1 Preamble

This document outlines and clarifies the issues and criteria related to tenure, promotion, and salary review in the School of Engineering Science. The following serves as a supplement to the collective agreement articles regarding tenure, promotion, and salary review which are outlined in Articles 28 -35 located at:

http://www.sfu.ca/content/dam/sfu/faculty-relations/collective-agreement/CA.pdf

The School is committed to seeking continuous improvement in standards. Such improvement is usually a gradual process. The evaluation criteria must be adjusted so that the rigour with which they are applied realistically parallels the growing excellence of the School and of the candidates for appointment and advancement.

2 ENSC Evaluation Criteria

Engineering Science expects that all tenured or tenure track faculty members would actively participate and make significant contributions to the School and the University alike through research, teaching, and service.

Engineering Science offers degree programs that are accredited by the Canadian Engineering Accreditation Board (CEAB). Professional Engineering (P.Eng.) Registration of the engineering faculty is an important criterion that CEAB uses in making accreditation decisions. Ideally, the CEAB would like to see the entire faculty with P.Eng. registration, but at the very least requires that a great majority of the faculty members be registered as professional engineers. The School therefore requires that by the time an eligible candidate for registration is being considered for tenure/promotion, he/she be registered or at least be able to prove that he/she has made a serious attempt to register as a P.Eng.

The following forms the basis of evaluation by the TPC.
2.1 Research

Scholarly activity in the form of seeking and disseminating knowledge is vital to the mission of the School. The fact that there exists a diversity of research areas within the School implies that there are likely to be differences amongst the norms for each area. For instance, based on one's area of research there may be differences in publication, availability of funding, type of research personnel including ratio of PhD to Masters students, level of applied vs. theoretical research, etc. As a result, due consideration should be given to differences between research areas and comparison of research accomplishment between one area of engineering and another should be avoided. Rather, the evaluation of the research will be based on a comparison of the candidate's research accomplishments to that of local, national or international norms for the same or a closely related area of research expertise. The evaluation of research will use quantitative as well as qualitative assessment of such factors as number of publications, originality, significance and impact, and number of citations. The following lists a number of criteria for evaluating research:

- Appraisal of the candidate's research by external referees of high academic stature is an important part of the TPC decision process. In particular, the School will give more weight to those external referee reports that contain a careful evaluation of the candidate's research in terms of details of its originality, significance, and the nature of its impact.

- The School requires that faculty seek knowledge and disseminate it to the engineering community. In Engineering Science, this is best accomplished through peer reviewed publication of significant research results in well recognized archival journals, appearing either in print or online. This is also one of the clearest indicators of a successful research program. Other forms of publications such as peer reviewed publications in the proceedings of national or international conferences, reviewed research monographs published by a reputable publisher, invited or refereed book chapters, commissioned or reviewed technical reports, and finally unreviewed publications, are also important and should be considered in evaluation of research. Special consideration should be given to quality, quantity, as well as the level of peer review of such publications. Additionally, lifelong research contribution, as well as research accomplishments while at Simon Fraser University, will be addressed.

- In Engineering Science, an important pre-requisite to sustaining a successful research program is the ability to secure research funding through external sources. Such funding is necessary for support of students and research personnel; attendance of the candidate and his/her students at conferences, technical workshops, and meetings; research infrastructure and laboratory equipment. The level of need, source, and availability of funding may differ depending on the candidate's area of research, but nevertheless, some level of external funding is necessary for a healthy research program. Evidence of an active pursuit of grant applications for research funding from competitive peer-reviewed granting agencies such as tri-council agencies, provincial fund, industrial sources or private foundations, is an indication that the research is deemed worthy of support.
The ability to attract and successfully train graduate as well as undergraduate students in research. The quality of the supervision or co-supervision will be measured by the calibre of theses/dissertations supervised, research productivity of students through publications, and when possible, students' career performance should be considered.

Evidence of impact and stature through such means as honors bestowed upon the candidate in relation to his/her research work such as best paper award; fellowship of technical societies such as IEEE, ASME, AIAA, ACM, etc.; membership on committees or editorial board of journals and conferences; membership on grant selection committees or advisory boards; etc.

