Board of Higher Education hereby grants to University of Illinois Chicago authorization to grant the Bachelor of Science in Pharmaceutical Sciences in the Chicago Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.*

*The Illinois Board of Higher Education hereby grants to University of Illinois Springfield authorization to grant the Master of Public Policy in the Central Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.*

*The Illinois Board of Higher Education hereby grants to University of Illinois Urbana-Champaign authorization to grant the Bachelor of Arts in Liberal Arts and Sciences in Linguistics and Teaching English as a Second Language in the Prairie Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.*

*The Illinois Board of Higher Education hereby grants to University of Illinois Urbana-Champaign authorization to grant the Master of Science in Weather and Climate Risk and Analytics in the Prairie Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.*

*The Illinois Board of Higher Education hereby grants to Western Illinois University authorization to grant the online Master of Science in Teaching Mathematics in the Western Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.*

## Southern Illinois University Carbondale

**Proposed Degree Title in the Region of Authorization:** Master of Science in Aviation Management in the Southern Region

*Projected Enrollments and Degrees:*

First Year Enrollment	Fifth Year Enrollment (or when fully implemented)	Degrees Awarded Fifth Year (or when fully implemented)
11	34	20

### Background

Southern Illinois University Carbondale (SIUC or the University) is seeking authorization to offer an online Master of Science (MS) in Aviation Management in the Southern Region. The proposed program will develop the skills and knowledge of working professionals in the aviation industry and graduates of aviation bachelor's degree programs, preparing them to become skilled managers in aviation-centered occupations. An alumni survey was conducted, and results showed a strong interest in an aviation-related master's degree offered by SIU Aviation. Additionally, the Bachelor of Science (BS) in Aviation Management Extended Campus program exists at six separate locations across the country, with the potential of adding a seventh site in Chicago. These off-campus locations expand the reach of SIU Aviation and are also expected to generate enrollment into the proposed graduate degree program. Graduates are qualified for management positions in aviation-centered occupations such as: safety coordinator, security manager, project manager, flight operations manager, maintenance control, quality assurance manager, among many others.

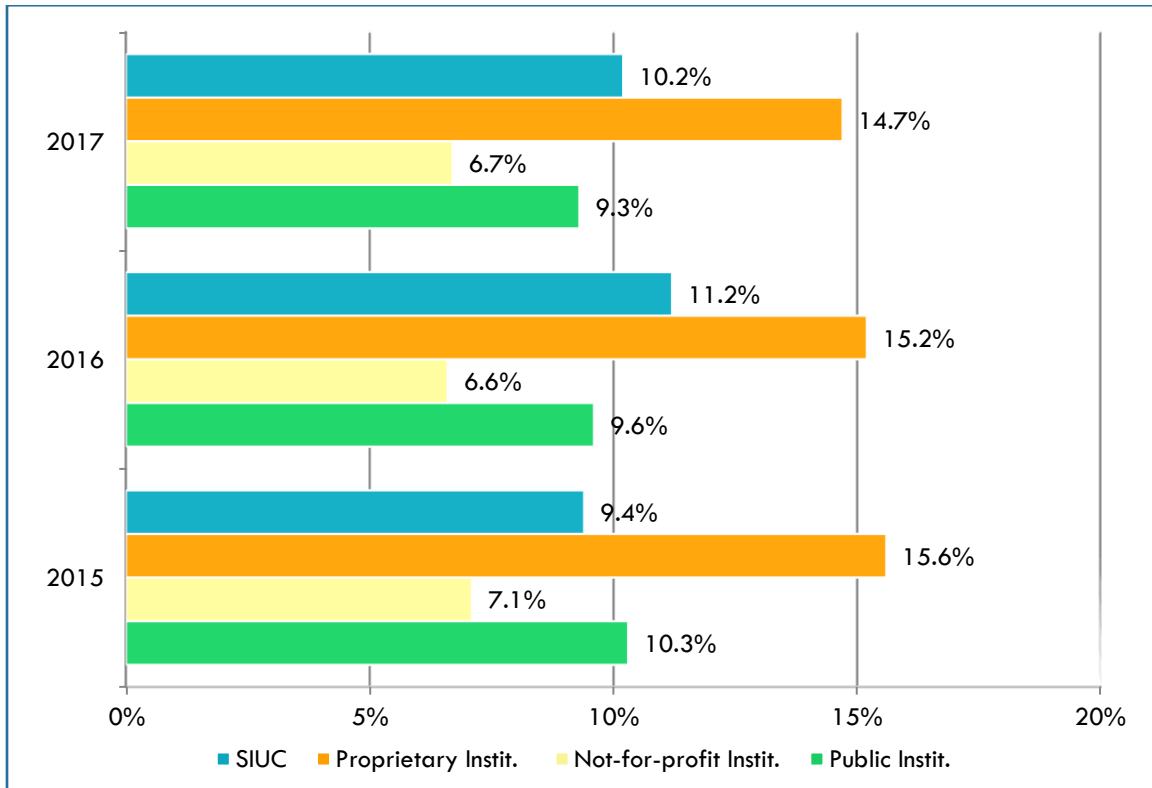
### Institutional Data

*1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.*

This section includes information about institutional and student success measures for each institution seeking program approval. The institution's rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.

Undergraduate success measures are not provided because the University is requesting a graduate level degree program.

Three-Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics (NCES), US Department of Education

Note: The national cohort default rate for fiscal year 2017 is 9.7 percent. A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school's borrowers who enter repayment on certain Federal Family Education Loan Program or William D. Ford Federal Direct Loan Program loans during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

### Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

The U.S. Bureau of Labor Statistics and the Illinois Department of Employment Security data shows growth in all occupations involved with transportation 2019 through 2029. Employment projections indicate a 3.4 to 9.9 percent increase at the federal level and a 4.5 to 8.2 percent increase at the state level for transportation-related occupations in which graduates of the proposed program are qualified to work. The transportation sector is projected to expand over the next several years, and this expansion will need qualified personnel to manage the national aviation system. Building on specialized skills and training from the aviation industry, graduates of

the MS in Aviation Management will be ready to work as members of multi- disciplinary teams throughout this growing field.

### **Comparable Programs in Illinois**

Lewis University is the only institution in the state that offers a Master of Science in Aviation and Transportation. The proposed program would be the first of its kind offered at a public institution.

### **Mission and Objectives**

*1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.*

The program is consistent with the purpose, goals, objectives, and mission of the University. The requested degree title reflects the programs objectives and curriculum.

### **Curriculum and Assessment**

*1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.*

*1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.*

### **Admission Requirements**

To qualify for admission to the MS in Aviation Management program, applicants must meet the requirements below:

- Completed a bachelor's degree prior to application or seek the 4+1 completion option as part of an undergraduate program in the field;
- Earned a minimum overall GPA of 3.0/4.0; and
- Submitted a program application and resume.

The program accepts students on rolling admission each academic term. Preference is given to students with either a bachelor's degree in a related field and active employment in an aviation profession or both.



## Curriculum

The proposed Master of Science in Aviation Management is a 30-credit-hour program designed to be completed online in 12 months. With the 4+1 bachelor's to master's completion option, undergraduates can complete the graduate degree in less time than if the two programs were taken separately. Credit up to nine hours of 400-level courses will count towards the master's degree.

Coursework includes 21 required courses, and nine electives from an approved list of courses designed to build students managerial skills and aviation knowledge. Foundational courses in statistics and information systems provide a framework for analytical skills; an academic core in aviation law, safety, and international aviation provide a breadth of knowledge in the field; and a capstone data analysis course demonstrates the graduate's readiness for real-world business project management.

Program curriculum cross-lists with related courses taught in the Aviation Administration concentration of the Master of Public Administration are designed to build upon technical training in aviation maintenance, flight, avionics technology, air traffic control, aircraft operations support, or other aviation-related fields. The curriculum also incorporates upper-level courses from the Bachelor of Science in Aviation Technologies and Bachelor of Science in Aviation Management programs that are designed to build upon technical training in aviation maintenance, flight, avionics technology, air traffic control, aircraft operations support, or other aviation-related fields. Lastly, it integrates courses from several academic units across campus including Industrial Management and Applied Engineering, Technical Resource Management, Behavior Analysis and Therapy, and Workforce Education and Development.

## Assessment of Student Learning

Southern Illinois University Carbondale has established processes to measure and analyze student learning outcomes data at multiple and distinct points throughout the program. Direct measures include various written assignments, presentations, quizzes, exams, and a capstone research project culminating in a thesis-style paper. Indirect measures include end of course evaluations, ongoing evaluation at faculty and advisory meetings, as well as graduate and employer surveys.

## Program Assessment

Southern Illinois University Carbondale has articulated a comprehensive plan to continually evaluate and improve the education it provides in the MS in Aviation Management program. The tabulated course-level assessment data will form an annual assessment report, which is prepared by the Aviation Management and Flight Assessment Committee. This report is reviewed among program coordinators, program directors, and school directors annually and will be used to refine the program. Evaluation and improvements will be accomplished in part by the assessment of faculty productivity and student engagement, retention and graduation rates, career advancement and job placement rates, employer feedback, and guidance from the Advisory Board.

