DEPARTMENT OF PHYSICS
CRITERIA FOR PROMOTION TO FULL PROFESSOR
(Revised 11/20/18)

OVERVIEW

Promotion to Full Professor requires a sustained record of excellence in research, teaching, and service activities. Candidates will have established a national and international reputation in their research field.

- Candidates must have a continuous record of high quality, independent, productive research, resulting in high quality publications in peer reviewed journals and conference presentations. Candidates will have a demonstrable national and international reputation in their field. Candidates must have a record of sustained success in securing funding through extramural sources to support a thriving research program. Candidates must be actively engaged in the graduate program by supervising doctoral students in their research and dissertation studies and at least two PhD student must have received their doctorate under the candidate's supervision.

- High quality teaching in undergraduate and graduate courses is required.

- Candidates are expected to actively participate in departmental service and governance. Candidates should also have participated in college and university level service. Significant service to the profession is required.

RESEARCH AND SCHOLARSHIP

Candidates for promotion to Full Professor must have a sustained record of high-quality research and must have established a demonstrable national and international reputation in their research field.

Ultimately, it is the candidate's responsibility to provide evidence of the quality of scholarship.
Indicators of the quality and reputation of a candidate's research program include:

- Publications in high quality/high impact peer reviewed journals,
- Significant numbers of citations to published articles,
- Intellectual property disclosures and patents,
- Awards and distinctions from professional organizations, such as being designated a Fellow in the American Physical Society,
- Invited papers or book chapters in high quality publications,
- High h-index (or other impact indices) relative to the candidate's research field and cohort,

- Invited presentations or invited session chair/organizer at conferences with national or international scope,
- Serving on editorial boards of high impact journals,
- Serving on federal funding agency review panels and boards,
- Invitations to serve on program review committees,
- Serving as an officer or committee member for national or international professional organizations.

Demonstrating a sustained, high quality research program involves a balance of the above quality indicators and a sufficient quantity of results to have established a national and international reputation in the field. The department allows faculty discretion in defining this balance between quality and quantity for their particular research area by setting a minimum threshold of "impact-points." This is the sum of journal impact factors for their peer-reviewed journal publications over the period as associate professor. The chart below specifies the thresholds for various research areas. The thresholds are based on the median journal impact factors for the research areas, as reported in the (2017) Journal Citation Reports by Clarivate Analytics, for journals within the specified research areas. (The thresholds are equivalent to twenty-two publications in journals with median impact factor in the research area.)

Journal impact factors evolve over time. Therefore, periodic reviews will be conducted to determine whether the impact-point thresholds should be adjusted. While journal impact factors do not change rapidly, there may be sufficient variation over the time period that a faculty member is an associate professor that an adjustment in the impact-point thresholds are warranted. If the thresholds are adjusted during the promotion evaluation period, the faculty member may elect to be evaluated by the thresholds in place at the time of their promotion to associate professor or those in place at the time they elect to be considered for promotion to full professor. Research programs of faculty may cross several areas over their career. Faculty will consult with the departmental EC/PAC through the Department Chair to determine appropriate research area(s) from which to derive a suitable impact-point threshold (e.g., a weighted average of impact-point thresholds derived from multiple areas in which the faculty member conducts research). Note that publications are evaluated the same whether they are published in digital or print formats and whether they are made accessible online to the public at no cost or are accessible only through individual or institutional purchase

Achieving the impact-point threshold should not be construed as ensuring promotion to full professor. The threshold is a minimum standard necessary to be considered. The departmental EC/PAC will weigh other indications of quality and impact of the faculty member's research (e.g., h-index relative to the research field and time in career, speaker invitations, intellectual property disclosures and patents, awards, etc.) along with the other research, teaching, and service criteria discussed below. Likewise, evaluations by external reviewers are a critical component in judging the impact of a candidate's research.
Candidates must have a sustained record of securing extramural funding over their career and demonstrate strong future potential for receiving additional funding. Extramural funding

includes grants and contracts from government, industry, or private sources; in-kind awards for access to computational, observational or instrumental resources; instrumentation grants, and travel grants. Extramural funding must support a thriving research program – for example, providing salary support for research assistants, funding post-doctoral positions, and supporting travel to professional conferences – leading to the discovery and dissemination of original research results. Candidates are expected to demonstrate leadership in obtaining and managing extramural funding by serving as the principal investigator or as the lead UNT investigator for at least one external research grant.

Sustaining a vibrant research program and contributing to the research climate of the department requires active participation in the graduate program. Candidates are expected to have a sustained record of recruiting and mentoring graduate students and/or postdoctoral fellows, leading to the timely completion of graduate theses and dissertations. At least two PhD student must have received their doctorate under the candidate's supervision.

TEACHING

High quality teaching in undergraduate and graduate courses is a minimum expectation for promotion to Full Professor. Teaching quality is assessed along the same criteria as for tenure decisions – student evaluations, peer observations/evaluations, course content, instructional innovation and teaching awards – with somewhat more emphasis on contributions to the graduate program.

SERVICE

Candidates are expected to actively – and positively – participate in departmental governance. Candidates should also have participated in college and university level service. Significant service to the profession is required.

PARTICIPATION IN THE COMMUNITY OF SCHOLARS

It is important that all faculty demonstrate an understanding of the responsibilities of working as member of the community of scholars and act accordingly. Teaching, research and service duties should be performed conscientiously and with integrity. All faculty should interact with colleagues, staff and students with civility and respect.

Table 1. Impact-point thresholds for promotion to full professor, by research area.

Research Sub-discipline	**Impact-point Threshold**
Condensed Matter Physics	49
Mathematical Physics	29
Atomic, Molecular & Chemical Physics	48

Fluids & Plasma Physics	43
Particles & Fields Physics	50
Nuclear Physics	42
Applied Physics	39
Multidisciplinary Physics	36
Biophysics	55
Multidisciplinary Materials Science	44
Nanoscience & Nanotechnology	65
Astronomy& Astrophysics	47
Materials Science, Characterization & Testing	32
Education, Scientific Disciplines	33