COLLEGE OF SCIENCE PROMOTION & TENURE GUIDELINES

AY 2023-241

The College of Science Promotion and Tenure Guidelines are used in conjunction with the latest published guidelines in the Faculty Handbook and on the Provost's website (www.provost.vt.edu/faculty_affairs/promotion_tenure.html).

The Provost's guidelines, along with the guidelines of the college, have been written to help ensure that all candidates for promotion and/or tenure are treated equally and fairly by the committees at the department, college, and university levels, and that the procedures employed are transparent to all.

To ensure the honest discussion of promotion and/or tenure cases, all parties involved must keep the deliberations strictly confidential. As such, the content of conversations and the results of any votes [at the college, department and university level] may be discussed only with persons who have a current role in the promotion and tenure process, such as committee members or administrators.

COS Promotion and Tenure Process at the Departmental Level

Individual departments must develop and publish written policies to guide their promotion and tenure review processes, including the rules governing eligibility and selection of committee members. Each academic department shall elect tenured faculty members with the rank of associate professor and above to the department's promotion and tenure committee. This committee is a standing committee in each department. Faculty members should not serve on any promotion committee evaluating a spouse or partner. It is not sufficient to leave the room while the spouse or partner is discussed.

The number of people on the committee and length of term are at the discretion of the department head. If a member of the department's promotion and tenure committee is also the department's representative to the college P&T committee, then he or she is expected to vote rather than abstain at the department level and is ineligible to vote at the college level. No one may serve in any capacity on the departmental committee in a year in which they are pursuing promotion. Individual departments must also maintain a promotion and tenure expectations document, wherein departmental performance expectations in teaching, in research, and in service and outreach, are clearly and broadly defined; this document serves as one point of reference for the departmental committee and the department head when evaluating a candidate's dossier.

Department heads may convene committees and may discuss each candidate with committees as appropriate. However, committees are to discuss the merits of the candidates and frame their recommendations without heads in attendance.

The committee will review the dossier of each candidate from their department, take a formal vote,

¹ Changes to this document from 2022-23 are highlighted.

and make a written recommendation (which includes the numerical division of the vote) to the department head as to the qualifications for tenure/promotion. The letter should address the candidate's contributions in teaching, research, service and outreach. Both quantitative and qualitative indicators should be employed to illustrate the stature and impact of the faculty member's research and scholarly work. Include assessment of performance relative to departmental expectations for a range of responsibilities related to promotion, such as involvement of undergraduates in research, completion of master's and doctoral students, external funding to support graduate research assistantships or postdoctoral associates, and so forth.

The voting process is administered in a manner (e.g., electronic survey) that requires each committee member to provide reasons for his/her vote, while maintaining anonymity of the voter. These reasons can be summarized in the letter to the department head. The letter must also explain negative, abstention, and ineligible votes, and non-voting observers, if any.

The committee's letter should include a list of names of the eligible voting members and note the names of ineligible or non-voting observers. The department committee letter should explicitly make a recommendation for or against promotion and/or tenure and will carefully explain the reasons for its recommendation. In particular, if there is a split vote, the recommendation must address the differing opinions of members who support the case and those who do not. A minority letter is not usually necessary; the differing opinions can be reflected in one letter. A minority letter may be appropriate if representing a large fraction of the committee.

The department head then reviews the dossier, considers the recommendation of the committee, and for cases that will go forward writes an independent recommendation letter about the candidate, addressed to the dean of the college. If this recommendation does not concur with that of the committee, the committee is so notified, and the department head's letter will specify the reasons.

The department head's letter should clearly state their recommendation on the case and provide a detailed assessment of the candidate's performance with separate comments on accomplishments relative to expectations for research and scholarship; for teaching, student mentorship and/or academic advising; and for service and outreach, describing them in the context of the department's usual assignments across these areas, and how those expectations relate to expectations in peer departments. Tables or figures should be used as appropriate to show comparisons with peers. If expectations vary among sub-disciplines within the department, this is to be accounted for. The letter should also clarify what is not expected if it is a case that might raise questions of the committee (e.g. master's student and/or Ph.D. student completion).

