

Department of Information Science College of Media, Communication and Information Boulder, Colorado 80309

Policy Title: Information Science Department Procedures, Policies and Criteria for Reappointment, Promotion and Tenure Functional Area: Information Science Faculty

Brief Description:	Department of Information Science Faculty P&T Policies and Procedures
Effective Date:	02/01/2017
Approved by:	Department of Information Science Faculty
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Approved by:	CMCI Dean Lori Bergen
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Applies to:	Department of Information Science

These procedures, policies and criteria are subject to the current laws and actions of the Regents and to other university policies and procedures as described on the Faculty Affairs website and as may be subsequently revised. Each policy and rule is to be applied in a manner consistent with current Regents Rules. In the event of conflict, Regential Rules shall govern. Every eligible faculty member will be reviewed in a timely manner with respect to an individual's tenure clock for reappointment, promotion and tenure.

Candidates are evaluated on each of Research, Teaching and Service performance cumulatively at each stage of their careers, and determined to be *less than meritorious*, *meritorious* or *excellent* in each category. In addition to outlining the procedures by which candidates are evaluated at each stage of review, this document outlines the criteria along which they will be evaluated. For reappointment, promotion to associate, and tenure, the faculty votes for each area of Research, Teaching and Service along the three dimensions of *less than meritorious*, *meritorious* or *excellent*.

To achieve promotion and tenure, a candidate must achieve *excellence* in Research or Teaching, and be *meritorious* in the other two areas. It is important to note that, at a campus level, tenure on the basis of excellence in teaching is rare. Standards are determined relative to the performance of a candidate's peers at other comparable institutions. Achievement of *excellence* indicates persistently strong performance that would earn the candidate the promotion to the rank or tenure status sought by a majority of peers at comparable institutions. *Less than meritorious* indicates performance that would not earn equivalent promotion or tenure status as a majority of peers.

For promotion to Full, the faculty vote unifies all dimensions and votes on overall excellence. The language from Faculty Affairs explains: "Professors should have the terminal degree appropriate for their field or its equivalent and (A) a record, which, taken as a whole, is judged to be excellent, (B) a record of significant contribution to both graduate and undergraduate education, unless individual or department circumstances can be shown to require a stronger emphasis, or singular focus, on one or the other, and (C) a record since tenure and promotion to associate professor, that indicates substantial, significant, and continued growth, development, and accomplishment in teaching, research, scholarship or creative work, and service."¹ Here again, standards are determined relative to the performance of a candidate's peers at other comparable institutions.

1.0 CANDIDATE'S MATERIALS FOR DOSSIER

Candidates for promotion and tenure should prepare a CV, a research statement, a teaching statement, and a service and outreach statement.

1.1 Curriculum Vitae

The CV should have major sections dealing with:

- a. Educational background
- b. Academic employment history
- c. Honors and awards
- d. Research and/or creative works
 - i. List scholarly publications. List publications that have been refereed in a separate section from those that have not been peer-reviewed. Include authors, year, article title, journal or proceedings name, volume, and inclusive page numbers. Include acceptance rates for peer-reviewed papers in conference proceedings, where known. Written work in press or submitted but not yet

¹ Reappointment, Tenure, and Promotion of Tenure Rank Faculty, Retrieved Jan 29, 2017 <<u>http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-promotion-and-tenure/reappointment-tenure-and-promotion</u>>.

accepted for publication should appear in a separate section and be clearly identified as such.

- ii. Publications in conference proceedings should be distinguished as being peerreviewed or not peer-reviewed.
- iii. List research funding received and pending proposals. Include agency, title, amount received or requested, beginning and end dates, names of all co investigators, candidate's role (Principal Investigator, Co-Principal Investigator, Senior Personnel, Consultant, etc.), and candidate's portion of the funding.
- e. Teaching accomplishments
 - i. List courses taught, how often they were taught, and what the size of student enrollment was for each class.
 - a. Include a listing of courses that were new preparations (first time taught) for the Department or College.
 - ii. List textbooks, study guides, manuals, workbooks, or electronic media produced for student or class use.
 - iii. List individual undergraduate and graduate students mentored. Include names, period mentored, and completion dates (with degrees or honors) of the students for whom the candidate served as primary mentor.
- f. Service activities.
 - i. Provide details on service to professional organizations, government agencies, department, college, and university.
 - ii. Include outreach activities to the community undertaken on behalf of the University or your profession.

