SCHOOL OF COMPUTER SCIENCE AND MATHEMATICS Promotion and Tenure Guidelines

Revisions Accepted by the Dean on February 5, 2018

The School of Computer Science and Mathematics (hereafter the School) has a broad spectrum of academic programs. The academic programs within the school are: Actuarial Science and Statistics, Computer Science, Cybersecurity, Mathematics and Mathematics Education. Each program is hereafter referred to as a program. Computer Science and Cybersecurity are considered as closely related programs (hereafter referred to as computing programs). Actuarial Science and Statistics, Mathematics, and Mathematics Education are considered as closely related programs (hereafter referred to as mathematical programs).

While the criteria for promotion and tenure listed in the University's Faculty Guide and the College of Health, Science, and Technology (hereafter the College) Guidelines for Promotion and Tenure are thorough and should be used as the primary basis for preparing a dossier and for evaluation of a candidate's credentials, some of the items are general in nature and may need additional interpretation relative to the school and programs.

The following school promotion and tenure guidelines serve as additional guidance for school faculty, school Promotion and Tenure Committee, and the School Chair in the evaluation of the three areas considered in the promotion and tenure process:

- 1. Excellence in Teaching
- 2. Scholarship/Creative Activity
- 3. Service

The requirements listed below are to be considered minimums only. Meeting these minimum criteria will not mean that a candidate will receive automatic recommendation for promotion and tenure. In addition, it is recognized within the school that promotion and tenure decisions are not only quantitative but also qualitative in nature. The candidate should bear the primary burden to assemble required materials and evidences in the dossier to meet School, College and University requirements.

This document will be reviewed by the school's Promotion and Tenure Committee each fall. Revisions recommended by the committee will be presented to the school for approval except contents contained in Sections 4.2.2 and 4.2.3 which will only be approved by the affected faculty. The school promotion and tenure committee will hold one workshop each spring to help candidate to prepare dossier.

1. School Promotion and Tenure Committee

Membership on the school's Promotion and Tenure Committee is restricted to tenured full professors of the school. A candidate for promotion or tenure, and any family members, may not serve in the year of the candidate's application. Faculty serving on the Committee will identify any conflict of interest in accordance with Board of Governors Policy 2.1.050 and exclude themselves from any and all promotion and tenure deliberations and actions related to the conflict of interest. The committee will consist of regular and additional committee members as described below.

1.1 Regular Committee Members and Selection

1.1.1 Five regular members are elected to represent the five programs in the school.

- **1.1.2** Members of the Committee will be selected from the following programs in even numbered academic years: Computer Science and Cybersecurity.
- **1.1.3** Members of the Committee will be selected from the following programs in odd numbered academic years: Actuarial Science & Statistics, Mathematics, and Mathematics Education.
- **1.1.4** Elections are held at the school's first faculty meeting in August. All eligible faculty members from each program are included on the ballot. Should there not be at least one tenured full professor in a program, then the pool of committee candidates in that program will be increased to include tenured associate professors from the same program in the school.
- **1.1.5** Should there not be any tenured/eligible faculty in a program, then the pool of candidates in that program will be increased to include all tenured full professors from the closely related programs in the school.
- **1.1.6** Regular committee members are selected by all tenure track faculty in the school.

1.2 Additional Committee Members and Selection

Additional committee members are selected as needed. They do not participate in the annual review of school promotion and tenure guidelines.

1.2.1 Additional Members for Computing Programs

- **1.2.1.1** Two additional committee members should be selected if a faculty member from computing programs is up for promotion and tenure.
- **1.2.1.2** Elections are held after the regular committee members are selected. All available tenured full professors from the computing programs are included on the ballot.
- **1.2.1.3** Additional committee members are selected by all tenure track faculty in the computing programs.
- **1.2.1.4** Additional committee members will only evaluate dossiers and vote on promotion and/or tenure decisions on candidates from computing programs.

1.2.2 Additional Members for Mathematical Programs

- **1.2.2.1** Two additional committee members should be selected if a faculty member from mathematical programs is up for promotion and tenure.
- **1.2.2.2** Elections are held after the regular committee members are selected. All available tenured full professors from the mathematical programs are included on the ballot.
- **1.2.2.3** Additional committee members are selected by all tenure track faculty in the mathematical programs.

1.2.2.4 Additional committee members will only evaluated dossiers and vote on promotion and/or tenure decisions on candidates from mathematical programs.

1.3 Committee Terms

Each regular member will serve a two-year term and no more than two consecutive terms. Each additional member will serve a one-year term.

