

**University of Houston-Clear Lake**  
**College of Science and Engineering**  
**Criteria for Tenure and Promotion Evaluation**  
**Approved: June 1, 2020**

### **Criteria and Standards for Evaluating Promotion and Tenure**

The general criteria and standards for evaluating promotion and tenure are listed in the faculty handbook (6.0, 6.1 and 6.2).

### **Guidelines for Evaluating Promotion and Tenure**

Guidelines for evaluation of candidates for tenure and promotion at the college level are provided below. All three areas of professorial responsibility, teaching, research, and service have been considered. Departments in the College may have different traditions with respect to teaching, types of publications, professional and community service, etc. The general guidelines listed below should be used by Promotion and Tenure Committees in evaluating candidates and making their recommendations to the Dean. **Each department in the college may generate additional departmental-specific guidelines. Candidates are not required or expected to have participated in every type of activity listed below unless it is specified. Candidates may also wish to submit additional information on professional activities not on the lists below. Faculty members receiving credit for previous Institutions in grade, regardless of being hired as an assistant or an associate professor, may only include teaching, research or service products generated in the preceding three years in their promotion and/or tenure document. The previous credit must be approved in writing by the Dean in consultation with Senior Vice President of Academic Affairs and Provost.**

### **Criteria for Evaluating Reputation Requirement for Promotion to Professor**

Promotion to professor requires the evidence of achieving a state, regional, or national reputation includes, but is not limited to, the following:

- Winning awards for excellence in teaching, research, or service, at the state, regional, national, or international level from professional societies, academies, foundations, agencies (federal, state, or regional) or other relevant entities,
- Earning election to leadership positions (e.g. president, vice-president, or board member) of professional societies,
- Being invited to give lectures (especially plenary lectures) at conferences, universities, or research institutes,

- Serving as an editor, associate editor, or editorial board member of reputable journals; serving on grant peer review panels for federal agencies (e.g. NSF, NIH, or DOE) or foundations,
- Serving on advisory boards of foundations, colleges, schools, or companies.
- Consulting with pertinent commercial firms such as aerospace, biotechnology, chemistry, engineering, law, or others,
- Advancing professional society through the service as an organizer or leader of a regional, national, or international conference,
- Receiving designation as a highly cited researcher by Clarivate Analytics or other organization that provide citation information,
- Earning a high total citation number or h-index score relevant to the candidate's research field,
- Earning the adoption of textbook developed by the candidate,
- Receiving comments from external peer reviewers explaining how the candidate has made a substantial contribution in one of the areas of professorial responsibility such that they have been recognized by others in the profession or by the public.

## **Teaching and Educational Activities**

### **Teaching Overview**

Teaching is a primary responsibility of UHCL faculty; therefore, excellence in teaching is an expectation of all faculty in the College of Science and Engineering at UHCL.

While candidates for both associate professor and full professors will be evaluated in their teaching activities outlined below, candidates for full professor will be expected to provide additional evidence of leadership within the department, college or university in the efforts to assess and improve student mastery of knowledge, as well as participation in instructional community engagement and dissemination of best practices in teaching.

### **Criteria for Evaluating Teaching and Educational Activities**

**The following criteria apply to evaluation of contributions by a candidate for promotion and tenure:**

- 1. Effective delivery of instruction to and the stimulation of learning by students, and/or clients in the community,**
- 2. Continuous improvement of courses or instructional programs,**
- 3. Effective advising and mentoring of undergraduate and/or graduate students,**
- 4. Professional practice related to the area of teaching.**

### **Evidence to support promotion and/or tenure**

Candidates for tenure and promotion will possess positive evidence from the following categories. The candidate may present evidence not listed below to demonstrate positive evidence for excellence in teaching. However, the candidate will need to provide explanation of how the evidence supports their case for tenure and promotion.

### **Required Evidence**

- Course evaluation summaries with grade distribution percentages
- Evaluations from classroom observations by faculty peer review

### **Additional Evidence**

All Candidates for Tenure and Promotion to Associate Professor must provide evidence of excellence in at least 3 of the categories listed below. Candidates for Promotion to Professor must provide evidence of excellence in at least 4 of the of the categories listed below and must have evidence of leadership in Teaching and Educational Activities.