1.2 Faculty Statement on Research/Creative Work

This narrative of typically 4-5 pages is the place where the candidate communicates research accomplishments to the various internal and external reviewers who are part of the tenure and promotion process. The narrative should highlight the candidate's major contributions, describing the impact of research/creative work and grant monies awarded to conduct the research, and addressing any unique aspects of the scholarly record. It is particularly valuable to be able to identify how the various research efforts the candidate has made fit together in working toward one or a small number of larger goals.

1.3 Faculty Statement on Teaching

This narrative of typically 2-4 pages is the place where the candidate communicates teaching accomplishments to the various internal and external reviewers who are part of the tenure and promotion process. The narrative should highlight the candidate's major teaching activities, the innovative aspects of this teaching, and the successes in both undergraduate and graduate training and individualized instruction. The narrative should address any unique aspects of the teaching record, including major curricular development, creation of curricular materials, and

participation in teaching-related research or development activities not only in the department but across the university and in the larger professional community.

1.4 Faculty Statement on Service/Outreach

This narrative of typically 1-2 pages is the place where the candidate communicates service accomplishments to the various internal and external reviewers who are part of the tenure and promotion process. The narrative should highlight the candidate's major contributions or activities in the areas of service and outreach to the Department, College, the University, to professional organizations, and to the public.

2.0 REVIEW BY PRIMARY UNIT

The primary unit is normally composed of the faculty members of the Department of Information Science (hereafter referred to as the Department or unit) authorized to vote on matters of appointment, reappointment, tenure, and promotion. Only members of equal or higher rank relative to the proposed action are authorized to vote on a given personnel case. The unit must have a minimum voting membership of at least five eligible faculty members. For the first several years of the unit's founding, until the unit has an adequate pool of senior faculty, it will need to supplement the voting membership of the primary unit with external faculty. These members will be selected by the Chair with the approval of the CMCI Dean.

Institute faculty who are tenure-homed in the Department will be evaluated according to terms outlined in an MOU between the Chair, the Dean and the Institute Director. In the absence of an agreement in the MOU, the conditions for evaluating promotion and tenure for Institute faculty are stipulated where appropriate in the sections below.

2.1 Primary Evaluation Unit Committee Composition

The Primary Unit Evaluation Committee is a group of at least three faculty from the same or higher rank that the candidate seeks from within the primary unit. They are appointed by the Department Chair. If the unit does not have enough members to meet the criteria, the Chair will invite other CU faculty to support the evaluation. Institute faculty will have one institute faculty serve on the committee to participate in the primary unit faculty review. The PUEC is responsible for assisting the candidate in assembling his or her dossier, soliciting opinions from outside reviewers, and providing an oral and written evaluation of the candidate's dossier to the full eligible membership of the primary unit. The oral evaluation is provided first, to solicit input from the full eligible membership of the primary unit.

The department allows a faculty member who serves on the college personnel committee to also serve as a member or chair of PUEC, given that departmental representatives cannot vote on one of their own faculty members at the college level. Family members should recuse themselves from personnel reviews of immediate family members (see <u>www.cu.edu/policies/Personnel/nepotism.html</u>). Questions on potential conflicts of interest should be directed by the Chair to the Dean or the Associate Vice Chancellor for Faculty Affairs. After the founding year, the Department Chair should not serve on the PUEC or write its report (as his or her recommendation is expressed in a separate report).