## Facilities (space, equipment, instructional materials)

*1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality*

*academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.*

Existing facilities at the University are sufficient for implementing the proposed program. Classroom space and computer resources are sufficient for the program's needs. The University possesses appropriate library resources, including textbooks, journal holdings, and other resources to support teaching and scholarly work.

### **Faculty and Staff**

*1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.*

Current faculty and staff are adequate to implement the program. The University has identified institutional policies that ensure faculty and staff hired possess the training, credentials, and other related qualifications to provide instruction at the institution. A formal faculty evaluation process is in place.

### **Fiscal and Personnel Resources**

*1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.*

The School of Aviation will support the program in its first year, and thereafter the program is expected to be self-supported.

### **Accreditation and Licensure**

*1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.*

No accreditation or licensure is required.

### **Program Information**

*1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.*

Detailed information about the proposed program, including description of the admission policies, university policies, tuition, fees, and curriculum are provided in the proposal and will be published on the University's website.

### **Staff Conclusion**

The staff concludes that the Master of Science in Aviation Management proposed by Southern Illinois University Carbondale meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

**Proposed Center Title in the Region of Authorization:** Center for Autism Spectrum Disorders in the Southern Region

*New Administrative Unit:* The proposal is for the establishment of the Center for Autism Spectrum Disorders (CASD or the Center) in the Southern Region. CASD is an interprofessional training and research center that provides high-quality services and leadership in the Southern Illinois region for individuals with autism spectrum disorder and their families. Services offered include applied behavior analysis, speech-language pathology, and child clinical psychology.

### **Background**

Southern Illinois University Carbondale (SIUC or the University) is seeking authorization to permanently establish the Center for Autism Spectrum Disorders in the Southern Region. Originally, the CASD was established informally at SIUC in 1999 to provide essential assessment and therapy services to individuals with autism spectrum disorder and their families in the Southern region, and to provide requisite training to SIUC students pursuing degrees in professions providing said services. Goals of the Center include enhancing student training, providing a needed community

service, and facilitating field-specific and inter-disciplinary research. In 2003, CASD became one of four regional centers instituted as part of IL Public Act 93-0395 creating The Autism Program of Illinois (TAP) to serve and support persons with autism spectrum disorder and their families. In 2018, the Center moved from being housed in the Rehabilitation Institute of the College of Education and Human Services to the School of Psychological and Behavioral Sciences within the College of Health and Human Sciences. Funding to support CASD's operation and mission will primarily come from TAP in addition to external grants.

## **Need**

*1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.*

The Center for Disease Control estimates that 1 in 54 children in the U.S. has Autism Spectrum Disorder (ASD), representing a 123 percent increase over the past eight years. With this growing prevalence comes a dire need for services for individuals with the disorder and their families in the State, as well as in the nation. Unfortunately, there is an insufficient number of professionals in Illinois to serve these individuals. Over 600 jobs remain unfilled in the state for positions in applied behavior, speech-language pathology, and clinical child psychology. Thus, Illinois continues to have an enormous need for professionals to be trained in best practices in clinical services and research to work with children and adults with ASD and their families, teachers, and other caregivers. The Center for Autism Spectrum Disorders will continue to provide training and assistance for individuals and families impacted autism spectrum disorders. The TAP grant provides the funds necessary for the CASD to offer multidisciplinary services at no cost to the client. The Center brings various professions and programs at SIUC together to serve a population in the State and region that is in desperate need of treatment, which also fosters the local economy and furthers the research and teaching missions of the University.

## **Comparable Centers in Illinois**

There are four University Centers funded by the State of Illinois' TAP grant: University of Illinois Chicago, University of Illinois Urbana Champaign, Illinois State University, and Southern Illinois University Carbondale. Each serves a region of Illinois, allowing more people within the State to receive autism services closer to home.

## **Mission and Objectives**

*1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.*

The proposed Center is in alignment with the overall mission of the University and is consistent with the purpose, goals, objectives, and mission of the University.

## **Assessment of Outcomes**

*1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of*

*the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.*

*1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.*

CASD will use a series of metrics to monitor its effectiveness in achieving objectives, as well as determine areas that would benefit from further development. The quality of student training will be measured by the number of students that train, volunteer, or observe at the Center from each academic program, assessment of their needs, evaluation of their progress, and alumni surveys. Community service will be assessed through the number of consultations provided, evaluation of the consultation process and progress, the number of individuals and families served, ascertaining unmet needs, client progress, and satisfaction surveys. Research opportunities will be quantified through the number and significance of conference presentations and publications. Extramural funding measures will include the number of grant proposals, grant awards, the level of external funding received, as well as the number and amount of private donations sought. Additionally, faculty involvement and participation in will be tracked for annual program review.

The Center is required to provide quarterly reports to TAP grant administrators and the Illinois Department of Human Services, which is the funding agency. The reports include narratives, quantitative information on deliverables, and financial activity. Assessments will be conducted on each of the respective clinic service areas. All data will be compiled by the Director to be included in the annual reports.

### **Facilities (space, equipment, instructional materials)**

*1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.*

Existing facilities at the University are sufficient for implementing the proposed center. The University possesses appropriate library resources, including textbook and journal holdings, to support the needs of the Center.

### **Faculty and Staff**

*1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation*

and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

Current faculty or staff are adequate to support the Center.

### **Fiscal and Personnel Resources**

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

The University has adequate faculty, staff, and other resources to support the proposed Center for Autism Spectrum Disorders. The Center is largely self-supporting through the TAP grant and is seeking to grow its external funding from a variety of agencies and foundations. Additionally, the Center will be soliciting for private donations and fundraising activities with the assistance of the SIU Foundation.

### **Accreditation and Licensure**

1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

No specialized accreditation is required.

### **Program Information**

1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation

agreements; vii) *A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.*

Detailed information about the Center for Autism Spectrum Disorders will be published on the University's website.

### **Staff Conclusion**

The staff concludes that the Center for Autism Spectrum Disorders proposed by Southern Illinois University Carbondale meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

## University of Illinois Chicago

**Proposed Degree Title in the Region of Authorization:** Bachelor of Science in Pharmaceutical Science in the Chicago Region

*Projected Enrollments and Degrees:*

First Year Enrollment	Fifth Year Enrollment	Degrees Awarded Fifth Year
25	100	50

### Background

The University of Illinois at Chicago (UIC or University) requests authorization to offer a Bachelor of Science (BS) in Pharmaceutical Sciences in the Chicago Region. The proposed program is a four-year, non-licensure program focusing on the basic sciences underlying drugs and drug therapy. The proposed program will offer two pathways. One pathway prepares students for graduate or professional school and/or immediate employment in pharmaceutical science and research, pharmaceutical administration and sales, biotechnology, drug manufacturing, regulatory affairs, food and agricultural industries, and other “life sciences industries.” The other pathway is to UIC’s Doctor of Pharmacy (PharmD), traditionally an eight-year professional practice program that would be reduced to seven years for qualifying BS in Pharmaceutical Sciences students. UIC’s existing PharmD program is ranked number one in Illinois and number seven in the nation. The proposed bachelor-level program would expand UIC’s ability to prepare and retain students in Illinois for bachelor- and graduate-level pharmaceutical sciences programs, as well as contribute well-trained bachelor-level students to the robust life sciences industry sector in Illinois.