**Curriculum Improvement and innovative teaching in the classroom.** All candidates for tenure and promotion must demonstrate a record of effective teaching in the classroom and/or for online courses. All candidates are required to maintain a high level of knowledge in their field; thus, course content should be reviewed and provide evidence of improvement to courses that reflect advances in their disciplines.

Excellent teachers often employ innovative instructional methods as appropriate to the discipline. The candidate should be responsible for explaining and documenting innovative teaching when appropriate.

- Evidence of effective advising and course related assistance; documentation of positive student outcomes such as student acceptance into graduate or professional programs,
- New ways of teaching and/or novel assignment that promote student success and engagement and foster student collaborations,
- Reorganization of a course / review and improvement of syllabi, problem sets, lectures and exams; and/or revising curriculum that significantly improve student learning experience in acquiring latest development in the field and applying what they learn,
- Periodic and comprehensive review of student comments and evidence of improvement or innovations to address them,
- Nominations for teaching awards at the university, state, or national level,
- Winning teaching awards at the university, state, or national level,
- Publications related to teaching including but not limited to textbooks, laboratory manuals, study guides, etc.,
- Other evidence of curriculum improvement and/or innovation in teaching.

### **Support of curricular needs of the program, department, college, and university.**

Evidence for support include, but is not limited to the following:

- Development of new courses required in the curriculum for majors, non-majors or with innovative curriculum

- Teaching course with high enrollments,
- Development and implementation of laboratory courses,
- Supervision of multiple laboratory sections or courses.

**Student Advising.** Faculty advisors should be available to students. The candidate should be responsible for explaining and documenting their activities in advising. Evidence of effective advising include, but not limited to the following:

- Conveying to the student information about the curriculum in the major,
- Providing students with accurate information about university, college, and general curriculum requirements,
- Communicating information about graduate or professional school, and career options.

**Development of programs, minors, concentrations, accreditations, etc.** Writing a proposal for a new program and getting it through the approval process is demanding and should be appropriately acknowledged and is particularly appropriate to show leadership for candidates applying for promotion to professor.

Further evidence for the support of the curricular needs consistent with the mission and strategic direction of the program, department, college, and university includes:

- Development of new degree-programs,
- Development of new specialization,
- Development of minors and certificates.

**Educational Grants.** Faculty members should be given credit for engaging in grant activities that support the teaching mission of the college and university. The candidate should be responsible for explaining how the grant supports the institution's teaching mission. Evidence of support include, but are not limited to the following:

- Submitting educational grants to federal agencies such as NSF, NIH, DOE or USDA and private funding agencies such as the Welch Foundation,
- Being awarded educational grants from federal agencies such as NSF, NIH, DOE or USDA and private funding agencies such as the Welch Foundation,
- Acting as PI or Co-PI on STEM training grants,
- Acting as PI or Co-PI on REU or similar grants.

## Research and Scholarly Activity

### Research Overview

Creation of new knowledge is a basic responsibility of UHCL faculty; therefore, effective research is an expectation of all faculty in the College of Science and Engineering. In the College, research activities are those that lead to the creation and dissemination of new scientific knowledge and/or to increase scientific understanding and capabilities, including such activities as design and analysis. Providing opportunities for both undergraduate and graduate students to participate in scientific investigations and to develop research skills is essential to the college mission and to student success. Evaluation of competency in research activities must include records of accomplishments.

### Criteria for Evaluating Research and Scholarly Activities

The following criteria apply to evaluation of contributions by a candidate for promotion and tenure:

1. Creation and dissemination of new knowledge through publication of research articles in legitimate peer reviewed journals,
2. Giving presentation at national and international conferences and/or leading to peer-reviewed published proceeding papers,
3. Obtaining research grants and contracts in support of the research mission of the university,
4. Mentoring students in research experiences (e.g. thesis, research projects, and independent research projects).

