

APPROVED
JUNE 21, 2016

Item #VI-3
June 21, 2016

**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 three public universities.

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

University of Illinois at Chicago

- Bachelor of Science in Liberal Arts and Sciences in Integrated Health Studies in the Chicago Region
- Master of Science in Comparative Effectiveness Research in the Chicago Region

University of Illinois at Springfield

- Bachelor of Science in Biochemistry in the Central Region
- Bachelor of Science in Exercise Science in the Central Region
- Master of Science in Data Analytics in the Central Region

University of Illinois at Urbana-Champaign

- Bachelor of Arts in Liberal Arts and Sciences in Asian American Studies in the Prairie Region
- University of Illinois Deloitte Foundation Center for Business Analytics in the Prairie 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 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 *The Illinois Public Agenda for College and Career Success*, which sets forth new priorities to guide Illinois higher education. Staff recommendations are based on analyses of application materials and responses to staff questions, and, for advanced degree programs, recommendations of external consultants.

Executive Summary – Public Institutions

University of Illinois at Chicago

- Bachelor of Science in Liberal Arts and Sciences in Integrated Health Studies in the Chicago Region

The University of Illinois at Chicago requests authorization to offer a Bachelor of Science in Liberal Arts and Sciences in Integrated Health Studies in the Chicago region. The Bachelor of Science in Liberal Arts and Sciences in Integrated Health Studies is a 120 credit hour degree program requiring 40-54 hours in major requirements. The proposed program is a unique collaboration that draws upon the research and educational expertise in the health sciences of the College of Applied Health Sciences and the College of Liberal Arts and Sciences. The program will be administered by the Department of Biological Sciences. 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 proposed program.

- Master of Science in Comparative Effectiveness Research in the Chicago Region

The University of Illinois at Chicago requests authorization to offer a Master of Science in Comparative Effectiveness Research in the Chicago Region. The purpose of Comparative Effectiveness Research (CER) is to improve health outcomes by developing and disseminating evidence-based information to patients, clinicians, and other decision-makers, and responding to their expressed needs about which interventions are most effective. The proposed CER program will require 32 credit hours, including 20 credit hours of core courses and 12 credit hours of elective courses. The program was designed primarily for individuals already working in a pharmaceutical or medical product company, government agency, or in a healthcare provider organization, who

would like to become competent in this new area of research. The program will be offered entirely online making it accessible for working professionals. If approved, the program will be the first online master's degree in CER in the United States and one of only a handful of related degree or certificate programs in the country.

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

University of Illinois at Springfield

- Bachelor of Science in Biochemistry in the Central Region

The University of Illinois at Springfield requests authorization to offer a Bachelor of Science in Biochemistry in the Central Region. The program was developed to attract students interested in biomedical and health science professions. The curriculum meets all of the requirements for pre-medical, pre-dental, pre-veterinarian, pre-pharmacy, and other health-related fields. Graduates would be prepared for graduate education in STEM fields as well as careers in the medicinal chemistry, pharmaceutical, and biotechnology industry. 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.

- Bachelor of Science in Exercise Science in the Central Region

The University of Illinois at Springfield requests authorization to offer a Bachelor of Science in Exercise Science in the Central Region. The program was developed to prepare students to work in health arenas such as in fitness centers, educational settings, and recreation centers; model appropriate professional and ethical practices related to their profession; and pursue graduate degrees in areas such as physical therapy or pursue professional medical degrees. 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.

- Master of Science in Data Analytics in the Central Region

The University of Illinois at Springfield requests authorization to offer a Master of Science in Data Analytics in the Central Region. The proposed program will require 36 credit hours, including 28 credit hours of core courses and eight credit hours of elective courses. The curriculum was designed to provide a conceptual and theoretical foundation as well as practical skills in data science and in the computational methods and tools for preprocessing, interpreting, analyzing, representing, and visualizing of data sets. The program will be a combined effort of the Department of Mathematical Sciences and the Department of Computer Science. The program will offer a unique interdisciplinary curriculum with interdisciplinary learning goals. Students will learn the mathematical foundations needed to understand the fundamental principles behind the data and the properties of datasets and the tools and techniques to clean and process datasets, find patterns, and turn data into useful insights for organizational decisions. The University has established institutional policies that ensure faculty possess the training, credentials, and other related qualifications in order to provide instruction at the institution.

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

University of Illinois at Urbana-Champaign

- Bachelor of Arts in Liberal Arts and Sciences in Asian American Studies in the Prairie Region

The University of Illinois at Urbana-Champaign requests authorization to offer a Bachelor of Arts in Liberal Arts and Sciences in Asian American Studies in the Prairie region. The proposed program is a 120 credit hour, interdisciplinary degree that explores Asian Americans across disciplines and cultures. The major requires a minimum of 33 hours, with 12 of those being at the advanced level selected from an approved course list. The program will provide both a broad and a deep approach to theory, research, and multidisciplinary study. The program will be administered by the Department of Asian American Studies. 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 proposed program.

- University of Illinois Deloitte Foundation Center for Business Analytics in the Prairie Region

The University of Illinois at Urbana-Champaign requests authorization to establish the University of Illinois Deloitte Foundation Center for Business Analytics in the Prairie region. The new Center is made possible through the establishment of a \$6.5 million endowment over five years from Deloitte, LLP. The Center will lead the academy in the creation and maintenance of detailed model curricula and educational resources for data analytics education in business and accountancy. The Center will act as a conduit, providing the academy with new information on the evolving role of analytics in business and the profession, along with regular updates to the model curricula as the professional service industry evolves. No new State funding is requested in this proposal. Funding, staffing, space, and equipment for the Center will come from the University's gifts and endowment income.

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

The staff recommends adoption of the following resolutions:

The Illinois Board of Higher Education hereby grants to University of Illinois at Chicago authorization to establish the Bachelor of Science in Liberal Arts and Sciences in Integrated Health Studies and a Master of Science in Comparative Effectiveness Research 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 the University of Illinois at Springfield authorization to establish a Bachelor of Science in Biochemistry, Bachelor of Science in Exercise Science, and a Master of Science in Data Analytics in the Central Region, subject to the institution's implementation and maintenance of the conditions that were presented in its applications and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to University of Illinois at Urbana-Champaign authorization to establish the Bachelor of Arts in Liberal Arts and Sciences in Asian American Studies 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 the University of Illinois at Urbana-Champaign authorization to establish the University of Illinois Deloitte Foundation Center for Business 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.

University of Illinois at Chicago

Proposed Program Title in the Region of Authorization: Bachelor of Science in Liberal Arts and Sciences in Integrated Health Studies in the Chicago Region

Projected Enrollments and Degrees: The University of Illinois at Chicago projects the program will increase from approximately 150 students in the first year to 600 students in the fifth year. The University projects 110 degrees will be awarded in the fifth year.

Background

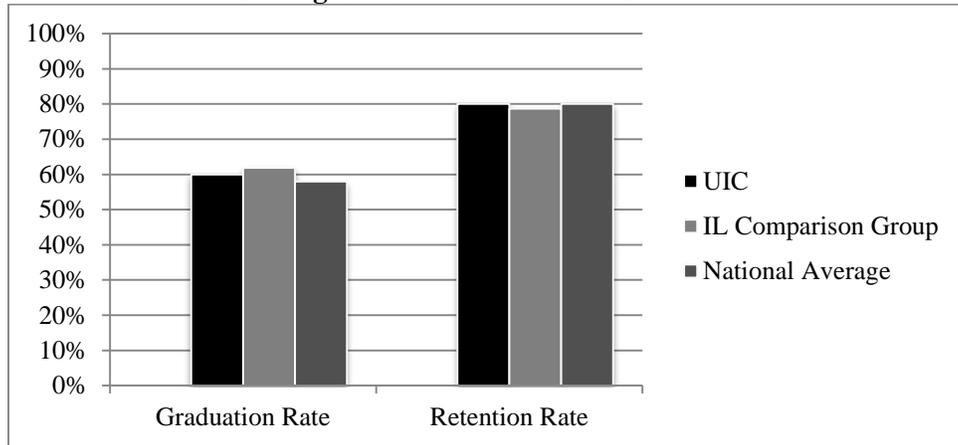
The University of Illinois at Chicago (UIC or the University) requests authority to offer a Bachelor of Science (BS) in Liberal Arts and Sciences in Integrated Health Studies and a Master of Science (MS) in Comparative Effectiveness Research in the Chicago region. The Bachelor of Science in Liberal Arts and Sciences in Integrated Health Studies requires a minimum of 40 credit hours for the major beyond the 14 hours of prerequisite and collateral coursework, and a total of 120 credit hours. The program offers two concentrations, either Behavioral Health or Health and Science. The proposed program will prepare students for admission into professional and graduate health-related programs or direct entry into health-related careers. The program will be administered by the Department of Biological Sciences.

Institutional Data

1050.30(b)(1)(G): provides that success in student progression and graduation, 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 the following factors, based on results for similar institutions: (i) Graduation rates, degree completion rates, retention rates, and pass rates for licensure and certification. (ii) Success rate, which 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 Retention and Graduation Rates



Source: National System for Education Statistics (NCES), U.S. Department of Education
Note: The University of Illinois at Chicago is in the four-year, selective Illinois comparison group. Higher percentages are positive indicators.

Undergraduate Graduation Rate

UIC’s 2012-2013 graduation rate was 60 percent. The national 2012-2013 average graduation rate for public four-year institutions was 58 percent and the average among comparable Illinois institutions was 61.9 percent. 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 National Center for Education Statistics (NCES).

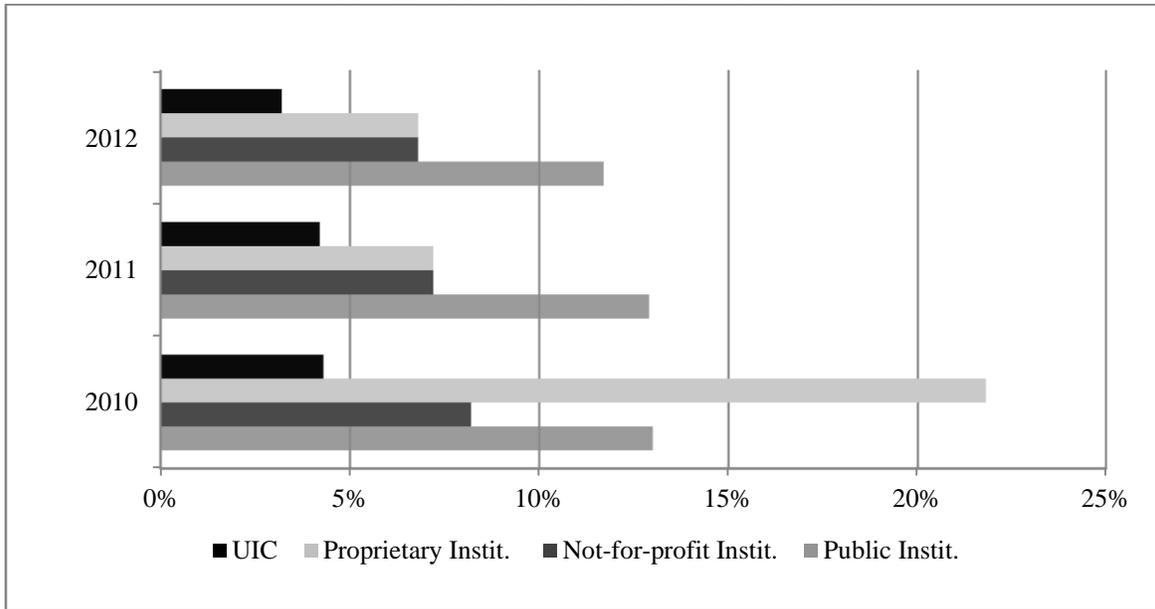
Undergraduate Retention Rate

UIC’s 2012-2013 retention rate was 80 percent. The national average retention rate for public four-year institutions in 2012 was 58 percent and the average for comparable Illinois institutions was 78.7 percent. 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 the NCES.