If the faculty candidate had an expectation, but did not meet it, the department head should explain the reason(s) for not completing the expectation. This is especially important for non-mandatory promotion and tenure cases. Example: the department expects the candidate to have chaired a doctoral or master's student to completion, but the candidate had not. The department head may wish to highlight other evidence that might show the candidate's success in a related area or intermediate progress (e.g. scholarship published with students, student progress towards degree, such as exams completed, etc.).

The letter should provide the context for the faculty member's teaching accomplishments compared to others in the department, and it should provide the context for service and outreach expectations in the discipline and rank. Similarly, it should explain the expectations and contribution for publications, external funding (e.g., grants and contracts), and the role that funding plays for the faculty member's research and scholarship in the department and in peer

departments nationally, evaluating the candidate accordingly. The letter should place the candidate's research and scholarship contributions in the context of major contributors at similar rank and years in the field of scholarship. Both quantitative and qualitative indicators should be employed to illustrate the stature and impact of the faculty member's research and scholarly work. The letter should additionally address performance relative to departmental practices (e.g. pretenure teaching release) and to expectations for a range of responsibilities related to promotion, such as involvement of undergraduates in research, completion of master's and doctoral students, external funding to support graduate research assistantships or postdoctoral associates, and so forth. The letter should also provide any updated accomplishments (i.e., funding, awards, progress of graduate students, etc.)

The department head's letter should also summarize the comments and recommendations of the external reviewers. It is especially important that the letter identify and discuss all criticisms made by external reviewers. It is not sufficient to simply disagree with a criticism; it is necessary for the department head to provide a reasoned argument about the criticisms that are raised. Similarly, disagreement with positive remarks of externals must be explained.

The department head's letter should explain why each reviewer is well-placed to write an external letter. If a reviewer has co-authored with the candidate, the letter should provide an explanation of how the reviewer is sufficiently removed from the candidate and how they can provide an independent and unbiased review.

If either the committee or the department head recommends the candidate for promotion and/or tenure, his/her dossier is forwarded to the dean's office for formal review by the College of Science Promotion and Tenure (COS P&T) Committee and the dean. If neither the department committee nor the department head recommends a candidate for promotion and/or tenure, the dossier is not sent forward to the dean except in cases of mandatory tenure evaluation.

COS Expectations and Guidelines are updated and published each June in accordance with guidance from the Provost's Office. Appendix A of this document include a complete timeline for tenure and promotion review at the college and departmental level.

COS Promotion and Tenure Process at the College Level

The COS P&T Committee is a standing committee composed of at least ten tenured faculty members, one from each COS department and the School of Neuroscience, selected in accordance with the guidelines in section 3.4.4 of the Faculty Handbook, one recommended by the College of Science Faculty Association (COSFA) and up to three additional faculty members appointed by the Dean as described below. The departmental members (including School of Neuroscience) serve staggered, three-year terms, as shown by the schedule in Table 1. Appointments for completion of a vacated three-year term are made by the dean upon recommendation from the department. COSFA will conduct a college-wide nomination and election process resulting in the recommendation of two faculty members to the Dean, who will choose one from those recommended to serve a 2-year term on the committee. Faculty members should not serve on any promotion committee evaluating a spouse or partner. It is not sufficient to leave the room while the spouse or partner is discussed.

Names of departmental and COSFA representatives are due to the dean's office by the end of the first week of fall classes of the indicated year.

Table 1: COS P&T Committee: Departmental Representative Replacement Years

2022, 2025, 2028	2023, 2026, 2029	2024, 2027, 2030
Biological Sciences	Economics	Chemistry
Geosciences	Neuroscience	Psychology
Mathematics	Physics	Statistics

The dean may annually appoint up to three additional tenured faculty members to the committee to serve one-year terms in order to ensure sufficient expertise, diversity, and fair representation. The dean may also appoint non-voting, non-participatory observers. Department heads do not serve on the COS P&T Committee but may be contacted for additional information during the committee's deliberations (see later in this section).

The committee will select one person to serve as chair, who will be responsible for writing the committee's recommendation letters to the dean. The dean will participate in the college committee meetings as a non-voting member. The faculty member who is appointed by the provost to represent the college on the university's promotion and tenure committee is expected to attend the committee meetings as a non-voting observer.