### Standards in Research for Promotion to Associate Professor with Tenure

Candidates for promotion to associate professor with tenure are expected to have produced at least 4 ***substantial scholarly contributions*** during their period of appointment at UHCL. The standard ***substantial scholarly contribution*** is defined as a research article in a legitimate peer-reviewed journal (see the Appendix below for information on identifying legitimate journals) where the candidate serves as the corresponding author for the work performed at UHCL. Although research articles in quality journals are the traditional standard for judging excellence in research, the College encourages other research related activities. Typically, 3 ***substantial scholarly contributions*** will be expected to be peer-reviewed journal articles where the candidate serves as corresponding author. Additional activities like producing research articles for conference proceedings or winning federal grants may substitute for 1 journal article depending on candidate's research discipline and contributions (also see below). The other example of a ***substantial scholarly contributions*** will usually come from but is not limited to the following: winning an external grant from a federal agency like NSF, NIH, DOE, USDA, EPA, etc. or a private foundation like the Welch Foundation, or obtaining

a contract of similar value; authoring a peer-reviewed conference proceeding paper from a highly regarded national or international conference; receiving a patent or rights to other intellectual property of similar value; mentoring a substantial number of student research experiences (e.g. thesis, research projects, independent research projects) to completion; coauthoring with UHCL students numerous research presentations at national or international conferences; serving as a middle author on two or more journal articles; being an author of two or more review articles or book chapters; serving as an author of an advanced text book, etc. Moreover, a single research product deemed to be ***an outstanding scholarly contribution*** may be counted as 2 ***substantial scholarly contributions***. Some examples of ***outstanding scholarly contributions*** include but are not limited to the following: serving as corresponding author of a research article in a high-impact factor journal or a top 5 journal in a particular discipline; winning high-dollar research grants as principle investigator from a federal agency (e.g. NIH R01 grant) or private foundation; publishing a conference proceedings paper from an invited plenary lecture at a prestigious national or international conference; being awarded a valuable patent; or producing and documenting other types ***outstanding scholarly contributions***. **It is the responsibility of the candidate to explain how a specific research product qualifies as a *substantial research contribution* or as an *outstanding research contribution*. In turn, it is the responsibility of the peer review committee and others in the review process to determine if the candidate's claim has been justified. This assumes that the university has provided appropriate facilities and resources to allow the candidate to meet these standards. If not, it is recommended that the candidate petition the dean for an exception to these minimum requirements prior to their third-year review. The candidate's written petition and Dean's response (whether supportive or not) should be included in the candidate's promotion and tenure file.**

## **Standards in Research for Promotion to Professor**

Candidates for promotion to professor are expected to have produced at least 8 additional ***substantial scholarly contributions*** during their period of appointment as associate professor at UHCL, and the impact of such research from the work at UHCL can be justified through citations and/or peer recognition. Again, the standard ***substantial scholarly contribution*** is defined as a research article in a legitimate peer-reviewed journal where the candidate serves as the corresponding author. Although research articles in quality journals are the traditional standard for judging excellence in research, the College encourages other research related activities. Typically, 6 ***substantial scholarly contributions*** will be expected to be peer-reviewed journal articles where the candidate serves as corresponding author. Additional activities like producing research articles from conference proceedings or winning federal grants may substitute for 1 or more journal articles depending on candidate's research discipline and contributions (also see below). The other 2 example of a ***substantial scholarly contributions*** will usually come from, but is not limited to, the following: winning an external grant from a federal agency like NSF, NIH, DOE, USDA, EPA, etc. or a private foundation like the Welch Foundation or obtaining a contract of similar value; authoring a peer-reviewed conference proceeding paper from a highly regarded national or international conference;

receiving a patent or rights to other intellectual property of similar value; mentoring a substantial number of student research experiences (e.g. thesis, research projects, independent research projects) to completion or coauthoring with students numerous research presentations at national or international conferences; serving as a middle author on two or more journal articles; being an author of two or more review articles or book chapters; serving as an author of an advanced text book, etc. Moreover, a single research product deemed to be an ***outstanding scholarly contribution*** may be counted as **2 *substantial scholarly contributions***. Some examples of ***outstanding scholarly contributions*** include, but are not limited to, the following: serving as corresponding author of a research article in a high-impact factor journal or a top 5 journal in a particular discipline; winning high-dollar research grants as principle investigator from a federal agency (e.g. NIH R01 grant) or private foundation; publishing a conference proceedings paper from an invited plenary lecture at a prestigious national or international conference; being awarded a valuable patent; or producing and documenting other types ***outstanding scholarly contributions***. **It is the responsibility of the candidate to explain how a specific research product qualifies as a *substantial research contribution* or as an *outstanding research contribution*. In turn, it is the responsibility of the peer review committee and others in the review process to determine if the candidate's claim has been justified.**

## **Evidence for tenure and promotion**

**Peer Reviewed Publications.** Evidence of scholarly accomplishments include publication of original and creative articles in peer-reviewed journals and conference proceedings. Peer-reviewed articles are those that have undergone review by objective experts in the field usually selected by an editor of the journal or the program chairs of a conference.