2. Role and Responsibilities of the Committee Chair

- **2.1** The Committee Chair is selected by all regular members on the committee and must be a regular member.
- **2.2** The Committee Chair will convene and conduct the Committee meetings to act upon Candidate Dossiers.
- **2.3** The Committee Chair will ensure that the Committee consistently applies the School, College and University Guidelines to all dossiers submitted for the Committee's review and evaluation.
- **2.4** The Committee Chair will forward the Committee's written recommendation on each candidate to the School Chair and to the candidate. The Committee Chair will sign the letter of recommendation.
- **2.5** The Committee Chair will conduct an annual workshop in the Spring.
- **2.6** The Committee Chair serves as the School representative on the College Promotion and Tenure Committee.

3. Role and Responsibilities of the School Chair in the Promotion and Tenure Process

- **3.1** The School Chair is responsible for assuring that the School has Promotion and Tenure Guidelines that are consistent with the College and University Guidelines. The School Chair is responsible for ensuring School Promotion and Tenure Guidelines, including discipline specific guidelines, are approved by the Dean of the College of Health, Science and Technology.
 - **3.1.1** The School Chair serves as a non-voting member of the School Promotion and Tenure Committee.
 - **3.1.2** The School Chair is responsible, in the Promotion and Tenure process, to conduct an independent evaluation of each candidate for tenure with reference to the projected needs of the Program, School, and College.

4. School Guidelines for Promotion and Tenure

4.1 Excellence in Teaching

The substantiation of "excellence in teaching" is a responsibility that lies exclusively within the school. If a candidate is to receive a favorable recommendation for promotion and/or tenure, the school Promotion and Tenure Committee must be convinced that the candidate does demonstrate "excellence" in the performance of his/her teaching responsibilities.

For demonstration of excellence of teaching, the candidate must follow all requirements in the College of Health, Science and Technology Guidelines for Promotion and Tenure section 3.2 Teaching, section 4.1.2 for promotion from Instructor to Assistant Professor, section 4.2.2 for promotion from Assistant Professor to Associate Professor, section 4.3.2 for promotion from Associate Professor to Professor. In particular, he/she is urged to see that the committee has supportive evidence which may include letters from professional colleagues and/or students and must include the items listed below. This document serves to clarify only those portions of the requirements that are left to the School and discipline.

4.1.1 Student Course and Teaching Evaluation Data

- **4.1.1.1** Student course and teaching evaluations should be included for each class taught by the candidate, each semester, for the four years immediately preceding submission of the dossier or for each year since their initial appointment if the appointment was less than 4 years prior. Candidate should include all available data (individual questions and statistical responses, graphic summaries of comparison, and individual written comments) from courses. Any missing data should be explained.
- **4.1.1.2** The candidate should provide a summary of statistical data from teaching evaluations. This summary must include all data from each class taught by the candidate, each semester, for the four years immediately preceding submission of the dossier, or for each year since their initial appointment, if the appointment was less than four years prior. The candidate may summarize the data in any of several ways: summarize by course, summarize by upper level/lower level, summarize by undergraduate level/graduate level, summarize by semester, or summarize by year.
 - **4.1.1.2.1** Computer Science and/or Cybersecurity candidate should provide a summary of statistical data from teaching evaluations by undergraduate level/graduate level.

4.1.2 Department Chair Evaluations of Teaching

For each candidate for promotion or tenure, the School chair will provide a summary evaluation of the candidate's teaching. This summary should be based on peer evaluations, student evaluations, new faculty evaluations, professional development plans and/or observations of the candidate. Candidate is required to provide school chair the teaching portion of the dossier at least two weeks before the official university dossier submission deadline.

4.1.3 Peer Evaluations of Teaching

Annually the Program Coordinators/School Chair will assign a department peer evaluator for each tenured or tenure-track faculty member below the rank of Professor. Their duties and responsibilities will be set forth in the College of Health, Science, and Technology Guidelines for Promotion and Tenure section 3.2.3. Peer evaluators will use the form developed and approved by the School of Computer Science and Mathematics and may include additional comments or observations. One copy of the completed form and additional comments will be submitted to the candidate and one copy will be submitted to the School Chair.

4.1.4 Statements of Self-Assessment

Refer to the college guidelines section 3.2.3

4.1.5 Optional Documentation of Student Learning

In addition to the examples list in college guidelines section 3.2.3, other appropriate School examples may include: student success in subsequent courses; student results on School final exams which compare mean scores of students in candidate's sections with mean scores in all sections; success rate on Actuarial Exams; student success in state, regional and national competitions, etc.

4.2 Scholarship/Creative Activity

Scholarship/Creative Activity includes discipline-related inquiry and/or creative activities that contribute new knowledge to the field and/or communicate important ideas to an appropriate audience.