Undergraduate Completions per 100 FTE

UIC’s 2012-2013 completions per 100 full-time equivalent (FTE) rate was 24. The average among comparable Illinois institutions was 24.6. The 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.

Three Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics, U.S. Department of Education

Note: The University of Illinois at Chicago is a public institution.

A lower number is a positive indicator.

The three-year student loan default rate for UIC was 3.2 percent in 2012, 4.2 percent in 2011 and 4.3 percent in 2010. The three-year cohort student loan default rate is the percentage of a school's borrowers, both undergraduate and graduate, who enter repayment on 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. The U.S. Department of Education stated that the Fiscal Year 2012 three-year national cohort default rate was 11.8 percent. The Fiscal Year 2012 three-year national cohort average default rate breakdown by institutional sector is: 11.7 percent for public institutions; 6.8 percent for not-for-profit institutions; and 15.8 percent for for-profit institutions.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens 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 BS in Liberal Arts and Sciences in Integrated Health Studies addresses two important educational needs in Illinois: the need for well-educated graduates ready to enter health-related careers upon completion of their bachelor's degrees and the need for graduates who are competitive for admission into professional health and graduate programs in the health sciences. The National Association of Colleges and Employers surveyed recent graduates and found healthcare and social assistance jobs ranked number three in the top hiring industries with an average salary of \$45,000. With the passage of the Affordable Care Act and increases in life expectancy, there is also an increased need for trained individuals to comprehensively manage health issues and an increasingly complex healthcare system. Second, this program seeks to fulfill the need to develop individuals

who are competitive for admission into professional health and graduate programs in the health sciences. The proposed program is designed to serve the evolving needs of many pre-health professional students. In particular, this degree is designed with flexibility to accommodate the prerequisite course requirements for a variety of in-demand health careers such as medicine, dentistry, podiatry, physical therapy, occupational therapy, and pharmacy. Although this degree will prepare students for clinical professional and graduate health science-related programs, many graduates will also be able to enter the workforce prepared to begin any number of healthcare-related careers.

The Illinois Public Agenda for College and Career Success

The University indicates that the proposed BS in Liberal Arts and Sciences in Integrated Health Studies supports Goal 1 of *The Illinois Public Agenda for College and Career Success*. Goal 1 is *to increase educational attainment to match the best-performing states*. The program will focus on recruiting, and creating a pipeline for, first-generation college students and underrepresented students into health-related careers and health professions. The proposed program will offer an innovative career path for students participating in the University's City Colleges of Chicago partnerships: the Guaranteed Admission Transfer Program (GAT) and the Behavioral and Biomedical Sciences Bridges to Baccalaureate program. The mission and the curriculum of the program are designed to educate students from groups that have been underrepresented in higher education and health careers and to provide all students in the program with an introduction to health disparities within local, state, national and global communities.

Comparable Programs in Illinois

Although several private and public institutions offer health-related bachelor level programs, this proposed BS in Liberal Arts and Sciences in Integrated Health Studies provides a slightly different focus in the curriculum along with requiring the prerequisites necessary for entry into many health-related graduate and professional programs. The program also targets students from two of the City Colleges of Chicago transfer programs to address the fundamental gaps with underrepresented populations in the field of healthcare.

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 program supports the University of Illinois at Chicago's mission and focus. The proposed programs are consistent with the purpose, goals, objectives, and mission of the institution. The requested degree titles reflect the degrees' program objectives and curriculum.

Curriculum/Assessment

1050.30(b)(1): 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 program 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; E) Degree programs must meet [appropriate] requirements.

Admission Requirements

Applicants to the Integrated Health Studies Bachelor's program must apply to the University as a Liberal Arts and Sciences undeclared student. Students must complete a C or better in AHS 200: Introduction to Integrated Health Sciences before declaring Integrated Health Studies as a major. Transfer students must complete a transfer application to the University, have a minimum of 24 credit hours at application and 36 hours at enrollment, and have a minimum GPA of 2.5.

Curriculum

The Bachelor of Science in Liberal Arts and Sciences in Integrated Health Studies is a 120 credit hour degree program. The program requires 14 hours in prerequisite and collateral courses, 40-54 hours in major requirements which includes a concentration in either Behavioral Sciences or Health and Science, and the remaining hours in general education or electives. The proposed program is a unique collaboration that draws upon the research and educational expertise in the health sciences of the College of Applied Health Sciences and the College of Liberal Arts and Sciences. The primary goal is to offer a diverse, interdisciplinary curriculum that includes relevant core content spanning the life sciences, physical sciences, social sciences, and the humanities. Although no capstone course is required, all students must complete AHS 375: Ethics, Law, and Professionalism in Health Sciences. This upper-level, writing-intensive course examines the ethical, legal, and professional theories, issues, and decision-making processes involved in health sciences and healthcare environments and must be completed in the junior or senior year.

Assessment of Student Learning

The University has a standard process for assessing student learning outcomes in all its degree programs. The institution's approach for the proposed program will incorporate direct and indirect measures administered periodically throughout the curriculum. Direct assessment measures include exercises, exams, projects, and written papers, which will be measured against the learning objectives for each course. Indirect assessments include: formal student evaluations of faculty and courses, retention, graduation, and time-to-completion rates.

Program Assessment

The University has a clearly articulated assessment plan to determine the overall effectiveness of its programs and the degree to which students' needs are being met. For the BS in Liberal Arts and Sciences in Integrated Health Studies, a comprehensive evaluation plan will be created and include ongoing steps to continually respond to evaluation findings. The plan will be implemented by the Program Advisory Committee, which will be constituted as a standing committee composed of faculty and college representatives selected by the heads of Departments of Biological Sciences and Psychology, College administration, and departmental and pre-health academic advisors. The Program Advisory Committee will ensure timely collection of data, provide summaries of data, and offer recommendations to the department heads and college administration on a yearly basis. The University will follow these existing protocols for continuous improvement.

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 or public service, are conveniently available and accessible and can be maintained.

Facilities at the University are sufficient for implementing the proposed BS in Liberal Arts and Sciences in Integrated Health Studies. Classroom space, computer resources, and library services are sufficient for the program's needs. Strong academic support is also a hallmark of this new program through the well-developed advising and academic supports already in place in both the College of Applied Health and Sciences and College of Liberal Arts and Sciences. The University's Daley Library and Library of Health Sciences have a rich collection of materials and resources necessary to the fields of health studies. Students and faculty have full access to books and other materials shelved on the open stacks, and both on-site and remote access to the library's collection of electronic databases, books, and journals. The University Library has professional staff members with graduate degrees in Library and Information Science.

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.

The University has identified institutional policies that ensure academic professionals hired possess the training, credentials, and other related professional qualifications to provide quality 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

Criterion 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 upon supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources will be requested to establish the proposed program. The University has adequate faculty, staff, and other instructional resources to administer the Bachelor of Science in Liberal Arts and Sciences in Integrated Health Studies.

Accreditation/Licensure

The proposed program does not require specialized accreditation or licensure.

Program Information

1050.30(b)(2)(A): The information the institution provides for students and the public...(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 Liberal Arts and Sciences in Integrated Health Studies proposed by the University of Illinois at 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.

Proposed Program Title in the Region of Authorization: Master of Science in Comparative Effectiveness Research in the Chicago Region.

Projected Enrollments and Degrees: University of Illinois at Chicago projects enrollment in the Master of Science in Comparative Effectiveness will increase from five students in the first year to approximately ten students by the fifth year.

Background

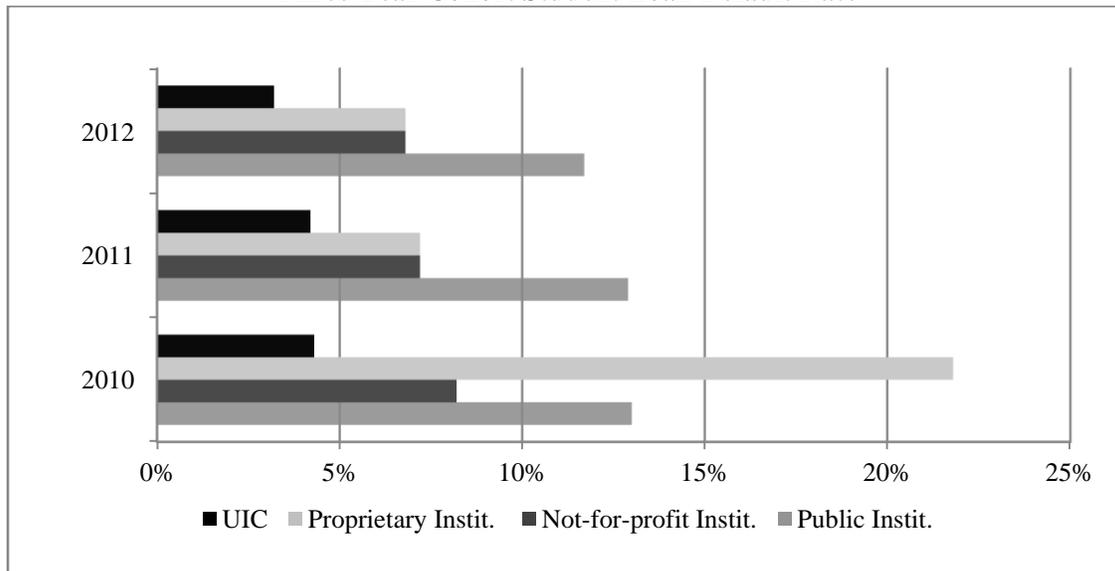
The University of Illinois at Chicago requests authority to offer a Master of Science in Comparative Effectiveness Research (MS in CER) in the Chicago Region. The purpose of Comparative Effectiveness Research (CER) is to improve health outcomes by developing and disseminating evidence-based information to patients, clinicians, and other decision-makers, and responding to their expressed needs about which interventions are most effective. The proposed program was designed to provide skills and knowledge relevant in conducting comparative effectiveness research for application in the pharmaceutical and healthcare industries. It was designed primarily for individuals already working in a pharmaceutical or medical product company, government agency, or in a healthcare provider organization, who would like to become competent in this new area of research. The program will be offered online, making it accessible for working professionals. If approved, the UIC program will be the first online MS degree in CER in the United States and one of only a handful of related degree or certificate programs in the country. UIC has been at the forefront of the development of CER for the past decade. UIC was one of a small group of universities funded by the Agency for Healthcare Research and Quality (AHRQ). As the coordinating site for the AHRQ-funded Developing Evidence to Inform Decisions about Effectiveness Center from 2005-2010 and from 2010-2013, the UIC was among a small group of select universities that were pioneers in CER. UIC faculty members have also been successfully funded via many CER-related programs. The proposed online CER program will be housed at the Department of Pharmacy Systems, Outcomes and Policy in the College of Pharmacy.

Institutional Data

1050.30(b)(1)(G): provides that success in student progression and graduation, 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 the following factors, based on results for similar institutions: (i) Graduation rates, degree completion rates, retention rates, and pass rates for licensure and certification. (ii) Success rate, which 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, U.S. Department of Education

Note: The University of Illinois at Chicago is a public institution.

A lower number is a positive indicator.