2.2 PUEC Report and Supporting Materials

The PUEC report, usually several pages in length, is generated based on an evaluation of the materials supplied by the candidate and the materials gathered as listed in items 1-6 below. The report should include a description of the findings of the Committee with regards to (a) teaching performance, (b) scholarly and creative work, and (c) university and professional service and outreach. The written report of the evaluation committee becomes part of the dossier. The names and affiliations of the external reviewers should not be revealed in these materials.

In addition to the candidate's materials, the dossier prepared by the primary unit should also contain the following items:

- 1. **External Letters of Evaluation.** Six external letters are required for promotion/tenure. External letters are not required for reappointment, though may be obtained at the discretion of the primary unit.
 - a. Letters must be submitted from professional colleagues not affiliated with the University of Colorado. Letters from mentors and direct collaborators are not to be included in the minimum number of required letters, but they may be added at the request of the candidate or review committee.
 - b. Evaluators must be selected by the Primary Unit Evaluation Committee and chosen to avoid any known or apparent inappropriate biases, either positive or negative.
 - c. All letters received must be submitted with the dossier. Individuals contacted but not able to review must also be listed, along with the reason for the declination.
 - d. Candidates may <u>not</u> select their own evaluators, but they are asked to recommend names to the primary unit. They may also indicate individuals whom they do not want to be contacted. A list of who recommended each reviewer (the candidate, the department, or both) should be included in the dossier. A maximum of three evaluators recommended by the candidate and not less than three evaluators recommended by the PUEC is the ideal balance. In terms of how close the evaluators can be to the candidate, there is only a conflict if the evaluator can be imagined to be benefitting from the candidate's success, which includes the Ph.D. advisor, postdoc mentor, a co-

author or co-PI. On the last role, the Department will follow the rules of the NSF for conflicts, which spans engagement as co-author or co-PI over the last 4 years.

- e. A CV from external reviewers will be requested, though a short biosketch is also acceptable. In addition, a short summary of the qualifications for each reviewer is to be provided at the front of the external reviewer section.
- f. All contact with outside reviewers should be noted and fully documented. All requests for information from external reviews must go through one representative from the primary unit. External letters should be requested at least three months before the dossier is due in the Dean's office.
- g. Letter of Solicitation. The template for letters of solicitation to external reviewers is available at: <u>http://www.colorado.edu/facultyaffairs/atoz/ofaindex.html#S</u> (in the A-Z section look in section "S" for Solicitation of External Letters). Primary units wishing to make substantive changes to the letter should seek permission from the Office of Faculty Affairs.
 - i. Evaluators should be asked to specify clearly if the candidate would be reappointed, promoted, or receive tenure at <u>their</u> institutions.
 - ii. Each evaluator should be asked to state what his/her relationship is to the candidate.
- h. Confidentiality. Letters from outside reviewers are considered to be confidential and are not to be seen by the candidate. This restriction also includes the names of those external reviewers and their vitae information.
- 2. Teaching Performance. Multiple types of teaching evaluation are required. In addition to the FCQ (Faculty Course Questionnaire) results as a measure of teaching quality, class interviews, peer evaluation, student letters, and portfolios are recommended. If letters from students or alumni are requested, please indicate how the individuals were selected. The candidate should not select them nor be involved with any correspondence requesting letters. Include all FCQs for faculty considered for reappointment or tenure. For promotion to the rank of Professor, include only the FCQs since the last review for the candidate. Fall FCQs should be added when they become available in January. Provide an explanation for semesters that the candidate did not teach. A listing of new course preparations are also to be reported in the report, so as to specifically acknowledge the contribution of founding and early faculty members of the department.

A listing of Ph.D. students in progress and completed is also required. The Department recognizes and credits to the candidate at all levels of his or her career the completion of Ph.D.s under the candidate's supervision both from within the Department, as well as from other counterpart degree programs at the university where the candidate was the primary advisor. The Department also recognizes graduations from students at other universities where the candidate was once the primary advisor and still has a central role in the student's progress. These stipulations are especially important in acknowledging the role of founding and early members of the unit, who have come from other universities, and who

have built up their research labs in coordination with counterpart departments who have supported the Department of Information Science's launch.