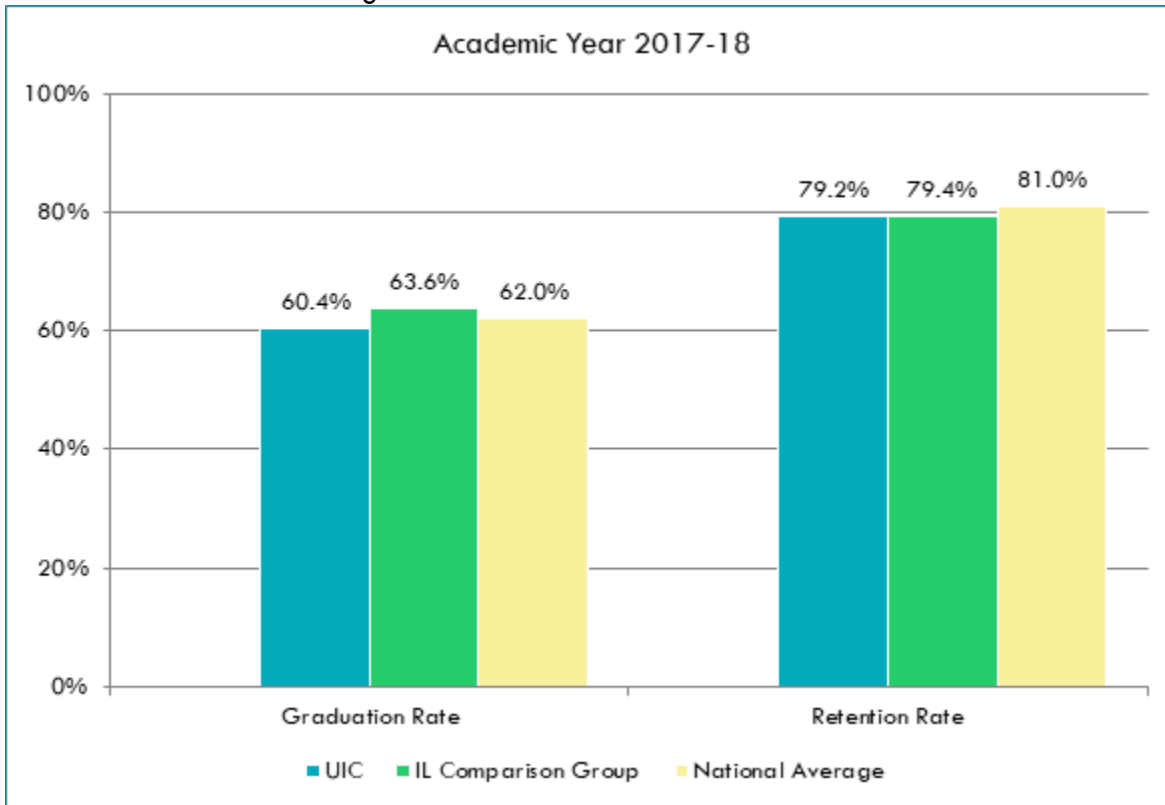
### Institutional Data

*1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.*

This section includes information about institutional and student success measures for each institution seeking program approval. The institution’s rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.



## Undergraduate Graduation Rates and Retention



Source: National System for Education Statistics (NCES), US Department of Education  
 Note: University of Illinois Chicago is in the four-year, selective Illinois comparison group.

### Undergraduate Graduation Rate

The graduation rate measures the rate at which entering freshmen graduate within 150 percent of normal program length. Data are provided for six-year graduation rates for first-time, full-time bachelor's degree-seeking students and three-year graduation rates for full-time associate degree-seeking students. The national standard for graduation rates is reported annually by the National Center for Education Statistics (NCES).

### Undergraduate Retention Rate

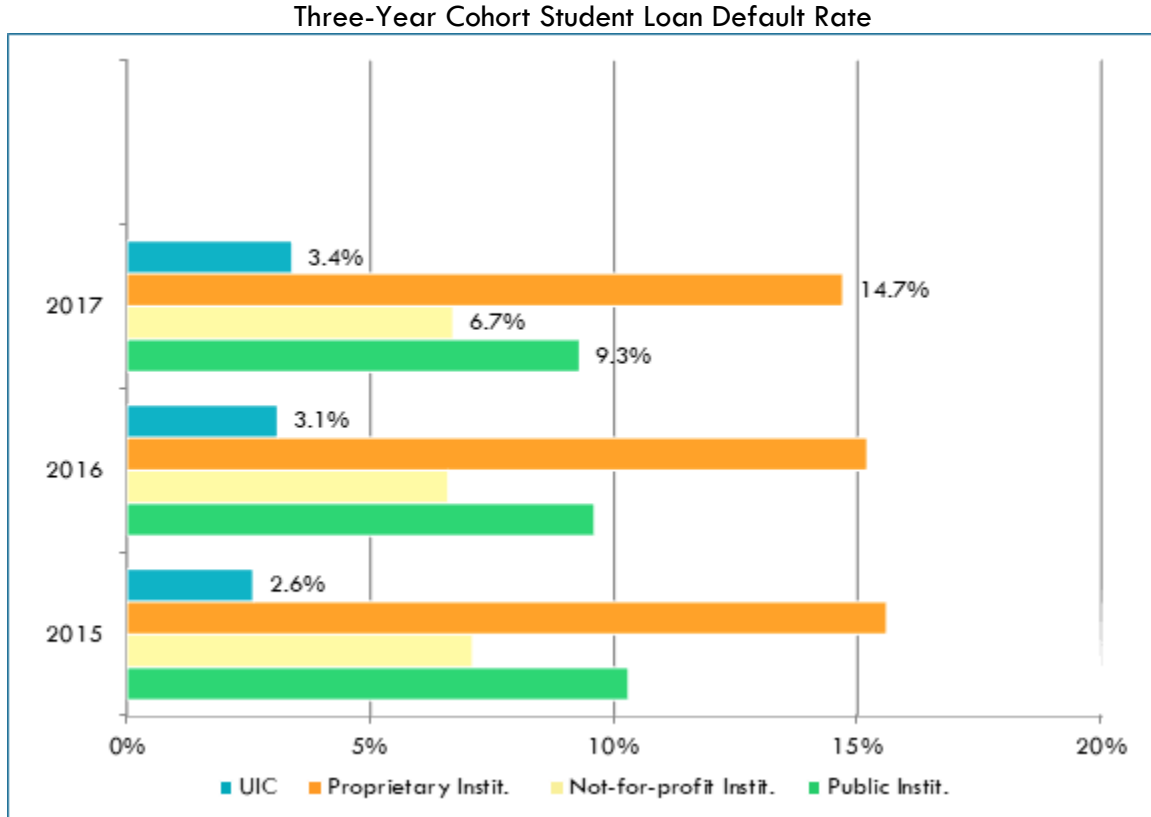
Retention rates examine the percentage of first-time degree seeking students enrolled in the fall of the prior year that are still enrolled in the fall of the current year. The national standard for retention rates is reported annually by NCES.

### Undergraduate Completions per 100 FTE

Academic Year 2017-18	University of Illinois Chicago	Comparable Illinois Institutions
	22	24

The full-time equivalent (FTE) data is a unit of measurement intended to represent one student enrolled full-time for one academic year. The calculation is based upon credit/contact hours offered at an institution divided by a standard minimum (12 credit hour) full-time course load. The completions per 100 FTE data are included to provide a holistic view of completions

across different student populations.



Source: National Center for Education Statistics (NCES), US Department of Education

Note: The national cohort default rate for fiscal year 2017 is 9.7 percent. A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school's borrowers who enter repayment on certain Federal Family Education Loan Program or William D. Ford Federal Direct Loan Program loans during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

### Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

Pharmaceutical science is a growing discipline fueled in part by the aging of America, the greater use of pharmaceuticals and biologics, the rapid pace of new drug and biologic approvals, and the greater complexity of advanced treatments, such as gene therapies, biologics, and vaccines. As a result, greater demands for healthcare, especially pharmaceuticals and biologics, to treat acute and chronic disease, point to a growing need for a workforce with training and expertise in pharmaceutical sciences.

The U.S. Bureau of Labor Statistics projected job growth among the many categories of occupations for which a graduate may qualify (e.g., Medical/Health Services Manager,

Chemists/Materials Scientists, and Microbiologists) will grow faster or much faster than average. As well, the *State of Illinois Industry Employment Projections Through 2026* by the Illinois Department of Employment Security estimates that 13.5 percent of total Illinois employees will work in the Healthcare and Social Assistance Sector, one of the fastest-growing sectors in Illinois. Finally, Illinois residents employed by the life sciences industry earn wages that are more than 120% higher than the average Illinois resident. The mean total compensation of people working in the life sciences industry was \$129,866 in 2016 (<https://ibio.org/wp-content/uploads/2019.StateofIndustry.pdf>).

### **Comparable Programs in Illinois**

Other Illinois institutions offer pre-professional health programs to undergraduate students who wish to pursue a Doctor of Pharmacy and a career as a pharmacist. However, no other institution currently offers a Bachelor of Science in Pharmaceutical Sciences, a non-licensure program focusing on the basic sciences underlying drugs and drug therapy that prepares students for graduate or professional school and/or careers in pharmaceutical science and research, pharmaceutical administration and sales, biotechnology, drug manufacturing, regulatory affairs, food and agricultural industries, and other “life sciences industries.”

### **Mission and Objectives**

*1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.*

The program is consistent with the purpose, goals, objectives, and mission of the University. The requested degree title reflects the program’s objectives and curriculum.

### **Curriculum and Assessment**

*1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution’s programs of study.*

*1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution’s established processes for academic planning and quality maintenance.*

## Admission Requirements

Students will be admitted to the proposed BS in Pharmaceutical Sciences in the UIC College of Pharmacy in their third undergraduate year, regardless of pathway (BSPS or BSPS/PharmD) and upon meeting certain grade point average and coursework requirements, as described:

- Application submitted by January 15 of sophomore year for fall admission
- Completion of a minimum of 54 credit hours of Pre-Pharmaceutical Sciences and General Education coursework with minimum GPA as follows:
  - 2.75/4.00 cumulative GPA
  - 2.50/4.00 science/math GPA

Qualified bachelor's level students would be admitted to the PharmD pathway at the completion of the third undergraduate year in the BS in Pharmaceutical Sciences program and would be considered professional students for the fourth year of the program. Upon completion of the fourth year (120 credit hours), PharmD students will be awarded the Bachelor of Science in Pharmaceutical Sciences.