The three-year student loan default rate for UIC was 3.2 percent in 2012, 4.2 percent in 2011 and 4.3 percent in 2010. The three-year cohort student loan default rate is the percentage of a school's borrowers, both undergraduate and graduate, who enter repayment on 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. The United States Department of Education stated that the Fiscal Year 2012 three-year national cohort default rate was 11.8 percent. The Fiscal Year

2012 three-year national cohort average default rate breakdown by institutional sector is: 11.7 percent for public institutions; 6.8 percent for not-for-profit institutions; and 15.8 percent for for-profit institutions.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens 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 proposed Comparative Effectiveness Research program will help to address the need to have more researchers engaged in the discipline. CER is a new field but there is a growing interest in training researchers to engage in focused research to promote the field. While a variety of programs grant degrees in related fields (including epidemiology, health economics, health service research, and biostatistics), these programs do not cover the entire spectrum of methods and applications unique to CER. As a result, there is critical need for new programs to educate and train new researchers. The Pharmaceutical Research and Manufacturers of American (PhRMA) Foundation attempted to address this need by funding academic institutions to develop training and education programs in CER, starting with the establishment of post-doctoral training or certificate programs at Harvard University, John Hopkins University, University of Maryland at Baltimore, University of Utah, and University of Washington. UIC was the sixth institution to receive the award.

The National Institute of Health (NIH) and other major government research agencies have identified the need for more investigators to be proficient in CER and have funded related training programs across the country. The Institute of Medicine published a report on infrastructure required for CER and identified the growth in the field and workforce training and education needs as critical. The NIH, via the National Center for Advancing Translational Sciences, also conducted a survey and reported the need for significant number of new workers in CER-related jobs in the foreseeable future. The CER discipline is still new and no data is available at the national and state level to document specific employment trends. UIC conducted a survey to assess interest in the proposed program. The questionnaire asked about both the need for and interest in CER training, and the need within the respondent's company. The majority of respondents indicated that their organizations would benefit from additional formal training in CER.

The Illinois Public Agenda for College and Career Success

The proposed MS in Comparative Effectiveness Research meets Goals 3 and 4 of the *Illinois Public Agenda*. Goal 3 is to “increase the number of high-quality postsecondary credentials to meet the demands of the economy and an increasingly global society.” The proposed program is designed to prepare graduates to meet the expressed demand on the part of pharmaceutical companies and other organizations for professionals with expertise in CER. The program is primarily targeted at individuals already working in a pharmaceutical or medical product company, government agency, or in a healthcare provider organization who would like to become competent in this new area of research. The proposed program supports Goal 4, to “better integrate Illinois' educational, research, and innovation assets to meet economic needs of the state and its regions.” The program will leverage existing research expertise to provide students the skills and knowledge relevant in conducting comparative effectiveness research for application in the pharmaceutical and

healthcare industries. The program is also innovative, being the first online degree in CER to be offered in the U.S.

Comparable Programs in Illinois

There are no comparable Comparative Effectiveness Research programs in Illinois, and only one such program in the country. The only academic institution in Illinois with expertise in CER is the University of Chicago. The University of Chicago offers a concentration in CER for individuals in a MS or PhD program in Health Studies. The University of Alabama is the only institution that grants degrees in CER. The program at the University of Alabama is titled “Pharmacoepidemiology and Comparative Effectiveness Research.” Nationally, two institutions offer concentration in CER and six institutions offer a certificate program. None of these concentrations or certificate programs are available online, which means the proposed program that will be offered online at the UIC will be more accessible to working professionals.

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 program supports the University of Illinois at Chicago’s mission and focus. The proposed program is consistent with the purpose, goals, objectives, and mission of the institution. The requested degree title reflects the degree program objectives and curriculum.

Curriculum/Assessment

1050.30(b)(1): 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 program 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; E) Degree programs must meet [appropriate] requirements.

Admission Requirements

Applicants for admission to the Comparative Effectiveness Research Master’s program must have earned a bachelor’s or health professional degree with a minimum GPA of 2.75. Applicants are also required to submit a personal statement and a resume to determine their ability to succeed in the program. The UIC program expects applicants will have experience in the healthcare industry and have completed college-level algebra.

Curriculum

The MS in CER program will require 32 credit hours, including 20 credit hours of core courses and 12 credit hours of elective courses. All the courses will be available online. In addition to the approved electives, students may be granted permission by the Department to substitute other electives on a case-by-case basis if deemed relevant to comparative effectiveness research. The program was designed primarily for individuals already working in a pharmaceutical or medical product company, government agency, or in a healthcare provider organization who would like to become competent in this new area of research. The program will be offered in an online format, making it accessible for working professionals.

Assessment of Student Learning

Assessment of the learning objectives for the MS in CER will occur throughout using direct assessment tools such as quizzes, online discussions, exams, reflections, homework assignments, oral presentations, and term papers. Students enrolled in the program will also undergo an annual progress evaluation to assess achievement of the program's learning objectives. Upon completion of the annual assessment, the Director of Graduate Studies and/or the Department Head will provide feedback to the students. The capstone project serves as an end-of-program evaluation. The capstone project will require the students to integrate and apply the knowledge acquired from the courses and therefore demonstrate the ability to conduct independent CER. Indirect assessments of students will also be tracked using feedback received from other students, alumni, and employers, as well as job placement or advancement data following the program.

Program Assessment

The Comparative Effectiveness Research faculty will meet monthly and the agenda will include discussion of the curriculum, instruction, and the overall quality of the graduate programs. At each meeting, the group discusses opportunities for improvement based on direct or indirect observation or feedback from students or others. The University also established an external advisory committee that will provide input on improvement needs of the program. The external advisory committee will include individuals who are knowledgeable about CER and the training needed in the workplace. This includes people from pharmaceutical companies, consulting companies, other academic organizations, healthcare organizations, and government agencies (including the FDA). The committee will provide input on all aspects of the Master's program, including but not limited to curriculum, teaching, research, public service, diversity, quality, cost, and demand. The committee will help set goals for these key aspects and will assist the Department in tracking performance on each of those goals.

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 or public service, are conveniently available and accessible and can be maintained.

The facilities at UIC are sufficient to support the MS in Comparative Effectiveness Research. The proposed online CER program will be housed at the Department of Pharmacy

Systems, Outcomes and Policy in the College of Pharmacy. The current resources and support structure of the department will be sufficient to support the start-up of the new program. The University has sufficient library resources and instructional technology that will support the program including online learning and research tools, online tutorials, technology support, and smart classrooms. The Department has sufficient faculty, classroom space, and administrative capacity to support the proposed programs. The University's Daley Library and Library of Health Sciences have a rich collection of materials and resources necessary to the fields of health studies. Students and faculty have full access to books and other materials shelved on the open stacks, and both on-site and remote access to the library's collection of electronic databases, books, and journals. The University Library has professional staff members with graduate degrees in Library and Information Science.

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.

The University has established institutional policies that ensure faculty hired possess the training, credentials, and other related qualifications in order 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.

No new state resources will be requested to establish the proposed program. The University has adequate faculty, staff, facilities, library resources, and instructional technology to implement the program. Faculty of the Department of Pharmacy Systems, Outcomes, and Policy will provide instruction for the proposed program.

Accreditation and Licensure

1050.30(b)(3) [applicable only to units of instruction]: Appropriate steps have been 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. Reporting Requirement (Board Policy, April 2002) Programs in which state licensure requires specialized accreditation for students to obtain professional licensure, but which have not yet achieved accreditation, will undergo full review and report to IBHE every three years until accreditation is achieved.

There are no additional accreditation or licensure requirements for the proposed program.

Program Information

1050.30(b)(2) [applicable only to units of instruction]: The information which the institution provides for students and the public accurately describes the unit of instruction, including its objectives, length, residency requirements if any, schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies, student rights and responsibilities, and such other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. Such information shall be available to prospective students prior to enrollment.

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 Comparative Effectiveness Research proposed by the University of Illinois at 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 at Springfield

Proposed Program Title in the Region of Authorization: Bachelor of Science in Biochemistry in the Central Region

Projected Enrollments and Degrees: The University of Illinois at Springfield has indicated that enrollment in the proposed Bachelor of Science in Biochemistry is projected to grow from ten students in the first year to approximately 45 students in the fifth year. It has projected also that 15 degrees will be awarded in the fifth year.

Background

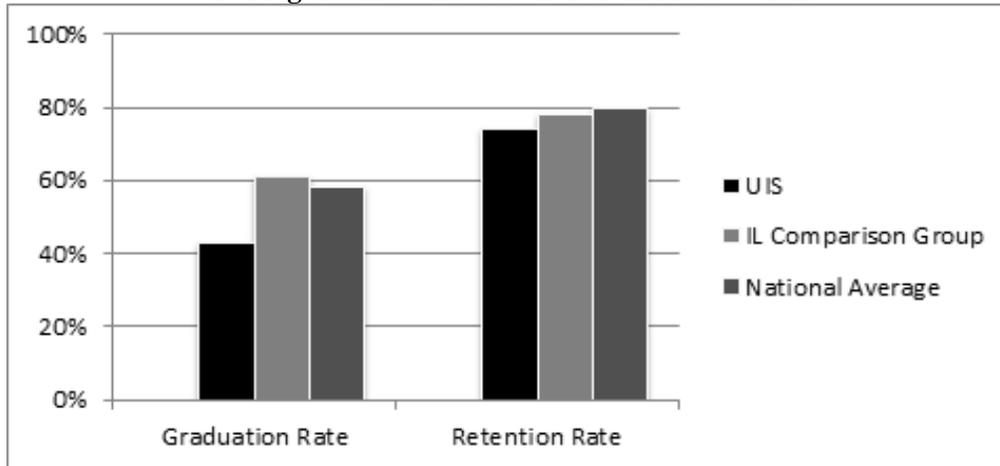
The University of Illinois at Springfield (UIS) requests authority to offer a new Bachelor of Science (BS) in Biochemistry. This degree was developed to prepare students for post-graduate training in healthcare practice and support. The proposed curriculum meets all of the requirements for pre-medical, pre-dental, pre-veterinarian, pre-pharmacy, and other health-related fields. With some additional graduate or professional education, students who complete this program will be prepared for a wide array of jobs at many levels in the healthcare industry.

Institutional Data

1050.30(b)(1)(G) provides that success in student progression and graduation, 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 the following factors, based on results for similar institutions: (i) Graduation rates, degree completion rates, retention rates, and pass rates for licensure and certification. (ii) Success rate, which shall be, at a minimum, higher than that 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 Retention and Graduation Rates



Source: National System for Education Statistics (NCES), U.S. Department of Education
Note: The University of Illinois at Springfield is in the four-year, selective Illinois comparison group. Higher percentages are positive indicators.

Undergraduate Graduation Rate

UIS's 2012-2013 graduation rate was 43 percent. The national 2012-2013 average graduation rate for public four-year institutions was 58 percent and the average among comparable Illinois institutions was 61.2 percent. 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).