The teaching section of the dossier should include:

- a. Faculty Course Questionnaires (required). Submit the complete record of faculty course questionnaire summaries of each course taught and the instructor summary compiled by the Office of Budget, Planning, and Assessment, for the period of review (see above).
- b. In addition to the required FCQ documents, submit three or more additional forms of teaching assessment. Candidates and units are urged to use whatever form of assessment that is most appropriate for the type of instruction. Suggested forms of assessment include:
 - i. Peer reviews of teaching. These reviews, especially for junior faculty, should not be just one or two classroom visits in the semester of the review. They instead should be representing a series of visits over several years, providing opportunity for feedback, improvement, and assessment.
 - ii. Report of class or group interviews. Interviews of a class or group of students should be performed without the candidate present, and the students should be asked to describe both the positive aspects of the course and instructor and areas for improvement. Feedback for improvement should be provided to the candidate.
 - iii. Confidential letters from randomly solicited students who have taken courses from the faculty member being evaluated, both on the undergraduate and graduate level, including current students and alumni and alumnae. At least six such letters should be included, preferably for a couple different times to gauge development over time, if this measure of assessment is used. Unsolicited comments from students submitted to the Chair, Dean or an advisor may also be included. To maintain confidentiality, students' names will not be reported in written evaluations.
 - iv. Letters from randomly solicited students or former students who have been research advisees of the candidate.
 - v. Significant contribution to curriculum and course development, with internal or external assessment of teaching portfolios or other teaching materials developed by the candidate.
 - vi. External evaluation and promotion of teaching excellence through awards, development of textbooks or other teaching materials used elsewhere, educational grants, teaching publications and presentations, and/or significant participation in activities of the American Society for Engineering Education or in the educational functions of the professional societies of which the candidate is a member.
 - vii. Additional ongoing teaching contributions and outreach activities, such as participation in college or campus programs for students.
- c. Listing of new course preparations taught by candidate by course number, title, and semester of first offering.

The Department also recognizes the value of civic engagement in teaching, research and/or service (anticipating Items 3—research—and 6—service—below). There are many ways this might be achieved, and faculty will have different emphases according to subdiscipline and personal strengths. On the matter of teaching, the university provides specific guidance: "The campus's strategic plan, Flagship 2030, advances as one of its goals civic engagement by faculty, staff, and students. Teaching is one area in which the faculty can stress civic engagement, which includes service learning pedagogy. Faculty who employ service learning pedagogy or focus on civic engagement as an important part of one or more courses are encouraged to speak to these efforts in building their teaching dossier. Such efforts speak not only to a faculty member's commitment and dedication to a core campus goal but also indicate that a faculty member is drawing on research literature on innovative teaching methodologies." ²

3. Scholarly and Creative Work. The primary unit report will comment on the quality and significance of the reviewed papers or other research and creative work published by the candidate, and on the quality, reputation and appropriateness of the publication venues selected by the candidate. Because peer-reviewed conference proceedings are often part of an Information Science faculty member's record as they are an important and even sometimes the primary publication modality in the field, the report will evaluate and communicate the prestige of the conference, selectivity, paper length, review process, and whether the proceeding papers are considered equivalent to top journal papers in the field ("journal-equivalent").

In addition, because much of Information Science research is performed in collaborative teams with other internal and external faculty, and with graduate students—a configuration which is to be rewarded—the committee will describe these research and authorship collaborations to college and campus committees. The Department recognizes that in team-based research, it is also typical for graduate students to take the lead authorship when distribution of work is otherwise approximately equivalent. In team-based research, it should be clear that many of the contributions made by the faculty candidate are critical to the initiation and development of projects. Occasionally, research conducted by some candidates is more individual, as in the humanities and social sciences, which is appropriate as long as it is consistent with their subdiscipline of Information Science.