**Evaluation of Publications.** Some factors regarding evaluation of research publications are listed below:

- Original research articles in legitimate peer-reviewed journals should be the standard in evaluating a ***substantial scholarly contribution***,
- Corresponding author papers in the “top tier” journals (e.g. those with high impact factors in the field) and conferences proceedings from top-level conferences serve as a significant indicator of the quality of a candidate's work, should carry the more weight, and qualify as ***an outstanding scholarly contribution*** which can count as **2 *substantial scholarly contributions***,
- In addition to impact factors (i.e. mean citation rate per citable item), selectivity (i.e. acceptance rate of the journal) may be used to determine if a research article qualifies as an ***outstanding scholarly contribution***,
- Examples of quality of a faculty member's contribution to research may also include scores on bibliographical indexes such as the h-index and i10-index,
- The relative importance of the position in the list of authors in multi-author papers often depends on the traditions of the specific research field. Therefore, the customs in the candidate's discipline should be used in evaluating authorship,



- Nonetheless, serving as the corresponding author of publications provides evidence of independence in research and should be the standard in evaluating research publications,
- Likewise, being first author is another clear sign of leadership in the work and should be given appropriate credit,
- The value of “middle authorship” is often harder to evaluate and as noted often varies by scientific discipline. Nonetheless, collaborative research is encouraged and should be recognized. Thus, 2 or more first or middle author papers, although not corresponding author level, may qualify as equivalent to 1 ***substantial scholarly contribution***. The candidate is responsible of documenting their contribution to the published studies to justify such a claim,
- Coauthoring research articles with UHCL students should also be given additional credit. For example, a corresponding author paper coauthored with 1 or more UHCL student in a highly rated journal can qualify as an ***outstanding scholarly contribution*** and count as equivalent to 2 ***substantial scholarly contributions***,
- Although they may not represent original research, review articles; monographs, book chapters and even advanced textbooks may be considered scholarly activity. In this case, 2 or more review articles or 1 monograph or 1 book on advanced topic may qualify as a ***substantial scholarly contribution***. The candidate is responsible for explaining and documenting the significance of these publications and how they qualify as a ***substantial scholarly contribution***.

**Grants and Contracts.** Securing external (i.e. extramural) funding is important to facilitate research and support student involvement in research projects. Significant funding from competitive peer-reviewed sources additionally provides recognition of the quality of faculty member's research program. Evidence of successful grantsmanship includes the following:

- Winning research grant funding from federal agencies (e.g. NIH R15, R21, NSF RUI) or from foundations (e.g. Welch Foundation) or high-dollar contracts from a corporation can qualify as 1 ***substantial scholarly contribution***. Winning an unusually valuable research grant such as an NIH R01 grant may qualify as an ***outstanding scholarly contribution*** and count as 2 ***substantial scholarly contributions***,
- Even though unsuccessful, submitting a substantial number (e.g. 5 or more) of grant proposals to national agencies (e.g. NIH, NSF, DOE, DOD) etc., or to foundations (e.g. Welch Foundation), or to corporations can qualify as a ***substantial scholarly contribution*** if positive reviews warrant a potentially successful re-submit,
- Submitting and obtaining funding from UHCL sources (e.g. FRSF and FDF) deserves credit as funds may be used as “seed money” to begin new research projects, support student research and generate preliminary data needed to bolster proposals to extramural funding agencies and foundations. However, internal funding is not a substitute for external funding; thus, it should not carry the same weight. Only in exceptional cases (e.g. winning 10 or more for a continued and promising research endeavor) could be used to qualify as a ***substantial scholarly***



**contribution.** The candidate is responsible for providing evidence to support such a claim.

**Conference Papers.** In some disciplines (e.g. selected engineering fields, computer science, and others) peer-reviewed conference proceedings may be considered as prestigious or even more so than journal articles (i.e. may have lower acceptance rates than journal articles) and may be given the same or higher credit than a journal article; thus, if the candidate was corresponding author it could count as a **substantial scholarly contribution.** The candidate is responsible for explaining and documenting the case for a specific field and a particular conference.