## Curriculum

The proposed Bachelor of Science in Pharmaceutical Sciences is a 120-credit-hour curriculum that includes Pre-Pharmaceutical Sciences and General Education courses, and major and elective courses:

- Pre-Pharmaceutical Sciences and General Education – 60-62 credit hours
- Pharmaceutical Sciences Major Courses – 44-46 credit hours
- Electives (in Mathematics or Computer Science) – 12-16 credit hours

## Assessment of Student Learning

The University has established processes to measure and analyze student learning outcomes data. Direct measures include midterm/final exams, lab reports, response papers, independent and group projects, and presentations. Assessment of the learning outcomes within each course takes place throughout each semester.

Indirect measures of student learning outcomes include program completion self-assessments and graduate satisfaction surveys; participation in on-campus poster/conference sessions and at national conferences and meetings; presentations at conferences or contributions to publications; the percentage of graduates successfully enrolling in a PharmD program; and surveys of employers, potential employers, and graduate schools. Data on admissions, enrollments, graduation, and on-time graduation rates will be collected and reviewed on a regular basis.

## Program Assessment

The program faculty are responsible for assessing the proposed BS in Pharmaceutical Sciences, with required collaboration with and reporting to UIC's Office of Academic Program Review and Assessment (APRA) and the Director of Undergraduate Studies. Program assessment will occur as a four-semester rotational review of direct and indirect assessment measures, Student Learning Objectives, and assessment tools with annual implementation of evidence-based improvements. The four-semester rotating review cycle allows the program to plan for assessment, report the results, and implement the findings to improve student learning.

## **Facilities (space, equipment, instructional materials)**

*1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.*

Existing facilities are sufficient for implementing the proposed program. Classroom space and computer resources are sufficient for the program's needs. The University possesses appropriate library resources, including textbook and journal holdings, to support teaching and scholarly work.

## **Faculty and Staff**

*1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.*

The University has identified institutional policies that ensure faculty and staff hired possess the training, credentials, and other related qualifications to provide instruction at the institution. Faculty teaching in the proposed program will have the appropriate qualifications. A formal faculty evaluation process is in place.

## **Fiscal and Personnel Resources**

*1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.*

The University has adequate faculty, staff, and other instructional resources to administer the proposed program. Existing faculty in the College of Pharmacy and the College of Liberal Arts and Sciences will teach the proposed curriculum.

## **Accreditation and Licensure**

*1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.*

No specialized accreditation or licensure is required.

## **Program Information**

*1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.*

Detailed information about the proposed program, including description of the admission policies, university policies, tuition, fees, and curriculum are provided in the proposal and will be published on the University's website.

## **Staff Conclusion**

The staff concludes that the Bachelor of Science in Pharmaceutical Sciences proposed by the University of Illinois Chicago meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

## University of Illinois Springfield

**Proposed Degree Title in the Region of Authorization:** Mater of Public Policy in the Central Region

### *Projected Enrollments and Degrees:*

First Year Enrollment	Fifth Year Enrollment (or when fully implemented)	Degrees Awarded Fifth Year (or when fully implemented)
20	40	25

## Background

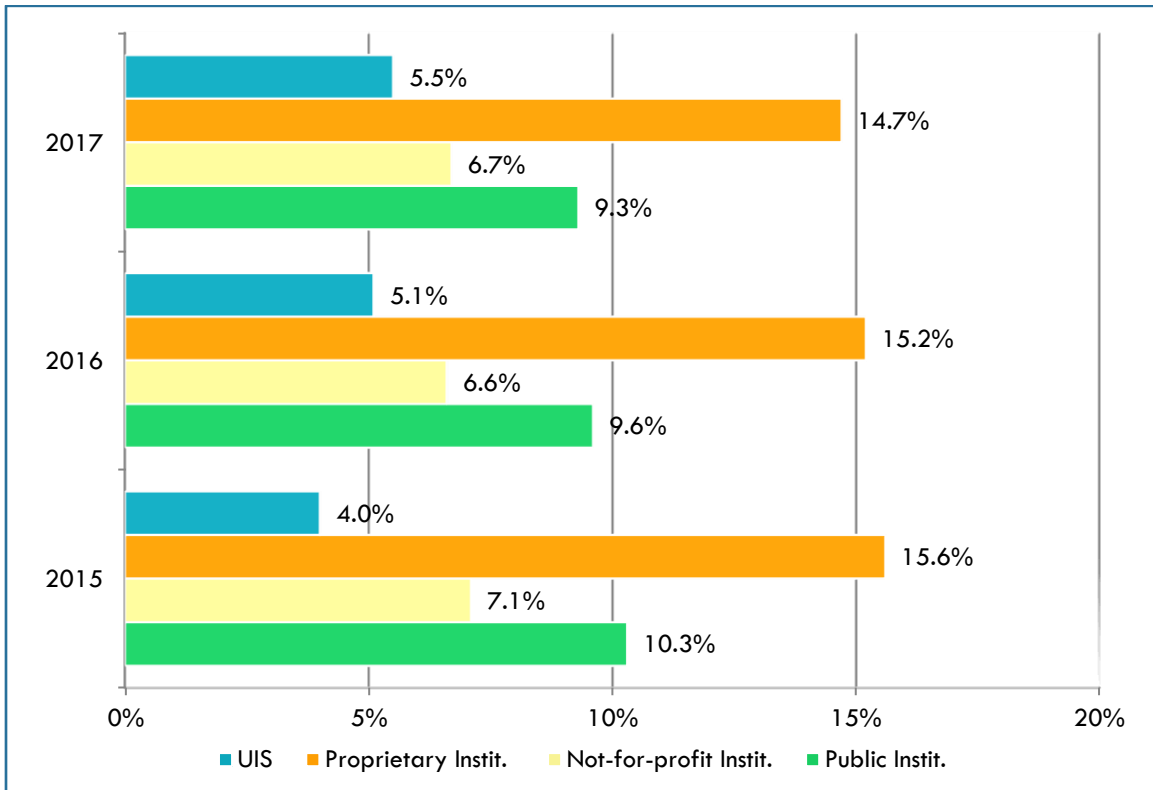
The University of Illinois Springfield (UIS or University) is seeking authorization to offer a Master of Public Policy (MPP) in the Central Region. The College of Public Affairs and Administration has been preparing Illinois leaders in government, politics, and public service since UIS' founding, offering bachelor's degree programs, graduate programs, graduate certificates, and a professional doctorate. Primarily a management degree, the current Master of Public Administration program (MPA) is geared toward preparing students to lead and manage public service organizations, while the proposed MPP program will focus on the systematic analysis of public policy issues and decision processes. The trend in public affairs programming is moving towards public policy. The addition of the Master of Public Policy program would enhance UIS' position within this newer market, allowing for more collaborative opportunities across the University to create joint degrees or to include concentrations in fields connected to policy such as economics, education, social work, criminal justice, and others. Graduates will be prepared for jobs in government, private, and nonprofit sectors.

## Institutional Data

*1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.*

This section includes information about institutional and student success measures for each institution seeking program approval. The institution's rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.

Three-Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics (NCES), US Department of Education

Note: The national cohort default rate for fiscal year 2017 is 9.7 percent. A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school’s borrowers who enter repayment on certain Federal Family Education Loan Program or William D. Ford Federal Direct Loan Program loans during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

**Need**

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

The U.S. Bureau of Labor Statistics (BLS) indicates between four and 11 percent projected job growth in this field through 2028. According to the Network of Schools of Public Policy, Affairs, and Administration (NASPAA), the top fields in which public policy or administration graduates are employed include nonprofit (23 percent), state or regional government (15 percent), consulting business (12 percent), and national or central government (11 percent). Additionally, O\*NET Online indicates several positions within these sectors that MPP graduates would be prepared for including elected official, program analyst, regulatory affairs specialists, lobbyist, consultant, public relations, policy researcher, and government relations manager, among others. UIS’ location in the state capital provides access to a diverse networked community of public affairs scholars, practitioners, and students.



## Comparable Programs in Illinois

Currently, seven public policy master's degree programs exist in the Chicago area. Of these programs, one is from a public university and the remaining are from institutions in the private sector. UIS would be the first public university outside of Chicago to offer this type of degree.

Institution	Program Name	Sector
<b>Adler University</b>	MA in Public Policy	Private Not-for-Profit
<b>DePaul University</b>	MS in Leadership and Policy Studies	Private Not-for-Profit
<b>Loyola University of Chicago</b>	MPP Public Policy	Private Not-for-Profit
<b>National Louis University</b>	MA in Public Policy and Administration	Private Not-for-Profit
<b>Northwestern University</b>	Master of Public Policy and Administration	Private Not-for-Profit
<b>University of Chicago</b>	MA in Public Policy	Private Not-for-Profit
<b>University of Illinois Chicago</b>	Master of Public Policy	Public

## Mission and Objectives

*1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.*

The program is consistent with the purpose, goals, objectives, and mission of the University. The requested degree title reflects the program's objectives and curriculum.