The primary unit report will also comment on the national landscape of sponsored grant funding in terms of competitiveness and changes over the years of a faculty member's tenure. The report will comment on the effort of the faculty member's pursuit of grants in this context, and describe how their awarded grants supported their and their graduate

² Cox, Jeffrey N. (Nov 6 2007). Multiple Measures of Teaching, Office of Faculty Affairs manuscript. Retrieved Jan 29, 2017. ">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-promotion-and-tenure/relevant-policies-and-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-promotion-and-tenure/relevant-policies-and-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-promotion-and-tenure/relevant-policies-and-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorado.edu/facultyaffairs/career-milestones/reappointment-procedures-0>">http://www.colorad

students' research agenda, and/or the departmental-level research agenda, curricular agenda, or infrastructural goals.

- 4. **Examples of Publications.** In most cases, three representative examples of scholarly work are sufficient. When photographs, videos, CDs, or other materials (such as web-based publications, standards, or policy documents) are the appropriate record of scholarly or creative work, candidates are urged to note that and, if appropriate, to submit examples.
- 5. **Research Funding History.** The candidate's research funding history must be included in the dossier, either as part of the candidate's CV (see item 5) or in a separate list. Include all funded grants, unsuccessful proposals, and pending proposals. Indicate whether the candidate is the Principal Investigator or a Co-Principal Investigator and his/her portion of the funding.
- 6. **Service and Outreach.** The primary unit will comment on the quantity and quality of service to the Department, college, campus, and national and international professional communities. The Department holds as a core value that its members undertake service to share in the advancement of the name and reputation of the Department, and share in the provision of an infrastructure that allows all to excel individually and collectively in research, pedagogical and civic endeavors. This core value will be a point of discussion in the service and outreach portion of the report.

In addition, the Department notes that during the first several years after the department's founding, junior faculty are needed to offer more departmental service than typically required, and that this will be an important part of a candidate's record to acknowledge and to communicate to the college and campus. Senior faculty members may also be providing more service proportionately to the Department than to college or Campus during several years following founding, compared to others at equivalent rank.

In addition to the PUEC report, items 1-6 above, and the candidate's materials, the primary unit should include these two items for submission to the College:

- 7. **Copy of the Primary Unit's Criteria for Promotion and Tenure.** A document describing the procedures, criteria, and evidence that the primary unit has agreed upon for evaluating comprehensive review, tenure, and promotion cases is to be included in the dossier.
- 8. **Summary of Personnel Action Form.** The Chair should sign the Summary of Personnel Action Form before the dossier is sent to the Dean.

2.3 Primary Unit Review of Dossier

All faculty members who are eligible to vote on a particular case must be allowed to review the entire dossier before they are asked to vote on the case. Letters and teaching evaluations will be analyzed for the degree to which societal biases influence judgments. Votes should be recorded in the categories of "in favor of" the proposed action, "opposed to" the proposed action, "abstain" or "excused absence." Excused absences should be limited to faculty members who are on leave and unable to participate in the review and vote. For tenure cases, there must also be three additional votes taken, where each member casts a vote of "excellent", "meritorious," or "less than meritorious" for the candidate's performance in each of teaching, research, and service. The Department Chair does not vote but should be present during the discussion by the primary unit.

2.4 Report of the Chair

The Department Chair should write a report, independently of the primary unit evaluation committee report, to the Dean on the actions taken by the primary unit, including the results of the vote, reasons for the recommendation, and explanations of any dissenting opinion as expressed in the vote. The report should include a description of the review and voting processes that were followed. It should also include the recommendation of the Chair on the proposed personnel action, along with reasons for disagreement if this recommendation differs from the majority vote of the primary unit (i.e., the majority of those voting). The report or letter from the Chair to the Dean must not identify the external reviewers by name or in any other way. This report becomes a part of the dossier.

3.0 GUIDELINES AND CRITERIA FOR REAPPOINTMENT AND PROMOTION

3.1 Reappointment Guidelines

Initial appointments for probationary tenure-track faculty members are usually for a period of four years, and they are usually reviewed during the last year of the appointment period. Following campus policy, a faculty member who starts in the spring semester has the option of delaying his/her review to the fourth full year rather than the third full year. Upon successful review, normal reappointment for tenure-track faculty is for three years.