Full Patents applications. Consideration should be given to patents that are issued, licensed to industry, and especially to those that are used in industrial products.

Industrial interaction and technology transfer are encouraged in the School of Engineering Science. If such activities can be shown to have enriched the teaching and/or the research of a candidate for tenure or promotion, the TPC will include them in its considerations. Evidence of industrial interaction and technology transfer can include commissioned technical reports and other consulting work, software that has come into widespread use and sabbaticals or leaves spent in industry. Indications of success of this work can include licences of technology and commercial availability of industrial products or services based on the candidate's work.

Invited seminars such as keynote speeches or tutorials at a conference, invited talks at other universities, industry, research laboratories, or government agencies.

Any other well documented evidence of research contribution supplied by the candidate.

2.2 Teaching

Teaching is an important function of a faculty and the School places high value on excellence in teaching. Apart from regularly assigned teaching duties, the School expects that all faculty members participate in some non-assigned teaching activities such as: supervision of undergraduate theses, directed study courses and special project laboratories, evaluation of work term reports, and presentations.

In evaluating teaching, consideration shall be given to one's effectiveness in teaching. Consideration should be given to:

- the history of students' course evaluations,
- course material (exams, homework, syllabus, handouts, project(s)),
- continual development, improvement and modernization of courses taught,
- written textbooks or supplementary notes/course material,
- originally developed laboratory experiments or software material,
- on line (web based) resources for the course,
• written comments from other faculty members who may have attended one of the candidate's lectures or the entire course,
• attendance at teaching effectiveness workshops,
• articles published in peer reviewed journals or conferences on engineering education,
• supervision and mentoring of both undergraduate and graduate students,
• recognition of teaching through teaching awards,
• registration as a Professional Engineer in British Columbia, Canada,
• relevant industrial experience or practice of engineering,
• standards imposed, and consistency in class grade point average with other similar courses in the School, and
• the range of courses developed or taught.

The TPC will use the above as well as any other appropriate avenue to evaluate: the candidate's mastery of subject matter as well as currency in his/her field; their ability to organize the material and communicate it skillfully; their ability to motivate, arouse curiosity and inspire students; their ability and willingness to teach a range of subjects at undergraduate and graduate levels with a wide range of enrollment; and finally the candidate's enthusiasm, preparation, diligence, and commitment to teaching. Candidates are encouraged to submit any material that would support and strengthen their case.

2.3 Professional Service to School, University, and Community

It is expected that each faculty member will be an active participant in the collegial governance of the School. This expectation, however, increases with the faculty member's professional growth. As such, the School shall not assign a great deal of administrative duties to an untenured faculty member, although membership of such faculty in some School's Committees will be required. Candidates should outline especially significant elements of their professional service, which may include chairing or being a member of various School Committees or serving on the University Committees. Their professional service may also include providing service to external professional organizations such as the IEEE, ASME, etc.; serving on the editorial boards of journals and conferences; organizing or serving on the organizing committees of technical conferences and workshops; serving as a reviewer for journals, conferences, and granting agencies; serving as a professional consultant to community, industry, and government agencies. The TPC will make every effort to assess and evaluate the candidate's performance in this area and not just list them.
3 Tenure Criteria

All candidates for tenure will be expected to demonstrate, since the commencement of the tenure-track appointment, that:

- There has been continued growth as an established scholar, as evidenced by the development of a significant program of independent research and scholarship;
- There has been a sustained commitment to undergraduate and/or graduate teaching and supervision; and
- He/she has become a responsible and contributing member of the University/academic community.

The decision to grant tenure implies the School's long term commitment to the candidate. A positive recommendation from the Tenure and Promotion Committee (TPC) should imply that, based on the presented evidence, it is the judgement of the committee that there will be continued growth and productivity, and that the candidate has established the potential to be promoted to Full Professor in due course. It should be noted however that a promotion with tenure does not guarantee future promotions.

4 Requirements for Assistant Professor

Appointment to the rank of Assistant Professor presumes a strong academic record and completion of academic or professional training. There should be clear indications that the individual has the aptitudes of a successful teacher, the potential to grow in stature as a scholar as well as a willingness to play an active role in the University. These views should be supported by strong referee reports.