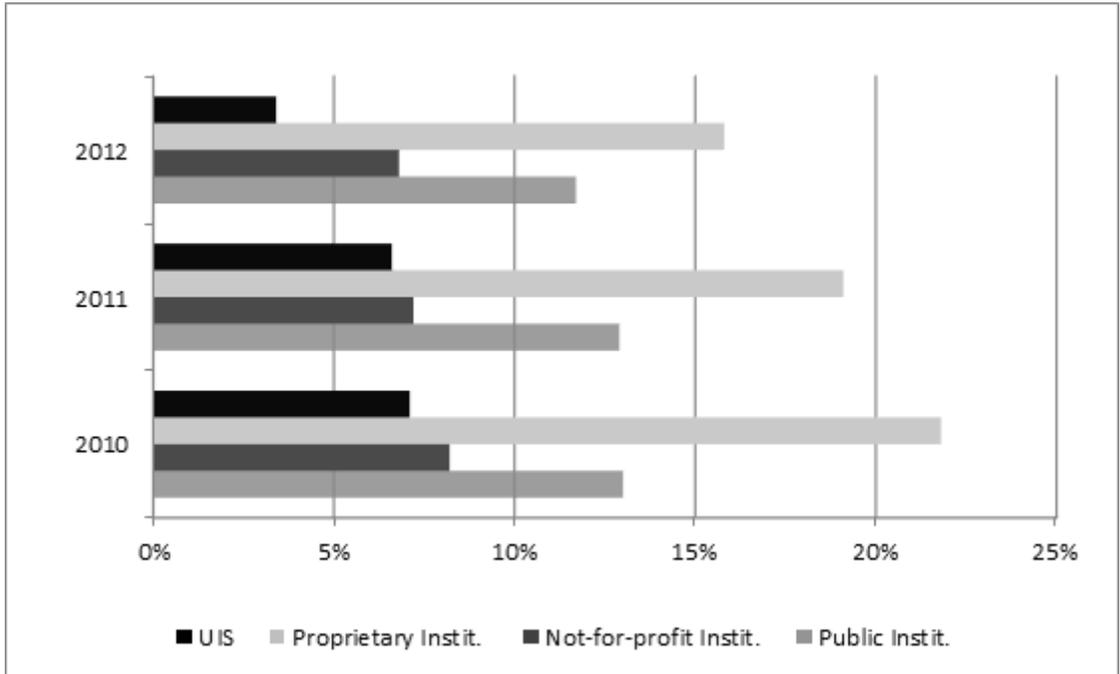
Undergraduate Retention Rate

UIS's 2012-2013 retention rate was 74 percent. The national average retention rate for public four-year institutions in 2012 was 80 percent and the average for comparable Illinois institutions was 78.3 percent. 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

UIS's 2012-2013 completions per 100 full-time equivalent (FTE) rate was 30. The average among comparable Illinois institutions was 24.7. The 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.

Three Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics, U.S. Department of Education

Note: The University of Illinois at Springfield is a public institution.

A lower number is a positive indicator

Student Loan Default Rate

The three-year student loan default rate for the University of Illinois at Springfield was 3.4 percent in 2012, 6.6 percent in 2011 and 7.1 percent in 2010. The three-year cohort student loan default rate is the percentage of a school’s borrowers, both undergraduate and graduate, who enter repayment on 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. The U.S. Department of Education stated that the Fiscal Year 2012 three-year national cohort default rate was 11.8 percent. The Fiscal Year 2012 three-year national cohort average default rate breakdown by institutional sector is: 11.7 percent for public institutions; 6.8 percent for not-for-profit institutions; and 15.8 percent for for-profit institutions.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens 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.

A Biochemistry degree directly serves students interested in health professions. The Medical College Admissions Test (entry exam for medical school) has adopted a strong biochemistry emphasis and other professional health programs are following that example. Pre-health is the most requested major at UIS by prospective students and one of the fastest growing

occupations in the U.S. This degree is also appropriate for students going on to graduate school in biochemistry, pharmacology, and molecular biology. Graduates would be immediately prepared for careers in the medicinal chemistry, pharmaceutical, and biotechnology industries. The national unemployment rate for the last ten years for people holding degrees in chemistry or biochemistry has been one to four percent lower than the general population. The U.S. Bureau of Labor Statistics lists growth for biochemists at 19 percent above average. The hospitals in the Springfield area serve over two million people. The State of Illinois Occupational Employment Projections (Long-Term) 2012-2022 projects positive significant compounded annual growth in demand for Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations.

The Illinois Public Agenda for College and Career Success

The University of Illinois at Springfield's proposed BS in Biochemistry was developed in light of the Strategic Plan of the University of Illinois Springfield, the goals of the *Illinois Public Agenda for College and Career Success*, and the State's completion agenda to substantially increase the number of postsecondary credential holders by 2025. This proposal is part of a larger effort by UIS to increase access to public education, with a focus on areas of economic development for the state of Illinois. The University's strategic plan meshes with state strategic goals for education. The goals for expansion at UIS support both the completion agenda goal of increasing postsecondary credential holders, and *Public Agenda* Goal 1 "Increase educational attainment to match the best-performing states" and Goal 3 "Increase the number of high-quality postsecondary credentials to meet the demands of the economy and an increasingly global society." This program is also designed to prepare graduates to contribute to the growing biotechnology and healthcare industries in Illinois. State government has projected a high demand in the next ten years for educated professionals with the skills taught and developed within the proposed degree. In doing so, the proposal addresses *Public Agenda* Goal 4, "Better integrate Illinois' educational, research, and innovation assets to meet economic needs of the state and its regions," in particular the strategy to "develop cutting-edge educational programs across the P-20 spectrum that will prepare students to succeed in the global economy."

Comparable Programs in Illinois

Five Illinois public universities offer a Bachelor of Science in Biochemistry including Illinois State University, University of Illinois at Chicago, University of Illinois at Urbana-Champaign, Southern Illinois University Edwardsville, and Southern Illinois University Carbondale. The institution emphasized that the UIS Chemistry department requires all its majors to complete three hours of capstone research to graduate (CHE 400). This requirement is the same for the Biochemistry degree. This is atypical for most Illinois public universities; UIS stated that this provides a higher degree of academic rigor than additional upper-division requirements and electives.

The impact on other Illinois institutions offering a similar degree should be negligible. The five public institutions currently offering a Biochemistry BS are all much larger than UIS. The smaller size and learning environment emphasizing liberal arts education serves an overlapping but distinct population that might not be as well served by the other five public institutions with a Biochemistry BS. UIS is also geographically separated from the other institutions and better located to serve a growing healthcare and biotechnology industry in central Illinois near the state capitol.

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 Biochemistry program is consonant with college-level strategic plans. The mission of the degree is consistent with and supports the educational mission of the University.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content to the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

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

There are no special admission requirements for the Bachelor of Science in Biochemistry beyond those required for admission to UIS. There are no licensure requirements or background checks necessary for the program. The UIS admission requirements state that student applications are evaluated based on the following criteria: college preparatory curricula/academic coursework; grade trends; and the rigor of courses completed throughout high school. Applicants must provide written evidence of their ability to perform at a high academic level by submitting a personal and academic statement. Admission for transfer students is the same for all transfer students to the University.

Curriculum

The BS in Biochemistry has many of the same requirements as the existing Chemistry (CHE) bachelor's degree. The proposed program adds BIO 241 Biology of Organisms and the Environment and MAT 121 Applied Statistics to the lower division prerequisites because of the emphasis on application of chemistry to biological systems and also because these courses are required for admission to post-graduate study in most health science disciplines. The upper division core requirements are also more focused on biochemistry than the general Chemistry program. The proposed curriculum was designed to align with the standards of the American Society for Biochemistry and Molecular Biology (ASBMB). As with the existing Chemistry degree, the instruction for this program will be entirely face-to-face (on-ground). External accreditation through the American Chemical Society (ACS) requires the department to meet or exceed high professional standards set forth by the ACS. Students majoring in Biochemistry will have the option of earning an ACS-certified degree in addition to earning the proposed B.S. by taking CHE 402 Physical Chemistry II and CHE 422 Inorganic Chemistry (which can be count toward their CHE electives).

Assessment of Student Learning Outcomes

Program faculty have developed five goals for student learning in the Biochemistry program. These goals are: integration of biochemical knowledge; laboratory skills; communication of scientific information; implementation of the scientific process; and preparation for the chemical profession. For each goal, the department faculty has determined student-learning outcomes and developed mechanisms to measure each of those outcomes. The assessment mechanisms include: standardized exam scores, review of selected integrative exam questions, performance on lab assignments, and the results from pre- and post-assessment tests. These measures will be reviewed by program faculty and will inform curricular developments and overall program assessment.

Program Assessment

The Biochemistry program will be evaluated using the existing program review process at UIS. Currently, that process requires that programs are reviewed every eight years, but in this case, the first review will occur at the end of the third year, as designated by IBHE for new programs or units. The current UIS program review process involves a one-year self-study that takes place in the seventh year, as well as a mid-cycle Assessment Progress Report in the third year of regular review cycles. Incorporated into the UIS program review process are instructional resource metrics for productivity, results of student learning assessment, employer surveys, student feedback, pass rates on capstone and certification exams, retention rates, and 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.

UIS' Brookens Library provides access to a collection of over 700,000 books and serials, including over 205,000 eBooks and eJournals. The Library adequately maintains a collection of resources used to support the program, which satisfies UIS' external accreditation through the American Chemical Society. No additional library resources will be required.

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; 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; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which 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 staff will be adequate to implement and maintain the new Biochemistry program. Front-line advising for majors in the Chemistry Department is done by full-time tenured and tenure-track faculty. The College maintains additional staff to aid with some advising, but the numbers expected for enrollment in this program should not significantly add to the load of those staff. Existing laboratory support staff and lab instructional staff should also be sufficient to easily absorb the slightly increased demand for additional lab instruction. The University has identified institutional policies that ensure faculty hired possess the training, credentials, and other related qualifications in order 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. No new faculty lines are required to staff the proposed program.

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.

No new state resources are needed to establish the proposed program because most resources for the proposed program already exist, including faculty, staff, facilities and equipment, library resources, and instructional technology. Any unmet resource need for this program will be addressed by the College and/or the University.

Accreditation and Licensure

1050.30(b)(3) [applicable only to units of instruction]: Appropriate steps have been 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. Reporting Requirement (Board Policy, April 2002): Programs in which state licensure requires specialized accreditation for students to obtain professional licensure, but which have not yet achieved accreditation, will undergo full review and report to IBHE every three years until accreditation is achieved.

No specialized accreditation is required for this program. The American Chemical Society accredits the UIS Chemistry department, but they offer no accreditation specifically for this kind of degree. ASBMB has within the last year begun to accredit undergraduate biochemistry programs. As of October 1, 2015, no programs in Illinois are accredited by ASBMB. Pending approval of this program by IBHE, the Department will investigate the cost and benefits of seeking accreditation from ASBMB for this program.

Program Information

1050.30(b)(2) [applicable only to units of instruction]: The information which the institution provides for students and the public accurately describes the unit of instruction, including its objectives, length, residency requirements if any, schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies, student rights and responsibilities, and such other material facts concerning the institution and the

unit of instruction as are likely to affect the decision of the student to enroll. Such information shall be available to prospective students prior to enrollment.

Information about the proposed program, including a detailed description of the curriculum, admission requirements, tuition and fees will be published on the University's website. Comparable information about the program will be published in the University's Catalog.

Staff Conclusion. The staff concludes that the Bachelor of Science in Biochemistry proposed by the University of Illinois at 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.

Proposed Program Title in the Region of Authorization: Bachelor of Science in Exercise Science in the Central Region

Projected Enrollments and Degrees: The University of Illinois at Springfield has indicated that enrollment in the proposed Bachelor of Science in Exercise Science is projected to grow from 15 students in the first year to approximately 70 students in the fifth year. It has projected also that 20 degrees will be awarded in the fifth year.