## Curriculum and Assessment

*1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of*

*participation in the institution's programs of study.*

*1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.*

### Admission Requirements

Applicants interested in the Master of Public Policy program must have a minimum overall undergraduate GPA of 2.5/4.0. To be considered for admission to the program, applicants are required to submit the following:

- Program application form
- Goal statement
- Resume
- Official undergraduate transcripts
- TOEFL or IELTS scores if native language is not English

### Curriculum

To earn the Master of Public Policy, students will complete 36 credit hours of coursework comprised of 24 hours of core courses including a capstone and 12 credit hours of electives. The elective hours can be used to complete a Graduate Certificate or specialize in one of the following areas: social policy, child advocacy and policy, policy analysis tools, education policy, or health policy. Courses will include data analysis, policy analysis, informatics, program evaluation, economics, and statistics. Curriculum content has been aligned with the Network of Schools of Public Policy, Affairs, and Administration (NASPAA) core competencies.

### Assessment of Student Learning

The University of Illinois at Springfield has established processes to measure and analyze student learning outcomes. Assurance of student learning will be performed using course embedded assessments and a set of summative exercises in the capstone course. A rubric will be used to analyze sample work product. Indirect measures of student learning outcomes include a reflective paper, surveys from various stakeholders, internship supervisor assessments, and course evaluations.

### Program Assessment

The proposed Master of Public Policy will be evaluated by the Department of Public Administration using the review process in place for all academic programs at UIS to monitor the performance, growth, and curricular quality. Data will be systematically and periodically gathered and will include:

- Surveys collected from current students, recent graduates, alumni, and employers
- Internship supervisor assessments
- Enrollment analysis
- Student standing/retention analysis
- Job placement
- CASL assessment reviews
- UIS program reviews
- Stakeholder advisory group feedback

The assessment plan meets the standards established by NASPAA and will follow the same mechanisms for feedback and curriculum revision that are used to evaluate the MPA program. The data will be reviewed by faculty annually and revisions will be made as needed.

### **Facilities (space, equipment, instructional materials)**

*1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.*

Existing facilities are sufficient for implementing the proposed program. The University possesses adequate library resources and database access to books, full-text online repositories, and electronic journals to support teaching and scholarly work.

### **Faculty and Staff**

*1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.*

The University has identified institutional policies that ensure individuals hired possess the training, credentials, and other related qualifications. Faculty teaching in the proposed program will have the appropriate qualifications. A formal faculty evaluation process is in place.

### **Fiscal and Personnel Resources**

*1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.*

The University has adequate faculty, staff, and other instructional resources to support the program. As program growth allows, the department plans to hire an additional faculty member and part time clerical staff person.

### **Accreditation and Licensure**

*1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.*

The University's Master of Public Administration program is accredited by the Network of Schools of Public Policy, Affairs, and Administration. No specialized accreditation or licensure is required, but the University plans to seek accreditation through NASPAA for this new program.

### **Program Information**

*1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.*

Detailed information about the proposed program, including description of the admission policies, university policies, tuition, fees, and curriculum are provided in the proposal and will be published on the University's website.

### **Staff Conclusion**

The staff concludes that the Master of Public Policy proposed by the University of Illinois Springfield meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

## University of Illinois Urbana-Champaign

**Proposed Degree Title in the Region of Authorization:** Bachelor of Arts in Liberal Arts and Sciences in Linguistics and Teaching English as a Second Language in the Prairie Region

### *Projected Enrollments and Degrees:*

First Year Enrollment	Fifth Year Enrollment	Degrees Awarded Fifth Year
15	75	30

## Background

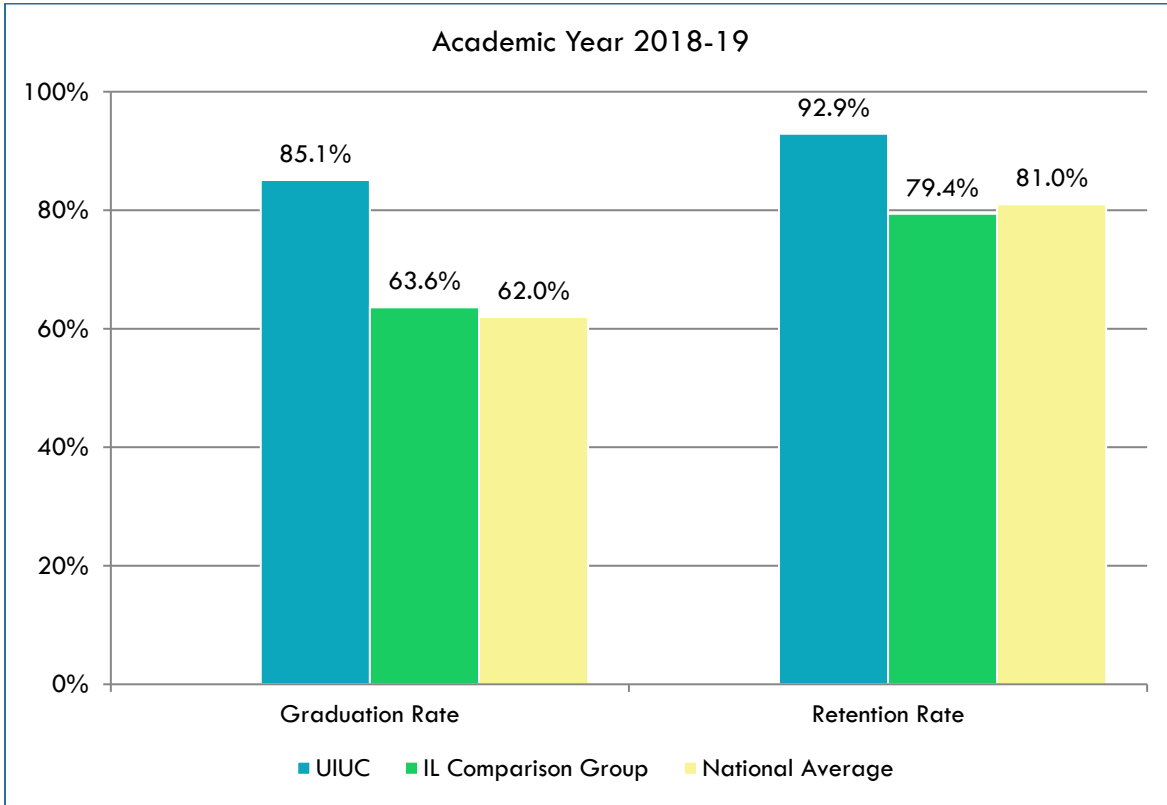
The University of Illinois Urbana-Champaign (University or UIUC) is seeking authorization to offer a Bachelor of Arts in Liberal Arts and Sciences (BALAS) in Linguistics and Teaching English as a Second Language (TESL) in the Prairie Region. Most peer institutions offer degrees related to teaching English as a second language (TESL) at the graduate level. Therefore, the proposed interdisciplinary undergraduate degree will be a forerunner in training students in TESL with a strong foundation in linguistics and coursework that encompasses the cognitive, cultural, and societal factors that influence the learning, teaching, and assessment of English and its different varieties, both in and outside of classrooms globally. Additionally, the distinction of English language teaching both in and outside the United States sets this program apart from the existing Early Childhood Education, Elementary Education, and Secondary Education majors offered in the College of Education. Graduates will be prepared for careers in areas such as teaching English as a second or foreign language, ESL textbook publishing, language testing, technical or professional communication, language-related research, and entry into graduate-level programs.

## Institutional Data

*1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.*

This section includes information about institutional and student success measures for each institution seeking program approval. The institution's rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.

### Undergraduate Graduation Rates and Retention



Source: National System for Education Statistics (NCES), US Department of Education  
 Note: University of Illinois Urbana-Champaign is in the four-year, selective Illinois comparison group. Higher percentages are positive indicators.

#### Undergraduate Graduation Rate

The graduation rate measures the rate at which entering freshmen graduate within 150 percent of normal program length. Data are provided for six-year graduation rates for first-time, full-time bachelor’s degree-seeking students and three-year graduation rates for full-time associate degree-seeking students. The national standard for graduation rates is reported annually by the National Center for Education Statistics (NCES).