For demonstration of scholarship and creative activity, the candidate must follow all requirements in the College of Health, Science and Technology Guidelines for Promotion and Tenure section 3.3 Scholarly/Creative Activity, section 4.1.3 for promotion from Instructor to Assistant Professor, section 4.2.3 for promotion from Assistant Professor to Associate Professor, section 4.3.3 for promotion from Associate Professor to Professor. All publications used for promotion and tenure purpose must be peer reviewed (hereafter referred to as refereed) and publicly disseminated either through subscription or open access. This document serves to clarify only those portions of the requirements that are left to the School and Discipline.

4.2.1 General Requirements on Scholarship/Creative Activity in the School 4.2.1.1 Refereed Scholarly Publications

Refereed scholarly publications may include:

- a refereed journal article
- a refereed book or monograph
- chapter* in an edited, refereed book

At least one of the two required refereed publications specified in college guidelines sections 4.2.3.1 and 4.3.3.1 must be a journal article based upon activities conducted since initial appointment or the last promotion at Central, whichever is more recent.

4.2.1.2 Reputable Journals

Only reputable journals can be used for promotion and tenure purpose. While each program may choose to specify discipline related criteria on reputable journals, the following general criteria must be satisfied

- Journal clearly outlines its peer review policy and has a rigorous peer review process
- Journal is indexed by at least one of the major indexing and abstracting databases
- Journal publishes regular issues

4.2.1.3 Grant

^{*} Multiple chapters in a single refereed book are only considered as one refereed publication.

Principle investigator (PI) is required in college guidelines sections 4.1.3.2.d, 4.2.3.2.d and 4.3.3.2.d. Co-PI for two externally funded grants can be substituted as one PI.

4.2.1.4 Double-Counting Phenomenon

A conference proceeding article is subsequently included in another publication such as a book chapter and/or journal, etc. without new materials can only be used in the one category or the other; not both. Editorial changes are not considered as new materials. Candidate should include with a description of the additional work completed to demonstrate what are the new materials in the later publication.

Presentation at conference, workshop, symposium or meeting and the manuscript published in the proceedings can only be used in the one category or the other; not both for college guidelines sections 4.1.3.2.b/4.1.3.2.c, 4.2.3.2.b/4.2.3.2.c and 4.3.3.2.b/4.3.3.2.c

4.2.2 Scholarship/Creative Activity Guidelines for Computer Science and Cybersecurity 4.2.2.1 Research Publications

The two required refereed scholarly publications specified in college guidelines sections 4.2.3.1 and 4.3.3.1 must be <u>research</u> publications from the following

- a research oriented book or a chapter in a research oriented book published by an academic or commercial publisher.
- an article that appears in a refereed journal
- an article in a refereed conference proceedings. The conference must be a
 major one in the discipline and its proceeding is equivalent to journal quality.
 Conference proceedings which do not meet the above requirement can only be
 used to fulfill Additional Scholarly/Creative Activities specified in college
 guidelines sections 4.2.3.2.c and 4.3.3.2.c
- any of the above item that is in press or accepted for publication

4.2.2.2 Reputable Journals

Reputable journals shall be defined as journals appearing in one or more of the following databases: Science Citation Index (SCI), SCI Expanded, Ei Compendex and DBLP.

4.2.2.3 Substantial Contributions to the Discipline for Promotion to Professor

Candidate is expected to assume increasing leadership roles in authorship of scholarly products to include sole or lead authorship among multiple authors. One of the followings must be satisfied based upon activities conducted since initial appointment or the last promotion at Central, whichever is more recent to meet the substantial contributions to the discipline requirement in college guidelines section 4.3.3.1

- an article in a high Impact Factor journal
- an article in a top ranked conference proceedings in the discipline which is equivalent to high impact factor journal quality
- PI for an external grant with total expenditures of \$100,000 or higher
- Three refereed scholarly publications*

*At least two of the three refereed scholarly publications must be journal articles.

High Impact Factor Journal

Journals published by ACM or IEEE or similar level

Top Ranked Conference Proceedings

CVPR, INFOCOM, SIGCOMM or similar level conferences

4.2.3. Scholarship/Creative Activity Guidelines for Actuarial Science, Mathematics, Mathematics Education and Statistics

4.2.3.1 Refereed Publications

- Reputable journals shall be defined as journals appearing in one or more of the following databases: AMS Reviews, Current Index to Statistics,
 MathEducDatabase, MathSciNet, Zentralblatt, or the list of actuarial journals in the library of the University of Iowa:
 http://guides.lib.uiowa.edu/actuarial/journals
- One refereed published text book in the candidate's discipline area may account for at most one of a candidate's required refereed publications.