Background

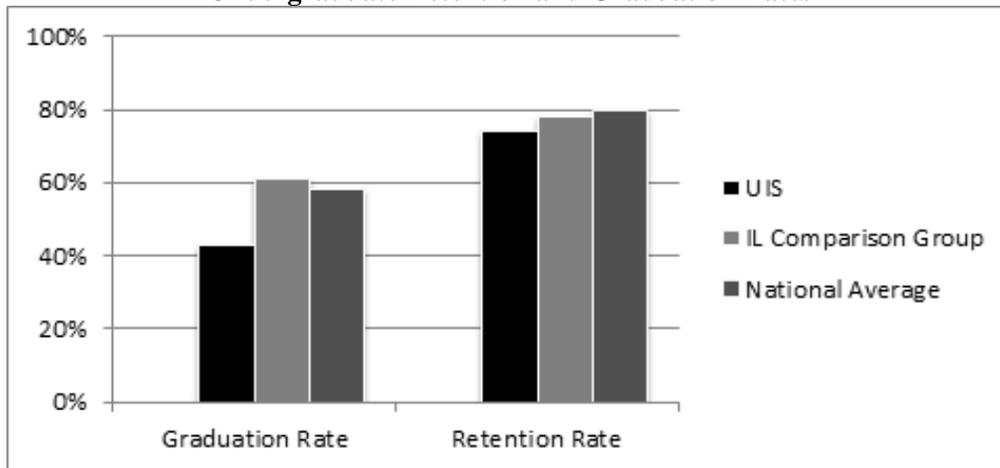
UIS requests authority to offer a new Bachelor of Science (BS) in Exercise Science. This degree was developed to prepare students to work in health arenas such as in fitness centers, educational settings, and recreation centers; model appropriate professional and ethical practices related to their profession; and pursue graduate degrees in areas such as physical therapy or pursue professional medical degrees.

Institutional Data

1050.30(b)(1)(G) provides that success in student progression and graduation, 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 the following factors, based on results for similar institutions: (i) Graduation rates, degree completion rates, retention rates, and pass rates for licensure and certification. (ii) Success rate, which shall be, at a minimum, higher than that 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 Retention and Graduation Rates



Source: National System for Education Statistics (NCES), U.S. Department of Education
Note: The University of Illinois at Springfield is in the four-year, selective Illinois comparison group. Higher percentages are positive indicators.

Undergraduate Graduation Rate

UIS's 2012-2013 graduation rate was 43 percent. The national 2012-2013 average graduation rate for public four-year institutions was 58 percent and the average among comparable Illinois institutions was 61.2 percent. 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 NCES.

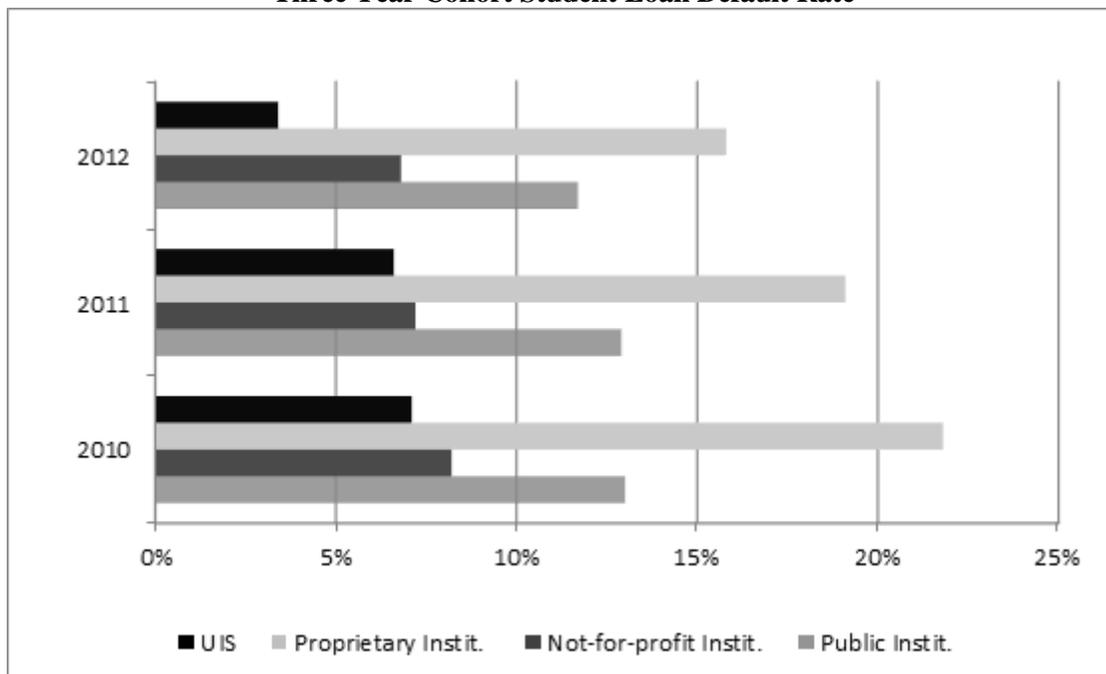
Undergraduate Retention Rate

UIS's 2012-2013 retention rate was 74 percent. The national average retention rate for public four-year institutions in 2012 was 80 percent and the average for comparable Illinois institutions was 78.3 percent. 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

UIS's 2012-2013 completions per 100 full-time equivalent (FTE) rate was 30. The average among comparable Illinois institutions was 24.7. The 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.

Three Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics, U.S. Department of Education

Note: The University of Illinois at Springfield is a public institution.

A lower number is a positive indicator

Student Loan Default Rate

The three-year student loan default rate for the University of Illinois at Springfield was 3.4 percent in 2012, 6.6 percent in 2011, and 7.1 percent in 2010. The three-year cohort student loan default rate is the percentage of a school's borrowers, both undergraduate and graduate, who enter repayment on 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. The U.S. Department of Education stated that the Fiscal Year 2012 three-year national cohort default rate was 11.8 percent. The Fiscal Year 2012 three-year national cohort average default rate breakdown by institutional sector is: 11.7 percent for public institutions; 6.8 percent for not-for-profit institutions; and 15.8 percent for for-profit institutions.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens 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.

An Exercise Science degree will prepare students for various careers or postgraduate educational opportunities. According to the Illinois Department of Employment Security and the U.S. Bureau of Labor Statistics (BLS), the occupational outlook for Exercise Science majors is very strong. Graduates in Exercise Science may accept positions as exercise physiologists, coaches, fitness trainers, and recreation workers. The BLS projects a greater than 21 percent growth from 2012 to 2022, faster than the average for all occupations, for exercise physiologists and

certified athletic trainers. In addition, the BLS projects a greater than 13 percent growth from 2012 to 2022 for fitness trainers and instructors. The BLS also projects a greater than 15 percent growth from 2012 to 2022, faster than average, for coaches and scouts. The course of study is also designed to provide an academic base for careers in various health care and related fields. The program will be an option for postgraduate study in medicine, chemistry, clinical laboratory science, or biology. Students may also use the degree as groundwork for post-graduate programs in physical and occupational therapy.

The Illinois Public Agenda for College and Career Success

The University of Illinois at Springfield's proposed BS in Exercise Science was developed in light of the Strategic Plan of the University of Illinois Springfield and the call articulated in the *Illinois Public Agenda for College and Career Success* to build a "well-educated workforce with the skills and competencies to compete in the economy." The University's analysis indicates a strong occupational outlook exists locally, regionally, and nationally for individuals with degrees and certifications in Exercise Science and related fields such as kinesiology, health management, and health, fitness, and recreation studies.

Through Goal 2 of the *Public Agenda*, the state seeks to "ensure affordability for students, families, and taxpayers." Because UIS is a public university with a liberal arts focus, it provides affordable education with a unique small-college approach to the citizens of Illinois. In comparison to Millikin University, Illinois State University, Eastern Illinois University, and Western Illinois University, UIS has the second lowest annual tuition rate at \$11,136. The average amount of \$10,078 of financial assistance was offered to 68.5 percent of the students enrolled at the University for the 2015-2016 school year, placing UIS among the most affordable educational institutions within the group.

Comparable Programs in Illinois

The majority of Exercise Science programs in the state are located in the Chicago Metropolitan area where there is relatively little direct competition with the proposed UIS program. In the downstate area, because of the high labor market demand in occupations related to Exercise Science and the data that suggest that current programs are not able to produce enough graduates to meet that demand, UIS believes that the Exercise Science program will meet a vital ongoing need in a growing occupational field. Five downstate public universities and two private universities currently offer exercise science programs. The UIS program of study is most similar to those of Illinois State University and Eastern Illinois University in Illinois, and is also aligned closely with the programs at Southeast Missouri State University (Cape Girardeau, MO), San Diego State University (San Diego, CA), and Bloomsburg University (Bloomsburg, PA) because they have Exercise Science programs based in the sciences. The University's research suggests that current programs within Illinois are not graduating enough students to meet the demand for jobs benefitting from a degree in Exercise Science.

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 Exercise Science program is consonant with college-level strategic plans. The mission of the degree is consistent with and supports the educational mission of the University.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content to the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

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

The general admission requirements for Exercise Science will follow UIS guidelines for undergraduate admission. Applicants are evaluated based on college preparatory curricula and academic coursework, grade trends, and the rigor of courses completed throughout high school. There are no special admission requirements for the Exercise Science program. This program allows for admission at the freshmen, sophomore, and junior levels for new and transfer students.

Curriculum

The Exercise Science program will be a four-year baccalaureate program with a highly prescribed set of courses offered on campus (face-to-face format) with the occasional use of blended classes and may develop online versions of some courses in the future. The proposed program curriculum matches best practice standards across the nation and conforms to the curricular standards recommended by the Commission on Accreditation of Allied Health Programs. The program will include classroom and laboratory instruction, as well as applied practical experiences. The curriculum is designed to provide didactic and clinical knowledge and skills relating to the exercise of movement, physical exertion, kinesiology, health awareness, and research into health disorders. Classroom instruction, laboratory work, and practical experiences with professionals on campus and in the community will emphasize basic science skill development, communication, critical thinking skills, and engaged citizenship. Subjects covered in the 31 hours of required core studies include athletic injuries, health and wellness, health promotion and disease prevention, exercise physiology, sports nutrition and pharmacology, and research. Students will be required to select a track, either Health and Fitness or Physical Therapy, in which they will complete an additional 15 hours of focused study. Students have the opportunity to choose from a variety of electives when creating their degree program. The multi-disciplinary nature of the program also draws on other programs to allow students to expand their skills and competencies. The multi-disciplinary curriculum provides students the opportunities to understand a variety of different topics that influence the human body. All Exercise Science students will be required to complete: an introductory course and a closure course. Students will be provided an opportunity to take an internship, through completion of their Engaged Citizenship Common Experience requirements.

Assessment of Student Learning Outcomes

A primary method of assessing learning objectives and outcomes will be accomplished by implementing value-added assessment methods focused on students' growth by assessing their

achievement based on past performance. The Department will evaluate, measure, and record student growth and achievement of learning outcomes using a rubric based on the stated program learning objectives. In the interest of developing a systematic approach toward assessment, each year the Exercise Science program will convene an Exercise Science Assessment Committee (ESAC) to examine student learning in the appropriate entrance and exit courses. The ESAC will consist of the instructor of each core course plus a faculty member from an allied program. This committee will be charged with evaluating student learning in the culminating assignments for each class. The Exercise Science Seminar capstone course will be used to evaluate overall understanding of important scientific concepts.

Program Assessment

All academic programs are required to submit an Assessment Status Report to the Committee on Assessment of Student Learning (CASL) in year three of the program review cycle. The report is reviewed by CASL the following year and the committee provides feedback to the Departments that are to be incorporated into the review documents. The Exercise Science program will be evaluated using the existing program review process at UIS. Currently that process requires that programs are reviewed every eight years but in this case the first review will occur at the end of the third year, as designated by IBHE for new programs or units. Information considered includes: credentials and primary areas of expertise of each unit faculty/staff member as well as a summary of his or her accomplishments and work during the review period; the operation of similar units in other institutions; and data collected on instructional resource metrics for productivity, results of student learning assessment, employer surveys, student feedback, pass rates on capstone and certification exams, retention rates, and 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.