#### Undergraduate Retention Rate

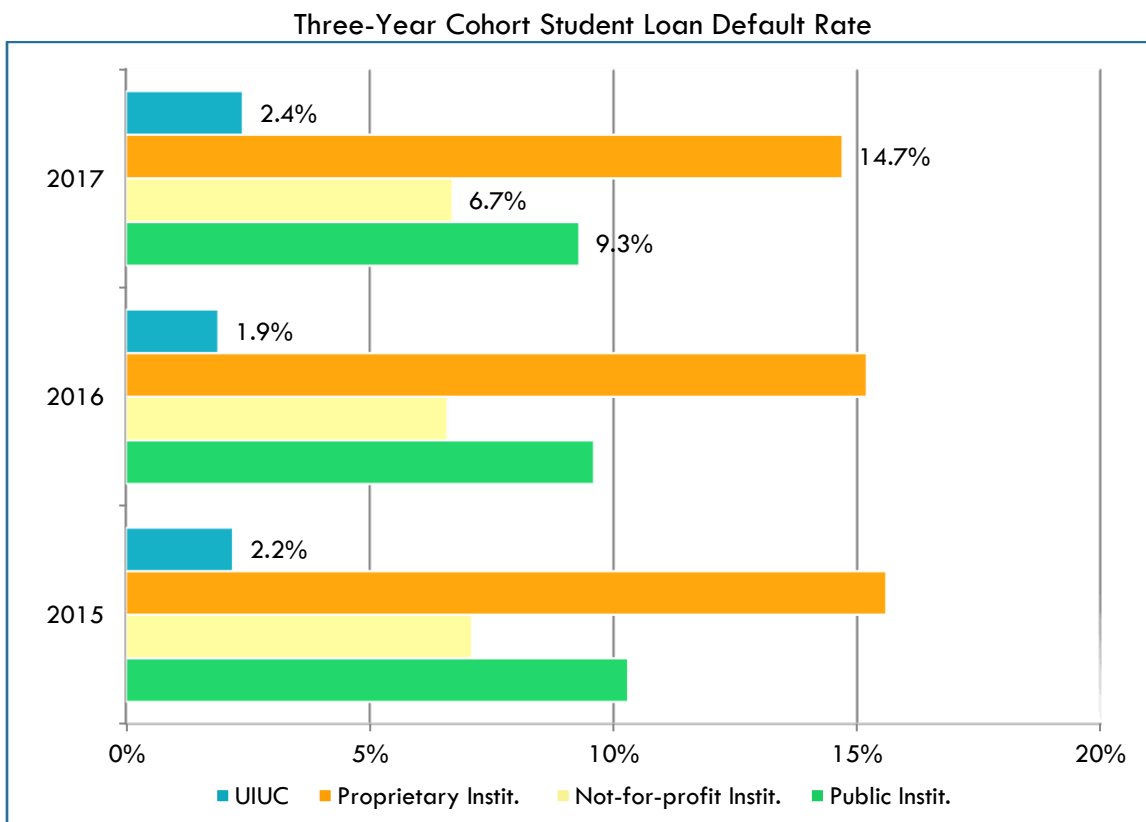
Retention rates examine the percentage of first-time degree seeking students enrolled in the fall of the prior year that are still enrolled in the fall of the current year. The national standard for retention rates is reported annually by NCES.

#### Undergraduate Completions per 100 FTE

Academic Year 2018-19	University of Illinois Urbana-Champaign	Comparable Illinois Institutions
	N/A	24.3

The full-time equivalent (FTE) data is a unit of measurement intended to represent one student enrolled full-time for one academic year. The calculation is based upon credit/contact hours

offered at an institution divided by a standard minimum (12 credit hour) full-time course load. For the University of Illinois Urbana-Champaign, the undergraduate completion per 100 FTE is not an accurate indicator. The majority of students at the University are full-time, and substantial numbers double major and take more than 12 (up to 18) credit hours, and the standard calculation does not account for these factors.



Source: National Center for Education Statistics (NCES), US Department of Education  
 Note: The national cohort default rate for fiscal year 2017 is 9.7%. A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school’s borrowers who enter repayment on certain Federal Family Education Loan Program or William D. Ford Federal Direct Loan Program loans during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

**Need**

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

According to the Illinois State Board of Education, Illinois has over 200,000 students who speak English as a new language, which accounts for over 12 percent of the student population in the state. Over the past five years, the percentage has increased and therefore supports the need for the proposed degree program to provide adequate training that will prepare graduates to pursue licensure and enable them to teach English as a second language in public and private Pre-

K to 12 schools in Illinois. Additional employment opportunities outside of classroom teaching include jobs with international publishing companies, testing institutions, language-related research centers, and ESL education providers. Domestic graduates can also consider opportunities with the U.S. Agency for International Development, Foreign Service, and Defense Language Institute, among many others. International graduates could pursue employment opportunities in diplomacy in their home countries.

Additionally, English has become the common language of international professional communication around the globe and is now used by more non-native speakers than native speakers. An increasing number of countries around the world require the English language as a school subject in the formal schooling system and need well-trained teachers with English proficiency. Therefore, there is a strong market demand both in the U.S. and around the world for English teaching professionals, material developers, and language testing professionals with strong foundations in both Linguistics and TESL.

### **Comparable Programs in Illinois**

Degrees in teaching English as a second language (TESL) are typically only offered at the graduate level. There are currently no universities in Illinois that offer degrees related to TESL at the undergraduate level. Nationally, the University of Hawaii in Manoa and the University of Iowa are the only peer institutions that offer an undergraduate major in a TESL-related area. Thus, this program would be the first of its kind in the state.

### **Mission and Objectives**

*1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.*

The program is consistent with the purpose, goals, objectives, and mission of the University. The requested degree title reflects the programs objectives and curriculum.

### **Curriculum and Assessment**

*1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.*

*1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.*



## Admission Requirements

Applicants interested in the BALAS in Linguistics and TESL program will be admitted to the University of Illinois Urbana-Champaign through the College of Liberal Arts and Sciences. The minimum high school course requirements for admission are:

- 4 years of English
- 3 years of Math
- 2 years each of Social Sciences, Lab Sciences, and Language other than English
- 2 years of flexible academic units

## Curriculum

The BALAS in Linguistics and Teaching English as a Second Language is a 120-credit-hour interdisciplinary curriculum that includes 41 hours of core coursework in linguistics and teaching English as a second language as well as a training in teaching practicum, foreign languages, and a capstone course. To obtain 40 hours of required upper-division coursework, students can select from a range of options offered in the Department of Linguistics and other units in the School of Literatures, Cultures, and Linguistics. Other categories of requirements for the degree are:

- General Education coursework – 33 to 45 hours
- Language Other Than English – 8 to 20 hours
- Composition I and Advanced Composition – 3 to 6 hours
- Electives as needed to reach the minimum of 120 hours

## Assessment of Student Learning

The University of Illinois Urbana-Champaign has established processes to measure and analyze student learning outcomes data. Direct measures include projects, essays, tests, and homework demonstrated by passing grades in required courses. Assessment of the learning outcomes within each course takes place throughout each semester. Indirect measures of student learning outcomes include surveys, graduation rates, graduate school acceptance and job placement data.

## Program Assessment

The proposed program will be housed in the Department of Linguistics. Program evaluation will involve key faculty, curriculum committee, and stakeholder groups. Assessment results will be used to refine the objectives, materials, and instruction of existing courses and to develop new courses to better prepare students for future employment and professional development. The following metrics will aid in program evaluation:

- enrollment trends
- course evaluations
- senior survey results
- students' involvement in pedagogical and research practices
- graduate school acceptance rates
- job placement rates

### **Facilities (space, equipment, instructional materials)**

*1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.*

Existing facilities are sufficient for implementing the proposed program. The University possesses appropriate library resources with access to books and journal holdings to support teaching and scholarly work.

### **Faculty and Staff**

*1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.*

The University has identified institutional policies that ensure faculty and staff hired possess the training, credentials, and other related qualifications to provide instruction at the institution. Faculty teaching in the proposed program will have the appropriate qualifications. A formal faculty evaluation process is in place.

### **Fiscal and Personnel Resources**

*1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.*

The University has adequate faculty, staff, and other instructional resources to administer the proposed program. Existing faculty will teach the proposed curricula.

## Accreditation and Licensure

1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

No specialized accreditation or licensure is required. The courses offered apply to the coursework requirements for state licensure for the ESL/Bilingual Education Teacher Endorsement through the Illinois State Board of Education, if a student later chooses to pursue the endorsement.

## Program Information

1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.

Detailed information about the proposed program, including description of the admission policies, university policies, tuition, fees, and curriculum are provided in the proposal and will be published on the University's website.