General Principles for Reappointment. The comprehensive review of an Assistant Professor focuses upon whether or not the candidate is making normal progress towards meeting or exceeding the standard for promotion to Associate Professor with tenure. In particular, the standard for reappointment is that the candidate is on a trajectory to achieve at the time of tenure an evaluation of meritorious in teaching, research and service, and excellence in research and/or teaching, or that the candidate has a high likelihood of achieving these evaluations with reasonable corrections to the trajectory.

Research Criteria:

- a. Does the candidate have a vigorous research program?
- b. Are research and authorship collaborations consistent with the style of research the candidate conducts?
- c. Has the candidate selected problems that are recognized as significant by experts in the field?
- d. What is the candidate's record in previous positions at other institutions?
- e. What is the candidate's record in attracting graduate students and directing their research work?
- f. Does the candidate have refereed publications that have appeared or been accepted in appropriate venues of high stature, including highly respected conference proceedings or journals, based on work done in the current position? Are additional articles under review?
- g. Is the candidate active in presenting scholarly work at professional conferences that will advance the goals of the candidate's research program?
- h. What external funding has the candidate received to support his/her research program? What additional proposals are pending for major support of this program?

Teaching Criteria:

- a. Does the candidate have a thorough knowledge of the subject matter of the courses he or she has taught?
- b. Does the candidate keep his or her courses up-to-date by incorporating new material?
- c. Has the candidate demonstrated an ability to develop new courses, or to make substantial revisions in old ones? At the undergraduate level? At the graduate level?
 - i. Has the candidate been a good citizen by teaching an appropriate number of courses that help to fulfill the department and the college's teaching obligations?
- d. Is the candidate an enthusiastic teacher?
- e. Do the students consider the candidate to be an effective teacher?
- f. Is the candidate willing to spend adequate time with students outside the classroom?
- g. Is the candidate a conscientious and effective mentor and advisor of individual students in research at the undergraduate level? At the graduate level? Who has the candidate graduated at the Ph.D.level, and what are their post-graduate prospects?
- h. Has the candidate introduced examples of contemporary information science design where appropriate in courses or supervised student design or independent-study projects?
- i. Has the candidate made effective use of peer evaluation and programs or training to improve teaching?

Professional Activities and Service Criteria:

- a. Does the candidate willingly cooperate with his or her colleagues in teaching, research, outreach, curricular development, and other academic activities?
- b. Does the candidate participate in Department, college, and/or university activities intended to improve the quality of the University's program?
- c. Has the candidate participated effectively in external professional activities while in the current position, such as chairing sessions at conferences and serving on program boards or review panels?

3.2 Promotion to Associate Professor and Tenure Guidelines

The mandatory tenure and promotion evaluation for tenure-track faculty normally occurs during the seventh year of the probationary period. Generally, the recommendation of promotion from Assistant Professor to Associate Professor and a recommendation of tenure will be concurrent. Thus, the criteria for this promotion and for tenure are similar and normally considered at the same time. Early promotion to Associate Professor without tenure will be considered only in exceptional cases in which the Assistant Professor has exhibited highly successful performance and is clearly "on track" toward tenure. Early tenure may also be considered for those candidates who have met the requirements for tenure prior to the mandatory review time. The comprehensive review of an Assistant Professor must be successfully completed prior to undertaking a tenure review. The person considered for early promotion and/or tenure should have had at least five years of experience beyond his/her Ph.D. and at least three years of academic experience at the time of promotion.