The facilities are adequate to support the program when fully implemented. However, the space will be remodeled to facilitate the type of work required for the program. The Multipurpose Room next to the old gymnasium will be divided into two classrooms and the adjoining locker rooms will be merged into a laboratory for Exercise Science and the forthcoming proposal to implement a new Athletic Training program. The facility remodeling costs will be split between the Exercise Science program and the proposed Athletic Training program.

Current Brookens Library resources in place to serve the Department of Allied Health will also serve the Exercise Science program. Two database subscriptions will be added to support both the proposed Exercise Science program and forthcoming proposal to add an Athletic Training program: the Cumulative Index to Nursing and Allied Health (CINAHL) and SportsDiscus. CINAHL is the definitive comprehensive database and research tool for nursing and allied health professionals. SportsDiscus is a comprehensive bibliographic database that covers key areas of sports medicine and related fields.

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; 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; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which 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 Department of Allied Health has requested funding from the Office of the Provost for two additional tenure-track faculty members for the new Exercise Science program. These two faculty, along with two tenure track faculty members in the forthcoming proposed Athletic Training program, will teach much of the course work, including some of the cross-listed courses between the two programs. Funding for these positions is anticipated from internal sources and ongoing support of the program from student tuition. New funds are not being requested from the state. The faculty will be reviewed under current criteria for promotion, tenure, and retention, and the expectation is that they will be able to meet their teaching, scholarship, and service obligations like all faculty in the university. This is a new program in a field UIS has never had before, so there are no current tenure system faculty members in Exercise Science. Two tenure-track faculty positions will be added in the first year of the program. These positions will complement other full time faculty currently in the Department of Allied Health and other science programs in the College of Liberal Arts and Sciences.

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.

No new state resources will be required to establish this program. The program will be added using the assumption of cost recovery. Reallocation of resources at the campus level, particularly for the faculty and staff positions, and one-time funds for facility upgrades and library resources provide for the costs of the program until enrollment growth covers expenses. Enrollment was estimated conservatively, but the budget model submitted by the University shows positive cost recovery by year two of implementation.

Accreditation and Licensure

1050.30(b)(3) [applicable only to units of instruction]: Appropriate steps have been 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. Reporting Requirement (Board Policy, April 2002): Programs in which state licensure requires specialized accreditation for students to obtain professional licensure, but which have not yet

achieved accreditation, will undergo full review and report to IBHE every three years until accreditation is achieved.

At this time the UIS does not plan to seek specialized accreditation for the proposed Exercise Science program. The Commission on Accreditation of Allied Health Programs does accredit Exercise Science programs; only one program at an Illinois institution (Southern Illinois University Edwardsville) is so accredited. Graduation from an accredited program is not a requirement to obtain any voluntary certification. There is no related licensure in the State of Illinois.

Program Information

1050.30(b)(2) [applicable only to units of instruction]: The information which the institution provides for students and the public accurately describes the unit of instruction, including its objectives, length, residency requirements if any, schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies, student rights and responsibilities, and such other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. Such information shall be available to prospective students prior to enrollment.

Information about the proposed program, including a detailed description of the curriculum, admission requirements, tuition and fees will be published on the University's website. Comparable information about the program will be published in the University's Catalog.

Staff Conclusion. The staff concludes that the Bachelor of Science in Exercise Science proposed by the University of Illinois at 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.

Proposed Program Title in the Region of Authorization: Master of Science in Data Analytics in the Central Region.

Projected Enrollments and Degrees: University of Illinois at Springfield projects enrollment in the Master of Science in Data Analytics will increase from 20 students in the first year to approximately 76 students by the fifth year.

Background

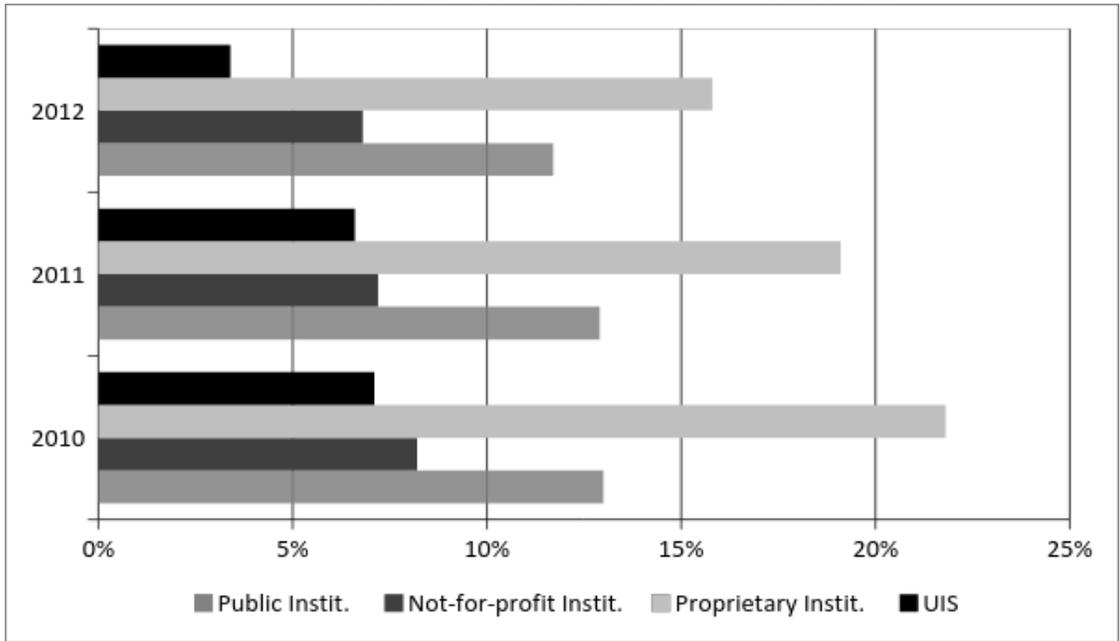
The University of Illinois at Springfield requests authority to offer a Master of Science in Data Analytics (MSDA). The proposed program will be a combined effort of the Department of Mathematical Sciences and the Department of Computer Science at UIS. Both departments contributed in the design of the content and curriculum of the proposed program. The proposed program will be housed within the Department of Mathematical Sciences to provide the essential foundational courses required by the program. Data Analytics courses offered by the Department of Computer Science will be cross-listed with the Department of Mathematical Sciences.

Institutional Data

1050.30(b)(1)(G) provides that success in student progression and graduation, 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 the following factors, based on results for similar institutions: (i) Graduation rates, degree completion rates, retention rates, and pass rates for licensure and certification. (ii) Success rate, which shall be, at a minimum, higher than that 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, U.S. Department of Education

Note: The University of Illinois at Springfield is a public institution.

A lower number is a positive indicator

Student Loan Default Rate

The three-year student loan default rate for the University of Illinois at Springfield was 3.4 percent in 2012, 6.6 percent in 2011 and 7.1 percent in 2010. The three-year cohort student loan default rate is the percentage of a school’s borrowers, both undergraduate and graduate, who enter

repayment on 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. The U.S. Department of Education stated that the Fiscal Year 2012 three-year national cohort default rate was 11.8 percent. The Fiscal Year 2012 three-year national cohort average default rate breakdown by institutional sector is: 11.7 percent for public institutions; 6.8 percent for not-for-profit institutions; and 15.8 percent for for-profit institutions.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens 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 proposed MSDA program will help to address the need to train graduates with strong data analytic skills who will contribute to the growing demand of data analysts in the State and country. The MSDA program will address this need by providing an interdisciplinary curriculum which equips graduates with the mathematical theory as well as the practical skills and knowledge needed to gain competitive advantage in the data analytics job market. There is a growing demand for jobs in data related fields. State and national data show that public and private sectors organizations are increasingly seeking data analysts that can leverage data to improve their productivity, allocate resources, minimize risk, increase transparency, gain new insights, and maintain their competitive advantage. According to Gartner Survey, 73 percent of organizations have invested or plan to invest in big data technologies in the next two years. The senior vice president at Gartner suggest that, “By 2015, 4.4 million IT jobs globally will be created to support big data, generating 1.9 million IT jobs in the United States alone.” As a result, there will be a substantial shortage of people with deep analytical expertise, particularly in the areas of statistics, machine learning, data mining, and big data technologies. In another study by McKinsey & Company (based on data from the U.S. Bureau of Labor Statistics), it is projected that “the demand for deep analytical talent in the United States could be 50 to 60 percent greater than its projected supply by 2018.”

In Illinois, like the rest of the nation, there is also a shortage of professionals with data analytics skills. According to the Illinois Department of Employment Security employment of people with the skills required for data analytics, such as Statisticians, Computer Programmers, and Database Administrators, will grow much faster than average through 2022. The projections for the years 2012-2022 shows a range of 30.55 percent positive employment change for Operations Research Analysts to 11.64 percent positive growth for Database Administrators.

The Illinois Public Agenda for College and Career Success

The proposed MSDA program will address Goals 1, 2, and 3 of *The Illinois Public Agenda*. Goal 1 is to “increase educational attainment to match the best-performing states.” The program will be offered online as well as on-ground, which will make it widely available and help to reduce the geographic barriers in educational attainment especially for individuals in rural areas who are outside reasonable commuting distance from campuses. The proposed program will address Goal 2, which is “college affordability.” UIS will be the first public institution to offer a specific data analytical program. The University provides affordable education compared to other private institutions in the State. In comparison to DePaul University, Northwestern University, and Illinois

Institute of Technology, other institutions that offer similar programs, UIS has the lowest tuition rate at \$11,367. An average of \$8,373 of financial assistance funds was offered to 69.4 percent of the students enrolled at the University for the 2013-2014 school term, placing UIS among the most affordable educational institutions within the group. Financial aid for graduate students is available in the form of Graduate Assistantships and Graduate Public Service Internships (GPSI).

The proposed program will also address Goal 3, “increase the number of high-quality postsecondary credentials to meet the demands of the economy and an increasingly global society.” The program was designed to prepare students to gain analytical skills for employment in different organizations including in government, retail, IT and security firms to communications and media, finance, healthcare, manufacturing organizations. The interdisciplinary nature of the field will provide students with the analytical thinking skills and creative abilities required in today’s workforce. Graduates will have training in the statistical methods, machine-learning algorithms, and a variety of sources to store and access data.

Comparable Programs in Illinois

There are three universities in the State of Illinois that offer programs similar to the proposed MSDA: DePaul University, Northwestern University, and Illinois Institute of Technology. All of these programs are offered by private institutions and are located in the Chicago Metropolitan area. Because of their geographic location within the State, there is a relatively low opportunity for competition with the on-ground program being proposed by UIS.

Currently, no public university in the state offer a graduate level program specifically in data analytics. In fall 2015, University of Illinois at Chicago initiated a Master of Science in Business Analytics. The University of Illinois at Urbana-Champaign offers a Master of Computer Science in Data Science, a Master of Science in Statistics, and a Master of Science in Information Management. Many of the programs at both the private and public universities are offered online. The MSDA courses will be offered online, on-ground, and in blended formats, allowing the program to serve a more diverse group of students.

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 MSDA degree is consistent with the purpose, goals, objectives, and mission of the institution. The requested degree title reflects the objectives and curriculum for the program.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content to the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

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

All applicants to the MSDA program must have completed a program of study equivalent to a baccalaureate of Computer Science or Mathematics with a minimum undergraduate grade-point average of 3.0 on a 4.0 scale. Applicants must have completed all prerequisite courses with a grade of B or better and must submit a personal and academic statement to demonstrate evidence of their ability to perform at a high academic level.

