Department of:
Effective Date:

Computer Science
April 11, 2024
This field will be completed by the Office of the Provost.

1) Department Chair:


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\frac{4-1-2024}{\text { Date }}
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2) Dean:


Signature

4-1-24
Date
3) Chair, UM Unit Standards Committee:


Signature
April 1, 2024
Date
4) Provost and Vice President for Academic Affairs:

Con lh r
April 11, 2024
Date

# DEPARTMENT OF COMPUTER SCIENCE UNIT STANDARDS <br> Draft of 4/1/2024 

## I. GENERAL

This document does not stand alone. It must be read and used in conjunction with the current Collective Bargaining Agreement (CBA) between the University Faculty Association and the Montana University System. In the event of omissions or inconsistencies, the terms of the CBA shall be applicable and shall prevail. Faculty members should consult the CBA for procedures related to the evaluation process beyond the FEC and to determine the procedural requirements for appeals.

## II. DEPARTMENTAL ORGANIZATIONS

## A. FACULTY COMPOSITION

The Department of Computer Science has both tenure-track and non-tenurable faculty members. The tenure-track faculty are expected to perform duties in all three areas of teaching, research and service while the non-tenurable faculty are usually only expected to teach and in a limited number of cases, perform service-type duties as outlined in their hiring agreements. The tenure-track faculty can be on one of two (2) career paths.

## B. TENURE-TRACK CAREERPATHS

The Department has two career paths for tenure-track faculty, the research emphasis track and the teaching emphasis track. The requirements of each path for promotion, tenure, and salary determination are specified in section V , subsection C .
Changing paths is subject to approval of the Dean of the College of Humanities and Sciences (H\&S), who retains authority based on the CBA.

## C. NON-TENURABLE FACULTY

The general rights and responsibilities of non-tenurable faculty are contained in University Policy 350 and the CBA section 9.110.

## 1. Hiring and duty assignment

Non-tenurable faculty are recruited and hired in consultation with the Dean of H\&S. State and federal laws and statutes are to be adhered to, including those associated with Equal Opportunity/Affirmative Action policies.
Duties and Full Time Equivalent (FTE) value will be assigned in writing at the time of hiring after consultation with the Dean. While primary duties will normally be associated with teaching, research and/or service responsibilities may also be included.

## 2. Participation in unit governance

Non-tenurable faculty with a rank of Lecturer will normally participate fully in faculty meetings, votes on unit matters (outside of the FEC), and serve on unit committees.

Non-tenurable faculty assigned a FTE of less than 1.0 will have the option of attending faculty meetings, will not participate in unit votes and are not required to serve on unit committees.

## 3. Participation in the annual faculty evaluation

Non-tenurable faculty will be evaluated similarly to the tenure-track faculty, but are not eligible to be members of the Faculty Evaluation Committee. Each non-tenurable faculty member will be evaluated based upon their assigned duties for the period under review.

## III. STUDENT EVALUATION COMMITTEE (SEC)

In addition to CBA section 10.230 , the following procedures apply to the Department SEC:

## A. SEC COMPOSITION

The SEC will be composed of three to seven students and one faculty observer who is among the full-time, tenure-track faculty except for the Department chair, unless they choose to take this role.

## B. SEC CHAIRDETERMINATION

The chair shall be determined by the student members at the first annual meeting of the SEC.

## C. EVALUATION PROCEDURES

Evaluation procedures will follow those specified in the current CBA. At the beginning of the first SEC meeting, the faculty observer will communicate with the student members these procedures and stress the importance of their work. Student evaluations must be administered in each course the faculty member teaches. It should be noted that this course evaluation requirement is more stringent than that of the CBA section 10.230.