- Articles published in peer-reviewed conference proceedings.

**Conference Abstracts.** Abstracts from conference presentations often reflect original research activity and in some cases are subjected to significant peer review. However, published abstracts should not be accorded the weight of peer-reviewed journal articles or full peer-reviewed conference papers and fall into a separate category. The candidate should document whether abstracts are peer reviewed, that they served as corresponding author, and if the abstract was coauthored with UHCL students. A substantial number of published abstracts (e.g. > 5) particularly if coauthored with UHCL students could qualify as 1 **substantial scholarly contribution.** The candidate is responsible for providing evidence to support a claim.

- Abstracts published in conference presentations.

**Conference Presentations and Invited Talks.** Being asked to give invited presentations at notable conferences, universities, and research institutes is another indicator of a faculty member's reputation in research. Therefore, invited research talks should be given appropriate credit in the review process. Selection by conference organizers to give plenary or oral presentations versus poster presentations is another indicator of quality research and should be given appropriate credit. A substantial number of conference presentations (e.g. > 5) particularly if they are plenary, invited or coauthored with UHCL students could qualify as 1 **substantial scholarly contribution.** Examples include the following:

- Invitations to give plenary talks at regional, national, or international conferences,
- Selection to give oral presentations at regional, national, or international conferences,
- Invitations to give presentations at Universities or research institutes,
- Poster presentations with UHCL student co-authors at regional, national, or international conferences.

**Intellectual Property: Patents and Useful Products of Research.** By law, a patentable invention must be novel, non-obvious and useful; therefore, obtaining a patent should be considered evidence of original research. In this case, a patent (particularly a licensed

patent with supporting documentation) could qualify as equivalent to 1 *substantial scholarly contribution*; additionally, other types of intellectual property potentially could qualify. The candidate should explain and document the importance of these products in relation to their research activities at UHCL. Examples of useful products of research include the following:

- Disclosures,
- Patent applications,
- Patent awards,
- Commercial licenses,
- Software,
- Relevant copyrighted material.

**Mentoring Students in Research and Publications** A key role for faculty members in the College of Science and Engineering is to provide research opportunities for both undergraduate and graduate students as well as mentoring students in research publications and presentations. Mentoring a substantial number of research products (e.g. published abstracts, presentations, or conference proceedings) where UHCL students serve as coauthors or mentoring a substantial number of theses, projects or independent studies (depending on the specific field) to completion may qualify as a *substantial scholarly contribution*. The candidate is responsible for providing evidence to support of such a claim. Examples of successful mentoring include the following:

- Number of student thesis successfully supervised,
- Number of student projects successfully supervised,
- Number of student independent studies supervised,
- Number of students serving as first authors or coauthors on peer reviewed journal articles,
- Number of students giving oral or poster presentations at regional, national, or international conferences.

## Service

### Service Overview

Service is defined as faculty members using their knowledge and skills to engage in activities that contribute to the advancement of the profession, university, and the College of Science and Engineering encourages and expects all faculty members to engage in productive service. Candidates for both associate professors and full professors will be evaluated in their service activities as outlined below.

Associate Professors are expected to assume leadership roles in support of the University's mission. More weight should be given to activities where candidates for professor dedicated a significant amount of time, effort, activities, and accepted leadership roles that made a significant impact to the university, community, or their profession.

### CRITERIA

1. **Contributions to welfare of the department, college, university, or profession,**
2. **Contributions to the Clear Lake community or greater Houston/Galveston area,**
3. **Contributions to any “community” that makes use of the faculty member’s academic or professional experience.**

**Service to the Profession.** Professional service consists of contributions to the advancement of a faculty member's discipline or profession. Some examples are the following:

- Serving as an editor of a journal, on a journal editorial board, or on the executive committee of a professional organization,
- Organizing or running a conference, or session in a conference,
- Routinely reviewing manuscripts for journals, books, or book proposal relevant to candidate's field,
- Reviewing grant proposals for funding agencies or foundations,
- Serving as a program reviewer for an accrediting agency, etc.,
- More weight should be given to faculty members taking leadership roles such as serving as a journal editor, as an organizer of a conference or as an officer in a professional society.