5 Requirements for Associate Professor

Appointment as an Associate Professor is based on a record of successful teaching, scholarly achievement, and participation in service to the University and the community. Appointment of a candidate to this rank requires a research and teaching record that would indicate that the candidate is a leading scholar and a teacher, and that he/she will exhibit continued growth and productivity commensurate with promotion to Full Professor in due course. External referees of high academic stature must assess the individual's research contributions.

Promotion of an Assistant Professor to the rank of Associate Professor is based on a record of successful teaching, scholarly achievement, and participation in service to the University and the community. Satisfactory performance in each of research, teaching, and service areas is necessary for tenure/promotion. However, a mere competency in all of these areas is not regarded as sufficient grounds for granting tenure/promotion. For tenure/promotion the candidate must have excellent performance in either research or teaching. An important criterion is the demonstration of continued professional growth of the individual in his/her field(s) including recognition as an established scholar. External referees of high academic stature must assess the individual's research contributions.

Evaluation for promotion to Associate Professor is conducted in the manner outlined in Sections (2.1), (2.2), and (2.3).
6 Requirements for Professors

For promotion to the Professor rank the total overall career contributions of the faculty member in areas of teaching, research and service to the School, University, and the community shall be taken into consideration. The rank of Professor is designed for those who have excelled in teaching and research. In particular emphasis shall be placed on evidence of substantial and continued growth and accomplishments in teaching, and research since appointment or promotion to the rank of Associate Professor. Appointment or promotion to this rank requires evidence of national or international reputation in their area of expertise, supported by letters from external referees of high academic stature.

Evaluation for promotion to Professor is conducted in the manner outlined in Sections (2.1), (2.2), and (2.3). Furthermore, it is recommended that a candidate for promotion to Full Professor should have graduated PhD students.

7 Requirements for Lecturer Faculty

Engineering Science expects that all Lecturers, Senior Lecturers, and University Lecturers would make significant contributions to the School through undergraduate teaching and service. Graduate research supervision is not expected of the Lecturers, Senior Lecturers, and University Lecturers. For all levels, the evaluation of teaching is conducted similar to that outlined in section (2.2). For each Lecturer rank, the criteria and requirements for promotion to that rank, are listed below.

Lecturer

A Lecturer will have full responsibility for the preparation and instruction of courses, including laboratory courses, and for curriculum development.

A Lecturer should show:
- Evidence of ability and commitment to teaching;
- Evidence of promise of educational leadership;
- Involvement in service to the academic profession, to the University, or to the community as appropriate.
Senior Lecturer

A Senior Lecturer will have responsibility for the preparation and instruction of a wide range of undergraduate and graduate level courses, and may be called upon to provide leadership in curriculum development. A Lecturer may apply for promotion to Senior Lecturer if he/she has demonstrated:

- Superior abilities in teaching;
- Examples of educational leadership;
- Involvement in curriculum development and innovation and other teaching and learning initiatives;
- Continuing pedagogical/professional development;
- An appropriate level of involvement in service to the academic profession, to the University, or to the community.

University Lecturer

A University Lecturer will have responsibilities that encompass the normal requirements of classroom teaching plus activities in the areas of educational leadership, teaching mentorship and curriculum development. University Lecturers will focus on accomplishments in teaching and educational innovation and the impact on student learning.

Promotion to University Lecturer will require demonstration of:

- Outstanding achievement in teaching;
- Distinction in the field of teaching and learning including demonstrated innovation resulting in a positive impact on student learning;
- Outstanding achievement in educational leadership;
- Sustained and innovative contributions to curriculum development, course design, and other initiatives that advance the University’s ability to excel in its teaching and learning mandate;
- An appropriate level of involvement in service to the academic profession, to the University, or to the community.

Professional Engineering status is required for any university lecturer assigned to technical engineering courses.

8 Salary/Career Progress Review

Faculty members are reviewed biannually based on their performance in research, teaching, and service. Same criteria as outlined in Sections (2.1), (2.2), and (2.3) will be used for the purpose of this evaluation.