Curriculum

The proposed MSDA program will require 36 credit hours, including 28 credit hours of core courses and eight credit hours of elective courses. The curriculum was designed to provide conceptual and theoretical foundations as well as practical skills in data science and in the computational methods and tools for preprocessing, interpreting, analyzing, representing, and visualizing of data sets. The program will be offered in both online and on-ground formats. Students will begin the program by learning the foundation of statistics, including probability distributions, statistical inference, hypothesis testing, estimators, and multivariate distributions. The statistical concepts will be practiced using statistical analysis tools. Students will also get exposure to databases and data mining. The program culminates in a capstone course that enables students to integrate and apply what they have learned to a capstone project with large real-world data. The capstone project also provides students with the opportunity to delve in greater depth in one or more of the topics covered in the program.

The program will be a combined effort of the Department of Mathematical Sciences and the Department of Computer Science at UIS. It will offer a unique interdisciplinary curriculum with interdisciplinary learning goals. On one hand, it will cover the mathematical foundations needed to gather and understand the fundamental principles behind the data and the properties of datasets and, on the other hand, it will teach students the tools and techniques to clean and process datasets, find patterns, and turn data into useful insights for organizational decisions.

Assessment of Student Learning Outcomes

The University will utilize different assessment instruments to measure learning objectives in the MSDA program including, course assessment, exit tests, capstone course and project, and the graduation survey. Course assessment will be conducted by linking program objectives to specific course objectives and assessing them using predefined course-embedded assessment tools, such as exams, research papers, programming projects, presentations, and assignments. The exit test will include several randomized questions on each of the core courses. The results of the exit test will be used to evaluate the effectiveness of the program as a whole as well as the effectiveness of specific courses. The exit test will also be used to provide feedback and to make improvements at the course and program level.

Program Assessment

The University has a well-established practice of program assessment. The assessment of the MSDA program will be consistent with campus wide standard program assessment practice. The program will be assessed on a course and program level. Data for the course level assessment will be obtained through course and capstone course assessments. The program level assessment data will be from exit test and graduation survey. The program will have an Assessment Liaison who will serve as the point person for the program assessment activities and will be responsible for ensuring the proper organization, operation, and reporting of assessment activities. The Assessment Liaison will collect, aggregate, and evaluate assessment data. An annual assessment report will be presented to the program chair and program head and the assessment/curriculum committees of the Department of Computer Science and the Department of Mathematical Sciences for identifying areas for improvement. The results of the assessment will be used to determine what types of interventions may be needed and to track the results on a longitudinal basis to determine the impact of interventions.

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.

The facilities at the University are sufficient to support the MSDA program. The program will be housed within the Department of Mathematical Sciences to provide the essential foundational courses required by the program. The current resources and support structure of the two departments and the college will be sufficient to support the start-up of the new program. The University has sufficient library resources and instructional technology to support the program including online learning and research tools, online tutorials, technology support, and smart classrooms. The Department of Mathematical Sciences has sufficient faculty, classroom space, and administrative capacity.

The Norris L Brookens Library supports teaching, learning, and community at the University of Illinois Springfield, with a collection of more than 747,000 total volumes; 205,000 e-books; 21,000 films, and 164 databases containing articles from nearly 60,000 journals and other materials. The library subscribes to more than 200 journals in the area of Computer and Information Science, including many of the top journals in the area of data analytics. These journals include such titles as Computing and Visualization in Science, Information Visualization, Big Data Research, Big Data and Society, and The Journal of Biomedical Informatics.

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; 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; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which 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 established institutional policies that ensure faculty hired possess the training, credentials, and other related qualifications in order 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.

No new state resources will be requested to establish the proposed program. The University has adequate faculty, staff, facilities, library resources, and instructional technology to implement the program. Faculty from the Department of Computer Science and the Department of Mathematical Sciences will provide instruction in the MSDA program.

Accreditation and Licensure

1050.30(b)(3) [applicable only to units of instruction]: Appropriate steps have been 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. Reporting Requirement (Board Policy, April 2002) Programs in which state licensure requires specialized accreditation for students to obtain professional licensure, but which have not yet achieved accreditation, will undergo full review and report to IBHE every three years until accreditation is achieved.

There are no additional accreditation or licensure requirements for the proposed program.

Program Information

1050.30(b)(2) [applicable only to units of instruction]: The information which the institution provides for students and the public accurately describes the unit of instruction, including its objectives, length, residency requirements if any, schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies, student rights and responsibilities, and such other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. Such information shall be available to prospective students prior to enrollment.

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 Data Analytics proposed by the University of Illinois at 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 at Urbana-Champaign

Proposed Program Title in the Region of Authorization: Bachelor of Arts in Liberal Arts and Sciences in Asian American Studies in the Prairie Region.

Projected Enrollments and Degrees: The University of Illinois at Urbana-Champaign projects the program will increase from approximately four students in the first year to 15 students in the fifth year. The University projects 20 degrees will be awarded in the fifth year.

Background

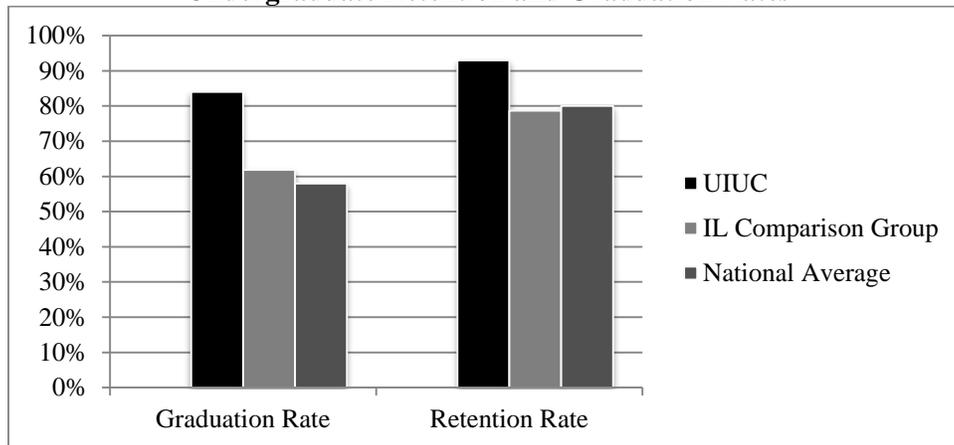
The University of Illinois at Urbana-Champaign (the University) requests authority to offer a Bachelor of Arts (BA) in Liberal Arts and Sciences in Asian American Studies in the Prairie region. The proposed program is a 120 credit hour, interdisciplinary degree that explores Asian Americans across disciplines and cultures. The major requires a minimum of 33 hours, with 12 of those being at the advanced level selected from an approved course list. The program will provide both a broad and a deep approach to theory, research, and multidisciplinary study. The major will prepare students with the research skills that may lead to graduate study in the humanities or social sciences, or career fields including health and medicine, education, law, business, social work, digital and media industries, policy advocacy, politics, academic administration, and other fields that address Asian American issues. The program will be administered by the Department of Asian American Studies.

Institutional Data

1050.30(b)(1)(G): provides that success in student progression and graduation, 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 the following factors, based on results for similar institutions: (i) Graduation rates, degree completion rates, retention rates, and pass rates for licensure and certification. (ii) Success rate, which 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 Retention and Graduation Rates



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

Undergraduate Graduation Rate

The University's 2012-2013 graduation rate was 84 percent. The national 2012-2013 average graduation rate for public four-year institutions was 58 percent and the average among comparable Illinois institutions was 61.9 percent. 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).

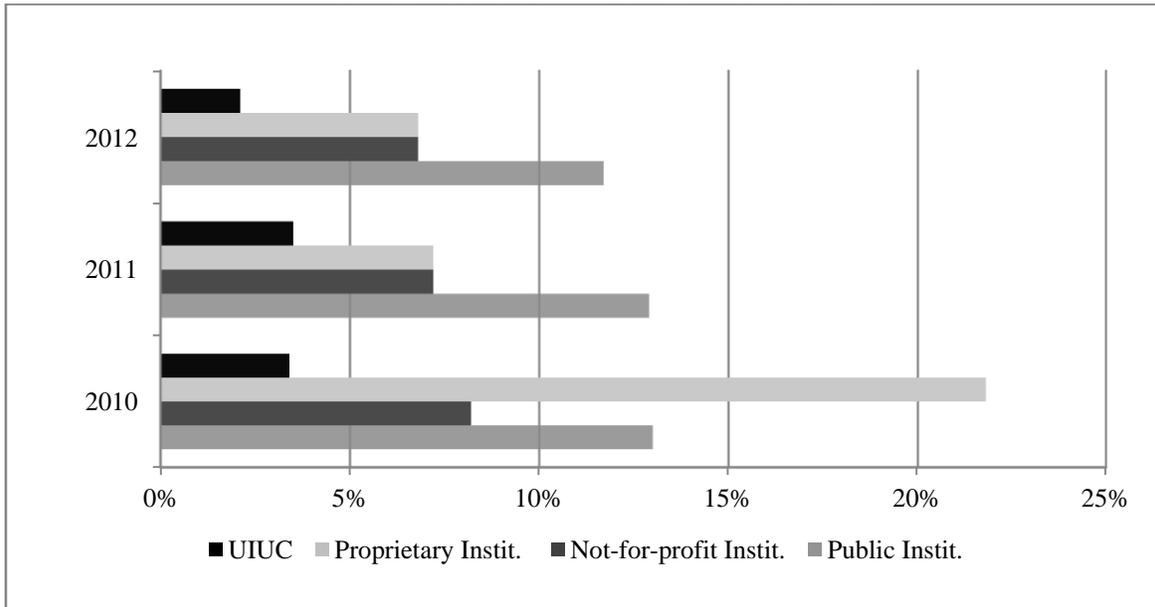
Undergraduate Retention Rate

The University's 2012-2013 retention rate was 93 percent. The national average retention rate for public four-year institutions in 2012 was 80 percent and the average for comparable Illinois institutions was 78.7 percent. 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

The University's 2012-2013 completions per 100 full-time equivalent (FTE) rate was N/A. The average among comparable Illinois institutions was 24.6. The 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 at 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 overloads of credit hours (over 12, up to 18 credit hours), and the standard calculation does not account for these factors.

Three Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics, U.S. Department of Education

Note: The University of Illinois at Urbana-Champaign is a public institution.

A lower number is a positive indicator.

The three-year student loan default rate for the University of Illinois at Urbana-Champaign was 2.1 percent in 2012, 3.5 percent in 2011 and 3.4 percent in 2010. The three-year cohort student loan default rate is the percentage of a school's borrowers, both undergraduate and graduate, who enter repayment on 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. The U.S. Department of Education stated that the Fiscal Year 2012 three-year national cohort default rate was 11.8 percent. The Fiscal Year 2012 three-year national cohort average default rate breakdown by institutional sector is: 11.7 percent for public institutions; 6.8 percent for not-for-profit institutions; and 15.8 percent for for-profit institutions.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens 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 BA in Liberal Arts and Sciences in Asian American Studies addresses both demographic interest and student career preparation and fills a vital curricular need. In 2014, Asian Americans made up 5.4 percent of the population in Illinois and 16 percent of the total undergraduate student body at the University of Illinois at Urbana-Champaign. Asian Americans are one of the fastest growing racial populations in the nation and in Illinois. As a stand-alone degree or doubled with another major, this degree will be important in training students to have an understanding of diversity in all its aspects: racial, social, cultural, gender, sexuality, religion, and nationality. A recent Forbes Insights report surveyed 321 companies with more than \$500 million in revenue about the importance of recruiting, developing, and retaining a diverse workforce, and

found that managing for diversity is critical to driving innovation in the workplace. Students will be equipped with greater social and cultural knowledge of diversity and difference and its applications to a variety of career choices.