## Staff Conclusion

The staff concludes that the Bachelor of Arts in Liberal Arts and Sciences in Linguistics and Teaching English as a Second Language proposed by the University of Illinois Urbana-Champaign meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

**Proposed Degree Title in the Region of Authorization:** Master of Science in Weather and Climate Risk and Analytics in the Prairie Region

*Projected Enrollments and Degrees:*

First Year Enrollment	Fifth Year Enrollment (or when fully implemented)	Degrees Awarded Fifth Year (or when fully implemented)
5	15	15

## Background

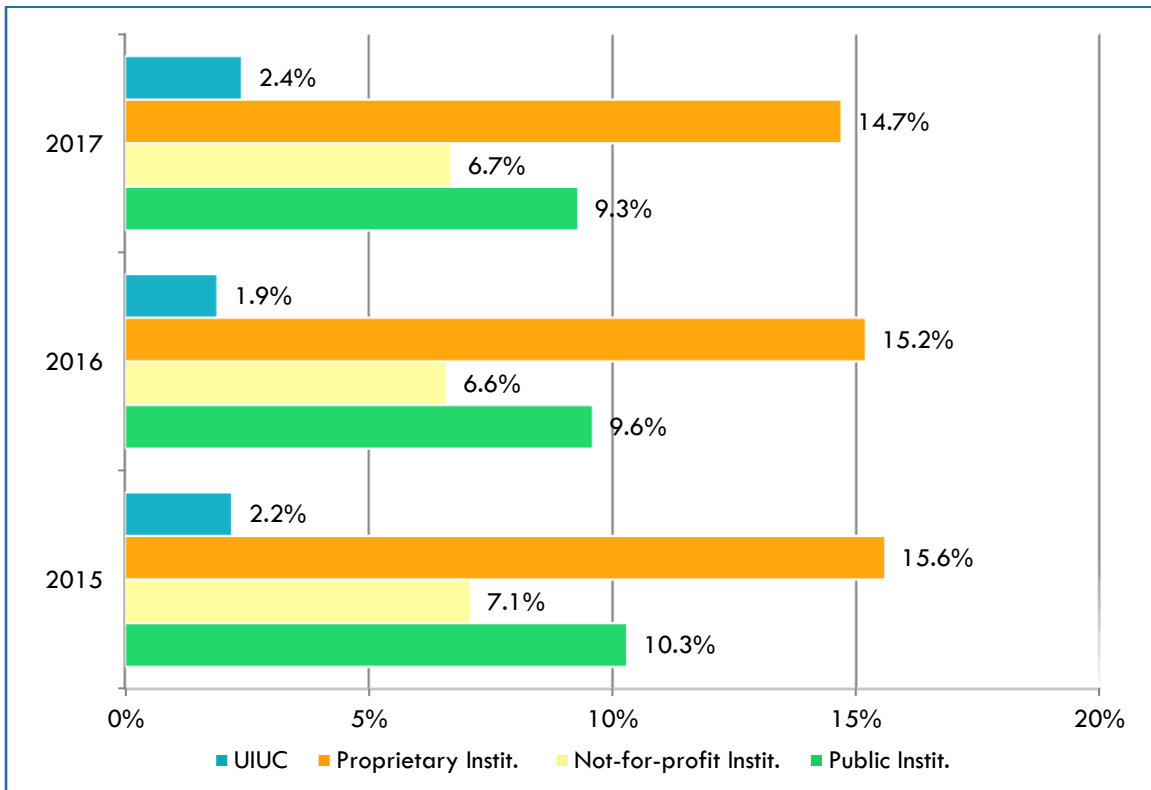
The University of Illinois Urbana-Champaign (UIUC or University) is seeking authorization to offer an online Master of Science (MS) in Weather and Climate Risk and Analytics in the Prairie Region. The proposed program is a collaborative effort between the Departments of Atmospheric Sciences, Geology, and Geography and Geographic Information Science, within the School of Earth, Society and Environment that was submitted and awarded funding in FY20 through the “Investment for Growth” initiative at UIUC. It is centered around risk and analytics of atmospheric sciences, taking advantage of the strengths of each department’s expertise in computational and data sciences as well as geospatial analysis. The Department’s current MS in Atmospheric Sciences program is focused on research to advance the scientific understanding of the field, whereas the MS in Weather and Climate Risk and Analytics is geared towards working professionals seeking advanced training in atmospheric sciences and meteorology to obtain expertise in risk and analysis. This focused degree program was motivated by employment trends and growing opportunities in the private sector for individuals with specialized knowledge and skills in this field.

## Institutional Data

*1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.*

This section includes information about institutional and student success measures for each institution seeking program approval. The institution’s rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.

### Three-Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics (NCES), US Department of Education

Note: The national cohort default rate for fiscal year 2017 is 9.7 percent. A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school's borrowers who enter repayment on certain Federal Family Education Loan Program or William D. Ford Federal Direct Loan Program loans during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

#### Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

According to the Bureau of Labor Statistics, employment for atmospheric scientists is projected to grow six percent from 2019 to 2029, faster than average for all occupations. The knowledge and skill set acquired from this degree program is especially desirable in the private sector within consulting firms, insurance companies, large corporations, non-profit organizations, and educational services. However, employment opportunities also exist in state and federal agencies. Graduates will be prepared to pursue jobs in areas such as risk assessment, data analytics applications, client-specific weather and climate modeling, big data management and curation, and sub seasonal-to-seasonal prediction. Examples of specific job titles include risk analyst, catastrophe modeler, geospatial data scientist, scientific software engineer/developer, quantitative strategist, agricultural meteorologist, and commodities forecaster. The curricular content is not included in most

undergraduate programs in atmospheric sciences. The demand for graduates in the field is evident and the proposed program will address the need for specialized training in atmospheric sciences. Lastly, according to the U.S. Census Bureau's American Community Survey, holders of degrees in atmospheric sciences and meteorology have the lowest unemployment rate of all college majors.

### **Comparable Programs in Illinois**

There are currently no universities in Illinois that offer a MS in Weather and Climate Risk and Analytics. Thus, UIUC would be the first to offer such a degree program.

### **Mission and Objectives**

*1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.*

The program is consistent with the purpose, goals, objectives, and mission of the University. The requested degree title reflects the programs objectives and curriculum.

### **Curriculum and Assessment**

*1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.*

*1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.*

### **Admission Requirements**

Applicants interested in the MS in Weather and Climate Risk and Analysis program must meet the minimum requirements set by the Graduate College. To be considered for admission to the program, applicants are required to have:

- Completed a bachelor's degree
- Earned a minimum GPA of 3.0/4.0
- Submitted three letters of reference
- TOEFL or IELTS scores if native language is not English

## Curriculum

To earn the MS in Weather and Climate Risk and Analytics, students will complete 32 credit hours of coursework consisting of seven required courses covering data analytics, assessment of risk, geospatial analytics, and climate prediction. The non-thesis research course can be repeated to a maximum of eight credit hours to reach the minimum degree requirement.

## Assessment of Student Learning

The University of Illinois Urbana-Champaign has established processes to measure and analyze student learning outcomes. Direct and indirect evidence of student learning will be considered annually by a learning outcome assessment team composed of members of the department's graduate affairs committee. Assurance of student learning will be performed using course embedded assessments. A rubric will be used to analyze sample work products in selected atmospheric science courses. Indirect measures include exit surveys of graduating students along with annual surveys of alumni and graduate students. Results will be shared annually with faculty, and recommendations for improvement will be collected and implemented.

## Program Assessment

The program will be evaluated and improved through the department's external review and associated self-study. Methods of evaluation used to improve the curriculum, instruction, and overall quality of the program will include:

- Enrollment trends
- Specific comments and scores from course evaluations
- Input and recommendations from external reviewers
- Graduate student surveys
- Feedback and information gathered by the Alumni Council

## Facilities (space, equipment, instructional materials)

*1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.*

Existing facilities are sufficient for implementing the proposed program. The University possesses adequate library resources with sufficient access to books, electronic journals, and database resources to support teaching and scholarly work.

## Faculty and Staff

*1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by*

a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

A program coordinator will be hired to assist with operations of new programs in Atmospheric Sciences, Geology, and Geography and Geographical Information Science. The University has identified institutional policies that ensure individuals hired possess the training, credentials, and other related qualifications. A formal faculty evaluation process is in place.

### **Fiscal and Personnel Resources**

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

The University has adequate faculty, staff, and other instructional resources in place to administer the proposed program. After the three-year period funding through the Investment for Growth grant, the program will be self-supporting.

### **Accreditation and Licensure**

1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

No specialized accreditation or licensure is required.

### **Program Information**

1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education



*Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.*

Detailed information about the proposed program, including description of the admission policies, university policies, tuition, fees, and curriculum are provided in the proposal and will be published on the University's website.

### **Staff Conclusion**

The staff concludes that the Master of Science in Weather and Climate Risk and Analytics proposed by the University of Illinois Urbana-Champaign meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

## Western Illinois University

**Proposed Degree Title in the Region of Authorization:** Master of Science in Teaching Mathematics in the Western Region