**Service to the University.** University service consists of a faculty member's participation in the departmental, college, and university-level activities that contribute in a substantial way to the important work of the institution. Again, all faculty should be expected to participate in some form of university service. This includes but is not limited to the following:

- Acting on departmental, college or university committees, task forces, or shared governance committees.

- Participating student recruitment for the program, department, or college,
- Serving as member of search committee
- Serving as faculty advisor for student organization
- Participation in policy development at the department, college, or university level,

#### **Additional Evidence for Promotion to Professor**

- Development of a new degree program proposal,
- Preparing a program review or accreditation report,
- Contributing to reaffirmation of accreditation by ABET, ACS, or other accrediting bodies,
- Contributing to reaffirmation of accreditation by SACS,
- Organization of seminar programs,
- Mentoring junior faculty,
- Serving as a faculty senator,
- Other service activities appropriate for senior faculty.

Faculty members who accept leadership roles should receive greater recognition; including, but not limited to the following:

- Serving as committee chair,
- Assuming leadership positions in the faculty senate (e.g. president, president-elect, past president, senate committee chairs), in shared governance (e.g. committee chairs), and in the college and departments (e.g. department chairs).
- Credit should be awarded for serving as program chairs as they receive little remuneration.

**Service to the Community.** Community service involves faculty members using their skills and professional expertise to benefit the knowledge, health, and well-being of external communities including at the local, regional, state, national or international level. This type of service work can occur either on campus or outside the university, and can include engagement with regional, state, national, or international groups. Examples of community service includes the following:

- Collaboration with or mentorship of students at other institutions (e.g. high schools or community colleges),
- Outreach to an organization that serves a public purpose, collaborating with teachers at local schools,
- Mentoring science fair projects of high school students,
- Supporting businesses (including consulting),
- Serving on advisory boards of civic agencies,
- Developing innovative solutions that address social, economic, or environmental challenges in the region,
- Unpaid consulting work,

- Volunteer service in supporting community and in response to emergency and natural disaster,
- Delivery of community or continuing education programs to the public or community agencies,
- Direction of an international education program (when done without credit for teaching),
- Serving as an officer or board member for community organization,
- Acting as an officer or board member in state, national or international professional organization,
- Contributing to the operation of state or federal agencies,
- Participation in accreditation efforts above and beyond expectations of a regular faculty member without receiving course release or additional compensation.

### **Addendum: Definitions and Identification of a Legitimate Journal**

**A Legitimate Scholarly Journal is defined as one having an editorial board, editorial office, web site, and one that provides true peer review, maintains quality standards and delivers additional editorial services. A Legitimated Scholarly Journal will be listed by one or more of the indexing services shown below and will usually have an impact factor.**

**Legitimate Traditional Scholarly Journals (LTSJs)** meet the criteria listed above. These traditional journals may charge authors a page fee (e.g. \$200 each) or a color figure fee (e.g. \$400 each) but cover most publication costs through subscriptions to individuals or libraries.

**Legitimate Open Access Journals (LOAJs)** are now an alternative to LTSJs and also satisfy the criteria listed above. They are generally available free of charge via the internet. Many publishers such as BioMed Central and the Public Library of Science, have adopted an author-pay model. They normally have a flat article processing charge; it can be as much as \$5000 or more.

**Predatory Open Access Journals (POAJs)** are now becoming more common. **These journals are not legitimate; so, articles in POAJs should not qualify as meeting the standards for promotion and tenure.** As with LOAJs, authors pay a processing charge to POAJs. However, these journals only imitate the benchmarks of LOAJs. They do not have true editorial boards, real peer review, or quality standards. As their aim is solely profit, their activities fundamentally undermine the objectives of legitimate open-access publishing. **If the journal is not listed in one of the indexing services shown below it is probably not legitimate.** Exceptions are possible; if so, it is the candidate's responsibility to provide evidence that the journal is legitimate.

#### **Indexing Services:**

DOAJ (Directory of Open Access Journals) <https://doaj.org/search>

EBSCOhost Title Lists <https://www.ebscohost.com/title-lists>

NLM Catalog <http://www.ncbi.nlm.nih.gov/nlmcatalog/journals>

PMC Journal List <http://www.ncbi.nlm.nih.gov/pmc/journals/>

SJR <http://www.scimagojr.com/journalrank.php>

Web of Science <https://mjl.clarivate.com/home>