## IV. FACULTY EVALUATION COMMITTEE (FEC)

In addition to CBA section 10.240, the following procedures apply to the composition and functions of the FEC in the Department of Computer Science:

## A. FEC COMPOSITION

The FEC will be composed of one student observer and all full-time, tenure-track faculty, except as follows:

1. The Department Chair shall not serve as a member of the FEC.
2. A faculty member will not serve as a member of the FEC for the consideration of their own evaluation.
3. When tenure matters are being discussed or decided:

- Only tenured faculty members and the student observer will serve on the FEC.
- Non-tenured faculty members may observe, but may not vote.
- All available tenured CS faculty members will participate on the tenure committee.
- The faculty member under consideration for tenure may request from the CS Chair the inclusion of faculty members from other departments/schools. This request must be made prior to October 1. No more than 2 outside members should sit on the
committee, unless there are not enough eligible tenured CS faculty members to reach the minimum of 3 required (as per the CBA). Outside committee members assigned to the committee must also be tenured and will have full voting rights.
- Unless only one or no CS faculty member is available to serve on the committee, CS faculty members must comprise a majority of the committee.

4. An eligible faculty member scheduled for a leave for all or part of the academic year will normally be excused from FEC membership for that year, unless they explicitly indicate the intention to participate as a member in that year. This intention should be made in writing to the Department Chair prior to the first FEC meeting.

## B. FEC CHAIRDETERMINATION

The FEC Chair shall be determined by the CS faculty early in September.

## C. EVALUATION PROCEDURES

Evaluation procedures will follow those specified in the current CBA, as amplified by the following:

1. After the FEC has evaluated the records of the individual under review, in the case of promotion or tenure, a merit increase, an Outstanding Performance Award (OPA), or below normal recommendation, a vote will be cast by secret ballot to decide the issue. The FEC chair will make provisions for obtaining an absentee ballot from each member not present. The total number of votes in any decision is the sum of those votes "for" or "against"; abstentions and absents are recorded as a matter of record, but are not considered in determining what constitutes a majority. A majority is required in support of a recommendation of either promotion, tenure, merit, OPA, or below normal increase.
2. The process, procedure, and timeline for any additional materials submitted to the FEC relating to the individual under review will follow the standards outlined in CBA section 10.240 .
3. By November $15^{\text {th }}$, the FEC will submit a written report communicating the committee's evaluation. This evaluation will be shared with the faculty member under review.
4. The faculty member under review can request additional feedback, including an anonymized vote tally of the FEC concerning their evaluation, from the FEC chair or chair designee.
5. The faculty member under review has the option to submit a written appeal to the FEC within ten (10) working days of receipt of the FEC's recommendation, as outlined in section 10.240 of the CBA. Within ten (10) working days of receipt of the appeal, the FEC shall either grant or deny the requested remedial action.
6. The faculty member may discuss the FEC recommendation with the Department Chair. This must take place before the Department Chair completes their evaluation and recommendations.
7. A faculty member under evaluation can request oral feedback concerning their evaluation from the Department Chair and should refer to section 10.250 of the CBA for further details.

## D. EVALUATION OF DEPARTMENT CHAIR PERFORMANCE

The FEC will conduct an evaluation of the Chair of the department in their duties as chair according to sections 16.220 and 16.240 of the CBA. The chair evaluation will occur every three years (providing the Chair has served in that capacity for that length of time continuously as of August 31 and has not left the University), or if the chair requests a review, or if the FEC requests to review. The evaluation might include a recommendation that someone else be appointed as Chair. The Department Chair evaluation is to be completed by November 15, and will be forwarded to the Dean of the College along with the other recommendations of the FEC.

The Chair's evaluation should be separate from their regular faculty member evaluation. The Chair's performance should be based in part on the following criteria:

1. Leadership: setting and accomplishing goals, detecting and correcting problems rapidly, efficient utilization of departmental resources.
2. Routine Administrative Duties: promptness and efficiency in handling the myriad administrative details, communicating administrative direction and feedback to the department.
3. Fairness: ensures equitable distribution and opportunities among faculty for assignments such as class scheduling, service roles, office space and resources, etc.

## V. CRITERIA FOR PROMOTION, TENURE AWARD AND SALARY DETERMINATION

## A. GENERAL

Faculty responsibilities in the areas of teaching, service and research are outlined in section 6.000 of the CBA for faculty in the bargaining unit and explicitly addressed in the letter of hire for faculty not in the bargaining unit. It is expected that all faculty within the Department show evidence of effective teaching since this is the primary mission of the University. It is also expected that faculty will engage in the other activities associated with their career path or non-tenurable faculty contract, but these will vary according to the member's interest and the needs of the Department and the University.