General Principles for Promotion to Associate. The Rules of the Regents state that "Associate Professors should have the terminal degree appropriate to their field or its equivalent, considerable successful teaching experience, and promising accomplishment in research." The standard for promotion to Associate Professor with tenure is defined as demonstrated meritorious performance in each of the three areas of teaching, research and creative work, and service, and demonstrated excellence in either teaching or research and creative work. The granting of tenure implies a long-term commitment on the part of the University and is, consequently, the most critical decision made regarding a faculty member. Such commitments must be limited to persons who are judged most likely to remain valued assets to the University for the rest of their careers. The granting of tenure is to be based primarily on the quality of the candidate's research and effectiveness of his or her teaching.

Professional activities and service on and off campus should be considered to a lesser degree. Implied in a recommendation to grant tenure is the judgment that the candidate's future performance will lead to promotion to Professor after a suitable period of time as Associate Professor. In particular, this judgment would be based on evidence that the candidate, if granted tenure, will achieve the distinguished reputation in research, the effectiveness in teaching, and the level of activity in professional service required for promotion to Professor. Implicit in any tenure consideration is the possibility of selecting and appointing someone else. The recommended person must be one of the best people the University could expect to attract to this position.

Research Criteria:

- a. Does the candidate have a vigorous research program?
- b. Has the candidate selected problems that are recognized as significant by experts in the field?
- c. What is the candidate's record of contributed and invited presentations, and of publication in refereed journals, conference proceedings, books and other outlets? How does this record compare to that of peers? Has the candidate published significant papers based on research at this university? How many of them are in top journals or other venues of equivalent quality and impact?
- d. What is the candidate's record in previous positions at other institutions?
- e. What is the candidate's scholarly reputation at other universities and in industry? Has s/he received any major awards for research?
- f. Has the candidate established him or herself as a scholar able to thrive independently of the faculty on his or her dissertation committee?
- g. Will the candidate be able to develop new areas of research in the future and establish competence in them?
- h. What is the candidate's record in attracting graduate students and directing their research work?
- i. An important component of peer evaluation of one's research work is obtained through funding support from sponsoring agencies. What is the candidate's record in seeking and attracting such support for his or her research program? How does
- j. his/her funding level compare to that of peers? Is it sufficient to support the kind of research group, including graduate students, needed to carry out the work effectively?
- k. If the research is part of a group effort, what contributions has the candidate made to the initiation and development of projects?

Teaching Criteria:

- a. Does the candidate have a thorough knowledge of the subject matter of the courses he or she has taught?
- b. Does the candidate keep his or her courses up-to-date by incorporating new material?
- c. Has the candidate demonstrated an ability to develop new courses, or to make substantial revisions in old ones? At the undergraduate level? At the graduate level?
- d. Is the candidate an enthusiastic teacher?

- e. Do the students consider the candidate to be an effective teacher?
- f. Is the candidate willing to spend adequate time with students outside the classroom?
- g. Is the candidate a conscientious and effective mentor and advisor of individual students in research, at both the graduate and undergraduate levels?
- h. Has the candidate introduced examples of contemporary engineering design where appropriate in courses or supervised student design or independent-study projects?
- i. Has the candidate displayed the flexibility and cooperativeness required to carry a full share of his or her department's teaching responsibilities over the long term?
- j. Is the candidate an effective teacher at both the graduate and undergraduate levels, or at one of the levels if dictated by the nature of the program? Has s/he received any teaching awards?
- k. Has the candidate had national or international impact on improving education, such as in the development of textbooks or other teaching materials used by others or in the presentation and publication of educational advances cited by others?

Professional Activities and Service Criteria:

- a. Does the candidate willingly cooperate with his or her colleagues in teaching, research, outreach, curricular development, and other academic activities?
- b. Does the candidate participate in department, program, college, and university activities intended to improve the quality of the University's program?
- c. Does the candidate participate in professional activities and leadership intended to promote the development of his or her field?
- d. Has the candidate engaged in outside industrial or governmental activities that have contributed to his or her effectiveness as a faculty member?
- e. Do the outside professional activities of the candidate enable him or her to keep up-todate with the current developments in his or her field in academic, industrial, and governmental institutions?