In addition, a major in Asian American Studies will also advance the campus' mission for excellence in undergraduate education by offering an interdisciplinary training in liberal arts while enhancing the University of Illinois' commitment to diversity. The Illinois Diversity Council articulated the importance of diversity by stating: "We believe that diversity and inclusion is not just smart business, it's a vital and positive aspect to every area of life." The Council noted that workforce trends for racial minority are projected to surpass 30 percent of the total workforce by 2020. The comprehensive interdisciplinary training of humanities and social sciences provided by the BA in Liberal Arts and Sciences in Asian American Studies, along with its emphasis on diversity training will well equip students to meet the needs and opportunities within the increasingly diverse workforce.

The Illinois Public Agenda for College and Career Success

The University indicates that the proposed program will support goal 3 of *The Illinois Public Agenda for College and Career Success*. Goal 3 is *to increase the number of high-quality post-secondary credentials to meet the demands of the economy and an increasingly global society*. Asian Americans are the fastest-growing racial population in the nation. According to the U.S. Census Bureau, the number of Asian Americans is expected to increase 74 percent, from 20.5 million in 2015 to 35.7 million in 2040. Further, the U.S. Census Bureau projects that in 2044, the U.S. will become a majority-minority nation, meaning that more than half of all Americans will belong to a minority group. Similar projections are expected in Illinois. In Illinois, Asians and Asian Americans made up 5.3 percent of the population in 2014. With nationally and internationally renowned scholars in the field of Asian American Studies as faculty, the proposed program will provide the diversity training and education necessary for educating the workforce on the growing Asian American population.

Comparable Programs in Illinois

According to the degree inventory, only four private institutions offer similar programs: Augustana College, Knox College, Lake Forest College, and Northwestern University. No public university in the state of Illinois offers a stand-alone bachelor's degree with a major in Asian American Studies.

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 BA in Liberal Arts and Sciences in Asian American Studies supports the University of Illinois at Urbana-Champaign's mission and focus. The proposed program is consistent with the purpose, goals, objectives, and mission of the institution. The requested degree title reflects the degree's program objectives and curriculum.

Curriculum/Assessment

1050.30(b)(1): 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 program 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; E) Degree programs must meet [appropriate] requirements.

Admission Requirements

Applicants to the proposed program must submit the application and fee, official high school transcripts, and ACT/SAT scores to the Office of Undergraduate Admissions. Admissions is selective and based on coursework, academic performance, class rank, ACT/SAT scores, application essay, extracurricular activities, volunteer and work experience, and awards and honors. In fall 2015, the middle 50 percent of students admitted to the College of Liberal Arts and Sciences had ACT scores in the 27-32 range and a high school rank of 85-97 percent.

Curriculum

The Bachelor of Arts in Liberal Arts and Sciences in Asian American Studies requires a minimum of 33 credit hours for the interdisciplinary major and a total of 120 credit hours. The proposed program will explore Asian Americans across disciplines and cultures and provides a comprehensive approach to theory, research, and multidisciplinary study. Students will complete a minimum of 33 hours, with 12 of those being at the advanced level, selected from an approved course list. The core program courses include Introduction to Asian American Studies; U.S. Race and Empire; U.S. Citizenship; and Theories of Race, Gender, and Sexuality.

Assessment of Student Learning

The University has a standard process for assessing student learning outcomes in all its degree programs. The institution's approach incorporates direct and indirect measures administered periodically throughout the academic program. Direct assessment measures include quizzes, exercises, exams, portfolio, projects, and exhibit assessments, which will be measured against the learning objectives for each course. Indirect assessments include: formal student evaluations of faculty and courses; retention, graduation, and time-to-completion rates; syllabi audits; and employer and alumni surveys.

Program Assessment

The University has a clearly articulated assessment plan to determine the overall effectiveness of its programs and the degree to which students' needs are being met. For the BA in Liberal Arts and Sciences in Asian American Studies, the Department will undergo a pre-evaluation of the major as well as a program review which includes a self-study, annual report, and

external review. The key elements include curriculum, teaching, research, public services, and demographics. The University will follow these existing protocols for continuous improvement.

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 or public service, are conveniently available and accessible and can be maintained.

Facilities at the University are sufficient for implementing the proposed BA in Liberal Arts and Sciences in Asian American Studies. Classroom space, computer resources, and library services are sufficient for the program's needs. The University's Library has a collection of materials and resources central to the field of Asian American Studies. Students and faculty have full access to books and other materials shelved on the open stacks, and both on-site and remote access to the library's collection of electronic databases, books, and journals. The University Library has professional staff members with graduate degrees in Library and Information Science.

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.

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

Fiscal and Personnel Resources

Criterion 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 upon supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources are required to establish the proposed program. The University has adequate faculty, staff, and other instructional resources to administer the Bachelor of Arts in Liberal Arts and Sciences in Asian American Studies.

Accreditation/Licensure

The proposed program does not require specialized accreditation or licensure.

Program Information

1050.30(b)(2)(A): The information the institution provides for students and the public...(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 Asian American Studies proposed by the University of Illinois at 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 Center Title in the Region of Authorization: University of Illinois Deloitte Foundation Center for Business Analytics in the Prairie Region

Projected Enrollments and Degrees: This proposal is for the approval of a new center focused on business analytics at the University of Illinois at Urbana-Champaign. The University of Illinois Deloitte Foundation Center for Business Analytics will further the campus' mission to provide transformative learning experiences that will make a significant and visible societal impact through the provision of better-educated professionals in the field of business analytics.

Background

University of Illinois at Urbana-Champaign requests approval to establish the University of Illinois Deloitte Foundation Center for Business Analytics (Deloitte Foundation Center or the Center) in the Prairie region. The Center is made possible through the establishment of a \$6.5 million endowment over five years from Deloitte, LLP. The Deloitte Foundation Center will lead the academy in the creation and maintenance of detailed model curricula and educational resources for data analytics education in business and accountancy. The Center will act as a conduit, providing the academy with new information on the evolving role of analytics in business and the profession, along with regular updates to the model curricula as the professional service industry evolves. Additionally, the Center will collaborate with faculty at University of Illinois at Urbana-Champaign and other institutions to develop and sponsor the development of curricular materials (e.g., cases, projects, etc.) on analytics that can be used in accountancy and business education throughout the United States and in other countries.

Institutional Data

1050.30(b)(1)(G): provides that success in student progression and graduation, 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 the following factors, based on results for similar institutions: (i) Graduation rates, degree completion rates, retention rates, and pass rates for licensure and certification. (ii) Success rate, which 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.

No data are provided because they are not applicable to the establishment of this new unit.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens 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 University is creating the Deloitte Foundation Center for Business Analytics due to the growing recognition that all business students need more knowledge of data analytic tools and appreciation of how data from a wide range of sources can be used to create value in organizations. Recently, the American Association for Collegiate Schools of Business adopted a new standard for the accreditation of accounting programs, requiring coverage of data analytics in the accounting curriculum. While the demand for data scientists has led to a proliferation of newly specialized master's-level programs in data analytics, these programs are not accessible to the undergraduate business student population. The Deloitte Foundation Center will address this gap in business education by creating an infrastructure at the national level for data analytics education in undergraduate business. The University of Illinois Deloitte Foundation Center for Business Analytics will lead the academy in the creation and maintenance of detailed model curricula and educational resources for data analytics education in business and accountancy. These model curricula will serve as an important guidepost for academic business programs (including the University's own program) in response to the need for analytics education. The University of Illinois is well-positioned to become one of the leading centers because of its national ranking as a college of business and ability to draw upon the unparalleled expertise of the campus in data sciences, particularly in its College of Engineering and its Graduate School of Library and Information Sciences.

The Illinois Public Agenda for College and Career Success

The University indicates the proposed Center supports Goal 3 of *The Illinois Public Agenda for College and Career Success*. Goal 3 is to *increase the number of high-quality post-secondary credentials to meet the demands of the economy and an increasingly global society*. The mission of the Center is to address the shortage of working financial professionals with adequate knowledge of data science by developing and disseminating new curricula and educational resources to address the rapidly changing needs of the accounting and business advisory professions, in the area of data analytics. Through the enhancement of curricula across the country, undergraduate business students will become better equipped and prepared to meet the well-established need for data science professionals. In addition, the Center will serve as a focus point for practicing professionals with skills in data science and analytics to share their knowledge and abilities among faculty. The Center's work will educate professionals who will then be better prepared to help the corporate sector leverage the value of new information assets and compete more effectively in the economy.

Comparable Institutes and Centers in Illinois

No comparable centers located at public universities exist in Illinois.

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 Center will support the priorities of the University and the State. The Center will contribute to two of the goals identified in the University of Illinois at Urbana-Champaign's strategic plan. First, the Center will design transformative learning experiences around analytics that will be implemented by universities throughout the United States and abroad. Second, by facilitating the introduction of analytics education in accounting and business curricula, the Center will make a significant and visible societal impact through the provision of better-educated professional service professionals. The University is well positioned to be a leader in business analytics as the campus is home to a nationally-ranked College of Business.

Assessment of Outcomes

Performance metrics related to the mission and current strategic priorities of the Center will be reviewed at least annually by the Board of Advisors. The Board will make recommendations to the Director and Accountancy Department Head regarding process changes, adequacy of resources, or other issues to be addressed to ensure that the products developed by the Center (curricula, education resources, and faculty training) are of the highest quality and to ensure that the objectives of the Center are being met.

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 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.

The Center will be housed within the existing College of Business.

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.

The Center will be led by a director and an academic professional. The director will be a faculty member whose primary service role will be related to the Center, with standard teaching and research expectations, as well as to the Board of Advisors. The Board of Advisors will be comprised of two Accountancy faculty, two representatives from Deloitte, and two at-large representatives drawn from units on campus and/or from accountancy or business advisory practice. Faculty and at-large board members will be selected by the head of the Department of Accountancy in consultation with the Center Director. Tenure-stream faculty will not hold an appointment in the Center. Deloitte board members will be selected by Deloitte or its designee. Each board member will serve for a renewable two-year term. The head of Accountancy will have full

budgetary control of the Center and will report to the College of Business Dean who reports to the Provost at the University of Illinois at Urbana-Champaign.

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 upon supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

Funding, staffing, space, and equipment for the University of Illinois Deloitte Foundation Center for Business Analytics will come from the University's endowment income. No new state or University funds are requested in this proposal.

Accreditation and Licensure

1050.30(b)(3): 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.

1050.50(a)(1): Three years after approval of a new program, the institution shall provide a program progress report to the Board as part of the institution's annual report. The third year progress report shall describe the institution's performance in meeting program objectives and show where any improvements are necessary. The placement of a program in voluntary temporary suspension will not negate the requirement of submitting a third year progress report.

1050.50(a)(2)(C): Additional Requirement for Programs in which State Licensure is Required for Employment in the Field: In the case of a program in which State licensure is required for employment in the field, a program can be found to be in good standing if the institution is able to provide evidence that program graduates are eligible to take the appropriate licensure examination and pass rates are maintained as specified in the objectives of the unit of instruction. If there is no such evidence, the institution shall report the program as flagged for review.

No specialized accreditation is required.

Program Information

1050.30(b)(2)(A): The information the institution provides for students and the public, (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.

Information about the University of Illinois Deloitte Foundation Center for Business Analytics will be available on the University's website.

Staff Conclusion

The staff concludes that the University of Illinois Deloitte Foundation Center for Business Analytics proposed by the University of Illinois at Urbana-Champaign meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment and accreditation for licensure.