We also draw specific attention to section 6.200 of the CBA which outlines expectations of professionalism and respect that all of our faculty and staff are expected to adhere to at all times.

## B. EVIDENCE OFSUCCESS

The Department lists the following activities as an elaboration of the general evaluation criteria found in the current CBA. This list is to be used only as a general guide, as the

Department does not wish to constrain creative endeavors which would further the objectives of the University.

## 1. Evidence of teaching

The faculty member must be an effective teacher in their various teaching assignments. While we recognize that judgment of effectiveness is sometimes subjective, usually a highly effective teacher can be recognized by a continuous effort to enhance and improve the presentation of subject matter, pedagogy used to teach the subject, and emphasis on student outcomes, diversity, equity, and inclusivity. Such a teacher will focus on educational, environmental, and technical issues in their courses to implement new teaching approaches, foster inclusive learning environments, and integrate advances in the field. Faculty will invest effort in student performance by helping the student to learn (in and out of the classroom), and then use these experiences to improve departmental retention rates.
A Normal evaluation in teaching requires that faculty teach their assigned teaching load, and that evidence indicates effective performance of these duties. The rating of Above Normal requires demonstrated substantive achievements (as determined by the FEC) in two or more of (a) to (k) below, which are intended to show commitment to pedagogy and teaching efficacy. A rating of Outstanding requires demonstration of impressive teaching effectiveness and commitment, as evidenced by high achievement in three or more of (a) to (k) below. Evaluation of teaching activity will be consistent with the faculty member's workload assignments and period of review.

Teaching effectiveness and commitment can be determined through consideration of any of the following:
a. Teaching an above normal course load, or a high number of student credit hours.
b. Preparation of new courses.
c. Teaching across the curriculum (lower-level through graduate courses), including core courses as well as electives.
d. Construction, adoption, and dissemination of state-of-the-art course materials. This might include new teaching and learning technologies, pedagogies, and assessment methods.
e. Fostering an inclusive learning environment by creating and maintaining a classroom environment where diversity is celebrated, equity is upheld, and inclusivity is a guiding principle.
f. Engagement in relevant professional development activities such as those organized by the University's Faculty Development Office, or those external to the University, such as Computer Science Education conferences and workshops.
g. Contributions to the General Education requirements and interdisciplinary efforts of the Department.
h. Supervision of undergraduate and graduate research projects, including Masters and Ph.D. theses and dissertations. Weight given is commensurate with length and scope of project.
i. Serving on graduate committees.
j. Supervision of independent study courses and internships.
k. Student opinion as reflected in the end-of-course critiques and the Student Evaluation Committee (SEC) report that evaluates above the mid-point on quantitative student evaluations.

## 2. Evidence of research / scholarship

When evaluating faculty achievement in research, the department will assign significant weight to the rigor of the peer-review process the scholarly products have been subjected to. Specifically, we favor forms of scholarship that can be documented as appearing in publications with a high impact factor, publications having a high citation rate, or any products that result from a highly selective process or show notable impact. The computer science department prides itself on an interdisciplinary approach to science. As such, we recognize the variety of conventions within science regarding order of author's names on papers, and the importance of various intellectual products (such as conference proceedings vs. journal publication). The computer science department also encourages faculty research initiatives that actively explore and address the intersection of diversity, equity, and inclusivity across various academic disciplines, and that fosters a more inclusive and representative body of knowledge.
For a Normal evaluation in research, faculty are expected to demonstrate research activity in at least one of the forms of scholarly output, (a) to (d) listed below. Scholarship products (e) to (i) may be considered as supplementary evidence of research activity. An Above Normal evaluation requires two or more contributions of scholarly output, (a) to (d). An Outstanding evaluation requires three or more contributions of scholarly output, (a) to (d), or at least two that have attracted national attention. Evaluation of research activity will be consistent with the faculty member's workload assignments and period of review.
We recognize the following as legitimate products of scholarship:
a. Publication of peer-reviewed articles, monographs, or books,
b. Peer-reviewed presentation at meetings, conferences, or workshops
c. Award of grants or contracts,
d. Submission of grants and contracts that can be demonstrated to have received favorable reviews,
e. Research that focuses on or fosters an inclusive and equitable academic environment in which diverse perspectives are valued and integrated into the research process,
f. Technical reports,
g. Development, distribution, and maintenance of software, databases, or derived data sets,
h. Commercialization of research products (e.g., patents) that are shown to benefit the University or our students,
i. Interviews with or articles for the popular press which relate to research.