3.3 Promotion to Professor Guidelines

There is no standard or mandatory time at which consideration for promotion to the rank of Professor occurs. For faculty who develop their careers along a very fast and steep trajectory, promotion may be considered in six years, or even less in exceptional cases, after the previous promotion. For faculty members whose career trajectory is less steep, or whose scholarly work, by its nature, requires a longer period of development, the period between promotions may be a decade or longer. Review for promotion to Professor is conducted in the same manner as is the tenure and promotion review, including the solicitation of external letters of assessment.

General Principles for Promotion to Full. Consideration of an Associate Professor for promotion to Professor is to be based on his or her research, the effectiveness of his or her teaching, and the scope of his or her professional activities and service on and off campus. For promotion to Professor, the candidate should have the terminal degree appropriate for his or her field or its equivalent and (a) a record, which, taken as a whole, is judged to be excellent; (b) a record of significant contribution to both graduate and undergraduate education, unless individual or department circumstances can be shown to require a stronger emphasis, or singular focus, on one or the other, and (c) a record since tenure and promotion to Associate Professor that indicates substantial, significant, and continued growth, development, and accomplishment in teaching, research, scholarship or creative work, and service.

The following items are some of the factors to be considered in evaluating the candidate's qualifications for promotion.

Research Factors:

- a. The quality and quantity of the candidate's research contributions, as evidenced by a strong record of invited and contributed presentations and of publications in recognized journals and other appropriate venues of high caliber.
- b. The evaluation by recognized authorities outside the University of the candidate's national and international reputation and innovative contributions in scholarly accomplishment, including awards received.
- c. The candidate's record in attracting graduate students, stimulating their research efforts, and promoting and directing significant thesis/dissertation research.
- d. The initiation, development, funding, and direction of significant research projects by the candidate, including in new areas that represent substantial growth from the candidate's earlier work.

Teaching Factors:

- a. Effectiveness of the candidate as a teacher in the classroom and/or laboratory at both the undergraduate and graduate levels. This effectiveness includes adopting efficient teaching styles appropriate to each course environment, motivating the students, and reacting with sensitivity to the students' responses. Measurements of effectiveness include course questionnaires, student letters or interviews, peer evaluations and teaching awards.
- b. Maintenance of knowledge of current developments in the candidate's field and application of them to teaching through timely development of new courses and modernization of existing courses.

- c. Publications and presentations by the candidate related to teaching, including textbooks, new teaching methods and aids, and the introduction of new laboratory experiments.
- d. Active interest in student affairs and welfare, and demonstrated effectiveness of the candidate as a mentor and advisor of individual students, both on the undergraduate and the graduate levels.
- e. Flexibility and cooperation by the candidate to carry a full share of the unit's teaching responsibilities over the long term.
- f. Effectiveness of the candidate in mentoring junior faculty in the teaching enterprise, as well as support the Department's teaching practices and policies.

Professional Activities and Service Factors:

- a. Participation and leadership by the candidate in leadership in the Department.
- b. Professional recognition of the candidate outside the university community, as evidenced by membership and leadership in significant professional and scientific committees, conferences, councils, boards, and review panels.
- c. Development by the candidate of major college initiatives or facilities that contribute to research and teaching activities in the College or University.
- d. Participation and leadership by the candidate in important faculty assignments and committees within the University or College.
- e. Outside industrial or governmental experiences of the candidate to the extent that they contribute to his or her effectiveness as a faculty member.

Given the spectrum of differences in individual attitudes and preferences, it is not expected that an individual would rate highly on every point in each of these categories. However, the overall quality of the candidate's performance in regard to the listed items and the number of those in which he or she has proved successful should make for reasonable uniformity of judgment in considering promotion. Age shall not be considered a factor. The fundamental objective is to recognize the likelihood of continued high quality academic performance throughout the individual's career. For promotion to Professor, the individual's record as an Associate Professor must be more than an extension of his or her work as an Assistant Professor, and there must be a clear indication that the candidate's previous promise has matured to scholarly stature of national and international standing.