*Projected Enrollments and Degrees:*

First Year Enrollment	Fifth Year Enrollment	Degrees Awarded Fifth Year
8	12	12

## Background

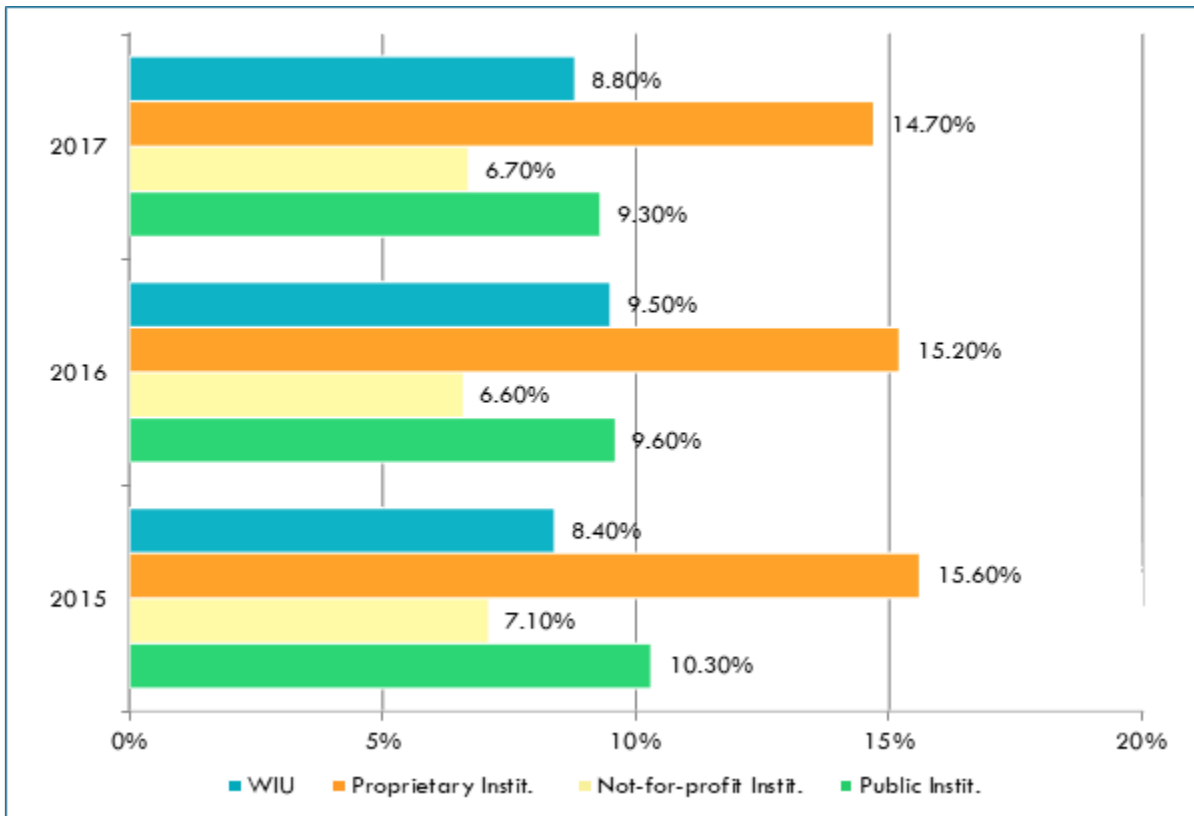
Western Illinois University (WIU or the University) requests authorization to offer a Master of Science (MS) in Teaching Mathematics in the Western Region. The University has received inquiries from and conducted surveys of alumni and the Illinois Council of Teachers of Mathematics, which has confirmed the need for graduate-trained teachers of Mathematics, especially in Western Region. The University also understands that the increased demand seen statewide for dual credit courses is dependent on the availability of dual credit teachers, especially in STEM fields, to teach college-level courses in high school, which reduces students' college expenses and time to completion. The proposed online MS in Teaching Mathematics is a two-year, 33-credit-hour program that prepares current high school teachers who already have a bachelor-level Mathematics degree and secondary teaching certificate for professional advancement and teaching dual credit or community college-level Mathematics. The online modality enables working teachers to achieve a graduate degree from a distance and at times that are convenient to their schedules.

## Institutional Data

*1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.*

This section includes information about institutional and student success measures for each institution seeking program approval. The institution's rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.

### Three-Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics (NCES), US Department of Education

Note: The national cohort default rate for fiscal year 2017 is 9.7 percent. A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school's borrowers who enter repayment on certain Federal Family Education Loan Program or William D. Ford Federal Direct Loan Program loans during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

#### Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

Illinois's Western Region is largely rural and low-income with comparatively fewer opportunities for professional adults seeking advanced programs relative to, for instance, the northeastern Illinois Regions. The University has received inquiries from and conducted surveys of alumni and the Illinois Council of Teachers of Mathematics, which has confirmed the need for graduate-trained teachers of Mathematics, especially in Western Region. The University also understands that the increased demand seen statewide for dual credit courses is dependent on the availability of dual credit teachers, especially in STEM fields, to teach college-level courses in high school, which reduces students' college expenses and time to completion. WIU's proposed Master of Science in Teaching Mathematics increases the number of high school teachers qualified to teach

dual credit math classes and to advance professionally; delivers well-trained instructors of college-level math courses to high schools and their students; and supports the State of Illinois’s higher education priorities with improved access to and equity in achieving post-secondary education goals for traditional and adult students.

According to the US Bureau of Labor Statistics, high school teacher jobs are expected to grow annually by four percent, as much as average, from 2019-2029. The Illinois State Board of Education [reports](#) that math teacher vacancies have increased since from 75.6 teachers 2018 to 123.6 in 2020.

### Comparable Programs in Illinois

Institution	Western Illinois University	University of Illinois Chicago	University of Illinois Urbana-Champaign	Illinois Institute of Technology
Program Name	Master of Science in Teaching Mathematics	Master of Science in the Teaching of Mathematics	Master of Science in the Teaching of Mathematics	Master of Science in Mathematics Education
Sector	Public	Public	Public	Private

In total, 15 graduate programs from ten institutions in Illinois have a comparable program. Among those ten are eight private non-profit institutions (DePaul University, Loyola University, Relay Graduate School of Education, University of St. Francis, Concordia University Chicago, Illinois Institute of Technology, National Louis University, and Rockford University) and two public institutions (University of Illinois Chicago and University of Illinois Urbana-Champaign) offering programs in the Chicago, North Suburban, South Metro, Fox Valley, and Central Regions. Only three of the ten institutions offer a MS in Teaching Mathematics. University of Illinois Chicago, University of Illinois Urbana-Champaign, and the Illinois Institute of Technology. None of the ten institutions has a presence in Illinois’s Western Region or serves the same student demographic. Western’s program cost is the lowest of the three comparable MS programs with a total cost of 15,000.

### Mission and Objectives

1050.30(a)(1): A) *The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university.* B) *The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.*

The program is consistent with the purpose, goals, objectives, and mission of the University. The requested degree title reflects the program’s objectives and curriculum.

### Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) *The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved.* B) *The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies.* C) *The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction.* D) *Institutions must show the capacity to develop, deliver and support academic*

programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.

1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

### Admission Requirements

Applicants for admission to the MS in Teaching Mathematics must satisfy the standards for admission to the School of Graduate Studies at Western Illinois University, which include the following:

- Completed online application;
- Bachelor's degree from regionally accredited institution;
- Cumulative GPA of at least 2.75 for all undergraduate work, OR a 3.0 or better GPA for the last two years (60 semester hours) of undergraduate work;
- Approval by the WIU Mathematics Graduate Committee; and
- Successful completion of Abstract Algebra (MATH 421 at WIU) or Real Analysis (MATH 435 at WIU), one of which may be completed while enrolled in the proposed program.

### Curriculum

The proposed Master of Science in Teaching Mathematics is a two-year, 33-credit-hour program that prepares current high school teachers who already have a bachelor-level Mathematics degree and secondary teaching certificate for professional advancement and teaching dual credit or community college-level Mathematics. The online modality enables working teachers to achieve a graduate degree from a distance and at times that are convenient to their schedules. The required coursework includes:

- Core Courses – 12 credit hours
- Elective Courses – 12-15 credit hours
- Capstone Courses – 6-9 credit hours

Within the six to nine hours of capstone research, students may select from options for research, internship(s), or a thesis.

### Assessment of Student Learning

The University has established processes to measure and analyze student learning outcomes data. Direct measures are obtained through faculty scoring and evaluation of students' performance in core courses (e.g., tests, papers, presentations, and teaching performance) and the two-part capstone experience that incorporates research, content, and pedagogy requiring students to analyze results to support a meaningful claim or outcome. Indirect measures of student learning outcomes include time to completion, percentage of students completing the proposed degree, and

percentage of graduates who teach dual credit courses.

#### Program Assessment

Each year, the program will submit its program assessment to the provost for review and inclusion in the University's Consolidated Annual Report. Key factors that will be used in program assessment include student recruitment, retention and graduation rates, evaluation of faculty teaching, faculty research, number and size of grants, the quality of student theses (measured by publication in external outlets), levels of alumni and employer satisfaction with the program, and the percent of graduates employed in relevant positions.

#### **Facilities (space, equipment, instructional materials)**

*1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.*

Existing facilities are sufficient for implementing the proposed program. Classroom space and computer resources are sufficient for the program's needs. The University possesses appropriate library resources, including textbook and journal holdings, to support teaching and scholarly work.

#### **Faculty and Staff**

*1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.*

The University has identified institutional policies that ensure faculty and staff hired possess the training, credentials, and other related qualifications to provide instruction at the institution. Faculty teaching in the proposed program will have the appropriate qualifications. A formal faculty evaluation process is in place.

#### **Fiscal and Personnel Resources**

*1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the*

*unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.*

The University has adequate faculty, staff, and other instructional resources to administer the proposed program.

### **Accreditation and Licensure**

*1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.*

No specialized accreditation or licensure is required at this time.

### **Program Information**

*1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.*

Detailed information about the proposed program, including description of the admission policies, university policies, tuition, fees, and curriculum are provided in the proposal and will be published on the University's website.

### **Staff Conclusion**

The staff concludes that the Master of Science in Teaching Mathematics proposed by the Western Illinois University meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.