## 3. Evidence of professional/university service:

Each faculty member has the obligation and responsibility to assist with sufficient administration of departmental and University affairs compatible with career rank. For example, more senior faculty members are expected to take on an increased amount and variety of service activities whereas junior faculty will have fewer expectations of service. The computer science department particularly encourages faculty service initiatives that broaden participation in computer science by actively engaging and supporting underrepresented communities and students from diverse backgrounds.
The text below suggests general guidelines for evaluation of service activity; additional qualitative aspects should be considered, particularly the time commitment and effectiveness of the service.

For Normal evaluation in service, faculty are expected to participate in activities and governance necessary to maintain routine departmental function. This level of service is commensurate with academic rank as described above. For an Above Normal evaluation, faculty are expected to have provided substantive service in at least two activities in different categories (a) to (d) as described below. For an Outstanding evaluation in service, faculty are expected to have served on at least two departmental committees and two or more substantive examples of service to the university, community, or profession. Evaluation of service activity will be consistent with the faculty member's workload assignments and period of review.

We recognize the following as legitimate service activities:
a. Service to the department. Examples include:
(1) Assessment and accreditationactivities.
(2) Curriculum development andrevision.
(3) Recruiting, orientation, and retentionactivities.
(4) Participation in outreach programs and partnerships with localschools.
(5) Fund raising and alumni relations activities.
(6) Teaching summer and/or continuing education courses.
(7) Continuing education activities such as extension courses, workshops, and/or seminars for business and government personnel.
b. Service to the university. Examples include:
(1) Participation on system-wide, campus-wide, or college-wide faculty committees.
(2) Participation in the organization and/or running of on-campus conferences and events.
(3) Participation in outreach programs and partnerships with localschools.
(4) Involvement in faculty governance.
c. Service to the community. Examples include:
(1) Participation and/or judging in the state science fair.
(2) Outreach to local schools (k-12), particularly that which actively engages underrepresented communities and broadens participation in computer science.
d. Service to the profession. Examples include:
(1) Reviewing journal and other professionalpublications.
(2) Participating as an editorial board member of a professional journal.
(3) Serving on conferencecommittees.
(4) Serving on grant reviewboards.
(5) Involvement in diversity-focused conferences and organizations to foster a more diverse and inclusive future for computer science.
(6) Serving as an editor of ajournal.
(5) Serving as an organizer of a professional conference.
(6) Active participation in professional organizations.

## C. TRACK REQUIREMENTS

## 1. Research emphasis track

Faculty on the research emphasis track are expected to be active in research, teaching, and service to the University and the profession. In each evaluation period, faculty will be evaluated based on the guidance laid out in sections V.B.1, V.B.2, and V.B. 3 above. The teaching load is assigned as noted in the CBA section 6.210.

## 2. Teaching emphasis track

Faculty on the teaching emphasis track will be expected to carry a heavier teaching load than faculty on the research emphasis track. The teaching load is assigned as noted in the CBA section 6.210 and in consultation with the Chair of the department and the Dean of the college. In these instances, additional teaching load plus heavier service responsibilities should balance reduced expectations for research. Teaching emphasis faculty will be evaluated primarily based on V.B. 1 and V.B. 3 above (i.e., teaching and service), but in cases of Tenure and Promotion, some scholarly output is required as per the CBA section 10.110. This scholarship might take the form of any of the criteria listed in V.B.2, or any of the following:
a. literature review and synthesis in support of course materials delivered to students;
b. systematic evaluation of pedagogical methods or innovations;
c. basic or applied research in some area of Computer Science or Computer Science Education;
d. dissemination of scholarly activities through publication, presentation at meetings, or an established online venue that is recognized and accessed by teaching faculty outside of the University.