4.2.3.2 Substantial Contributions to the Discipline for Promotion to Professor

In addition to two refereed scholarly publications (Section 4.3.3.1 of the College Guidelines), to meet the substantial contribution to the discipline requirement in College Guidelines section 4.3.3.1, the candidate must provide evidence of the following since initial appointment or the last promotion at Central, whichever is more recent.

- At least one refereed talk and
- At least one of the following:
 - o One refereed scholarly publication.
 - o PI for an external grant with total expenditures of \$100,000 or more.

4.3 Service

Faculty member are expected to provide constructive services at the school, college, and university levels. Service contributions to the profession and/or the academic community are also valued and required.

For demonstration of service activity, the candidate must follow all requirements in the College of Health, Science and Technology Guidelines for Promotion and Tenure section 3.4 Service, section 4.1.4 for promotion from Instructor to Assistant Professor, section 4.2.4 for promotion from Assistant Professor to Associate Professor, section 4.3.4 for promotion from Associate Professor to Professor. **This document serves to clarify only those portions of the requirements that are left to the School and discipline.**

4.3.1 Required School Service

A faculty member, at all times, should be actively involved in school service. The following areas of service are required:

- Counseling and advising students
- Student recruitment and retention
- Chairing and/or serving on school committees
- Regular attendance at school meetings, discipline group meetings and school events

4.3.2 Other Examples of School Service Areas

- Dual credit visits
- Presenting informational seminars (e.g. software demonstration)
- Coaching, judging math/computer science competition teams
- Serving as sponsor of program related student organizations (ACM, CMME, KME, MAA, TAO and UPE, etc.)
- Regular attendance at department student organization's meetings
- Organizing, coordinating professional meetings, conferences, competitions
- Serving as program coordinator, graduate coordinator, assistant chair, etc.
- Leadership role in program accreditation

4.3.3 Service to the College, University and Greater Academic Community

A faculty member should engage in service, beyond his/her school, that benefits the greater university/academic community. Examples of such service follow:

- Participation in professional organizations
 - ➤ Holding membership in appropriate professional organizations
 - ➤ Attending local, state, regional, national or international meetings of professional organizations
 - ➤ Serving on committees of professional organizations and/or conferences
 - ➤ Holding office at the local, state, or national level in a professional organization
 - > Presiding over sessions, workshops, panel discussions, etc.
- Chairing and/or serving on college or university committee
- Sponsoring campus-wide organizations
- Providing professional expertise to business, industry, schools, or government
- Refereeing articles for professional journals
- Refereeing a research grant
- Reviewing a textbook or software package for a publisher

4.3.4 Other Service Requirements

- **4.3.4.1** In addition to the requirements specified in college guidelines section 4.1.4, the following must be satisfied
 - Attend local or state meetings of professional organizations
 - Evidence of service in other school service areas
- **4.3.4.2** In addition to the requirements specified in college guidelines section 4.2.4, the following must be satisfied
 - Hold membership in appropriate professional organizations
 - Attend state, regional, national or international meetings of professional organizations
 - Evidence of significant service in other school service areas

- Evidence of service in the candidate's profession
- **4.3.4.3** In addition to the requirements specified in college guidelines section 4.3.4, the following must be satisfied
 - Hold membership in appropriate professional organizations
 - Attend state, regional, national or international meetings of professional organizations
 - Evidence of significant service in other school service areas
 - Evidence of significant service in the candidate's profession

4.4 Tenure

Successful candidates for tenure that are not already full professors must meet the following requirements:

- The school promotion requirements for a rank higher than the candidate's initial appointment at Central and
- All requirements for tenure as outlined in Section 5 of the CHST promotion and tenure guidelines.

Successful candidates for tenure that are already full professors need only meet the requirements for tenure as outlined in Section 5 of the CHST promotion and tenure guidelines.

5. Terminal Degree and Other Special Requirements

- **5.1** For Actuarial Science and Statistics, Computer Science, Cybersecurity and Mathematics, the terminal degree is an earned Ph.D. The Ph.D. must be completed before consideration for tenure and promotion. (Note CAC-ABET requirement on minimum full time faculty with Ph.D. in Computer Science will be maintained)
- **5.2** For Mathematics Education, the terminal degree is an earned doctorate. The doctorate must be completed before consideration for tenure and promotion.
- **5.3** For Actuarial Science Faculty, it is required to have attained the Associate or Fellow designation bestowed by the Society of Actuaries, Casualty Actuarial Society, Canadian Institute of Actuaries, Institute and Faculty of Actuaries (UK) or Institute of Actuaries of Australia before tenure and promotion consideration.

6. Implementation Schedule

6.1 Effective Date

Guidelines (initial or revised) will be in effect upon acceptance by the Dean.

6.2 Implementation Date

The guidelines will be implemented Fall 2017. Future revised guidelines are implemented at the beginning of the Fall semester of the next academic year.