## D. SPECIFIC CRITERIA

## 1. Terminal Degree

A terminal degree for the Department is an earned doctorate in Computer Science or a closely related discipline. (Exceptions may be approved by the Dean and Provost.)
All faculty members hired for a tenure-track position of Assistant Professor or above will be assumed to have met the requirements of a terminal degree. This assumption also pertains to all members of the department.

## 2. Promotion

a. To assistant professor: Requires possession of an earned doctorate in Computer Science or a closely related discipline. (Exceptions may be approved by the Dean and Provost.)
b. To associate professor: Requires 4 or more years in the rank as assistant professor. To be promoted to associate professor, the candidate must illustrate continued professional growth and recognition. The activities considered most important in recommendations for promotion of research track faculty are peer-reviewed publications, external grant funding, and teaching. The activities considered most important in recommendations for promotion of teaching track faculty are teaching effectiveness, participation in computer science education conferences and initiatives, and service contributions. Preferably, the candidate for promotion to associate professor will have been recognized (or at least supported by the FEC) for meritorious work (as mentioned in section D. 4 of this document) during the period as assistant professor.
c. To full professor: Requires 5 or more years in the rank as associate professor on the research track. For promotion to full professor for research track faculty, evidence of high performance in each of the three areas of teaching, research, and service is required. For promotion to full professor for teaching track faculty, evidence of high performance in teaching and service is required. The character of the service in rank as associate professor shall be such that there is a clear demonstration of professional growth and an increasingly valuable contribution to the University. As outlined in the CBA, no faculty member may be promoted to full professor on the basis of teaching and service alone.

## 3. Tenure

To apply for tenure, the faculty member must have the appropriate terminal degree and rank of at least Associate Professor (or simultaneous application). The overall guiding criteria in recommending tenure for a faculty member will be their demonstrated ability to carry out the academic responsibilities in the areas of teaching, research, and service as stated in CBA section 6.200, and based on their assigned track (i.e., research versus teaching) as elaborated upon throughout this document. The candidate for tenure in our department should also have been recognized (or at least supported by the FEC) for meritorious work during the probationary period.
For faculty members applying for tenure, it is required to include outside letters of evaluation in the review file. A minimum of two outside letters must be gathered. For research track
faculty, the outside letters are particularly important in evaluating the candidate's research record; for teaching track faculty, the outside letters are most important in evaluating the candidate's teaching and service record. External letters should not be obtained from former graduate advisors, or current collaborators from the past three years. By July 1 of the year in which a faculty member is applying for tenure, the faculty member should submit to the Department Chair or the Chair's designee a list of at least four names of professionals from outside the University who are familiar with the faculty member's research work. These people will be tenured faculty at other universities or professionals at governmental or other organizations engaged in research. At least two of these will be people who were not faculty members or students at the institution where the applicant earned their doctoral degree during the time the applicant was a student there. The faculty applicant can also provide a list of reviewers that should NOT be contacted for external letters. In July and August of the year in which a faculty member is applying for tenure, the Department Chair or the Chair's designee will solicit letters of evaluation from individuals on the approved list provided by the candidate or from other resources not necessarily identified by the faculty member. Letters should be received by August 31 in case additional reviewers need to be contacted to reach the minimum number.

## 4. Merit

To be recommended for a merit raise or Outstanding Performance Award (OPA), a faculty member must have above normal performance in at least two of the three areas: teaching, research, or service OR outstanding performance in at least one of these areas and normal performance in the other two areas. No faculty with below normal performance in any one of the three areas will be recommended for a merit raise.

See CBA 10:110 for Outstanding Performance Awards for non-tenure track faculty.

## 5. Less than normal increment

Poor performance of assigned responsibilities within the scope of employment may constitute grounds for recommendation of a less-than-normal increment. An overall less-than-normal evaluation requires poor performance in two or three of the areas of teaching, research/scholarship, and service per the CBA section 10.110. Performance is to be evaluated consistent with workload assignment. Failure to submit an IPR for evaluation by a faculty member, when required (see CBA 10.210, 10.220), is grounds for a less-than normal increment.