The purposes of the review by the college committee are to verify that the recommendations for promotion and tenure are consistent with the evidence, reflecting college-wide standards, and that they consider the goals, objectives, and programmatic priorities of the college as components of the university mission.

The dean will call a meeting of the COS P&T Committee in November. At this meeting, the dean charges the committee with their responsibilities and describes the promotion and tenure process. Each committee member is then assigned one or more of the cases to prepare for presentation to the full committee during its deliberations in December. No one will be assigned to present on a case from his/her own department. Each committee member will have access to an electronic copy of all candidates' dossiers. Each member is responsible for thoroughly reviewing all the dossiers, keeping in mind that all information is confidential.

The committee will meet for two days of deliberations during December. The deliberations begin with the presentations of individual cases as assigned at the November charge meeting. The presenter is responsible for providing a summary of the accomplishments of the candidate in the areas of teaching, research, and service and outreach; the presenter is not charged to advocate for or against the promotion. Presentation format is according to a common template provided to all committee members. Presentation order will be alphabetical by candidate within ranks being considered (i.e., candidates for promotion to associate with tenure or for promotion to full professor). Presentations should not exceed five minutes.

A full committee discussion will follow each presentation. The discussion of each case centers around the three areas in which the candidate must exhibit achievement – research, teaching, and service and outreach – and should also include the scholarly reputation of the candidate. Refer to the Faculty handbook, Section 3.4.4, for details. At no time are the department representatives to the committee expected to be an advocate for the candidate(s) from their own departments.

The dean's office coordinates requests to department heads for further information or clarifications as needed. The college committee may choose, on rare occasions, to invite the department head to meet with the committee on the second day of deliberations. A preliminary vote, conducted by

secret ballot, will be taken and tallied during the first day of deliberations.

On the second day of deliberations, all candidates are reviewed again. Candidates with unanimous positive votes from the first day of deliberations will be briefly reviewed and any additional information or clarifications will be presented. Candidates with negative votes from the first day will receive additional discussion, and additional information and clarifications will be presented. After discussion of each candidate on the second day of deliberations, the final vote, conducted by secret ballot, will be tallied. The voting process is administered in a manner (e.g., electronic survey) that requires each committee member to provide reasons for his/her vote (particularly important for negative votes), while maintaining anonymity of the voter. These reasons can be summarized in the letter to the dean. The letter must also explain negative and ineligible votes, and non-voting observers, if any.

For both the preliminary and the final votes, a voting member of the COS College P+T Committee should recuse him/herself from voting on a case if: (i) the member has written a paper or proposal, or has had a shared financial interest as might be represented by a business venture or an externally funded grant or contract, with the candidate in the current or previous year; (ii) the member self-determines he/she has a conflict of interest. A member who is in doubt about a potential conflict of interest, actual or perceived, should confer with the Dean. Regardless of the above, all members of the committee can participate in the discussion of all cases.

The letter from the college committee should include a list of names of eligible voting members and note the names of ineligible or non-voting observers. The college committee letter should explicitly make a recommendation for or against promotion and/or tenure and must reflect the major points of discussion that occurred during the deliberations. Should the recommendation be at variance with that received from the department head, reasons for that variance should be specified. In cases with a split vote, it is also important for the letter to address the differing opinions of members who support the promotion and those who do not. Committee letters should make the case of the majority vote but should also explain the basis for any dissenting opinions. All committee members will have an opportunity to review the letter before it is finalized and included in the dossier. A minority letter is not usually necessary; the differing opinions can be reflected in one letter. A minority letter may be appropriate if representing a large fraction of the committee.

The work of the COS P&T committee is typically completed before the start of the winter semester break.

Upon completion of the committee's work, the dean will once again review the dossiers and will consider the recommendations of the committee in formulating her/his recommendation. The dean's letter should explicitly make a recommendation for or against promotion and/or tenure. If either the dean's recommendation, or the committee's recommendation, is positive, the dean will provide her/his recommendation in a letter addressed to the provost. The letter may bring out additional points not raised in earlier evaluations, and in cases of reversal of the committee's recommendation will specify reasons for that reversal. Should the dean not concur with a committee recommendation, the committee is so notified.

If the recommendation is negative from both the dean and the college committee, the normal review process is concluded. The dean informs the department head of the decision, and the department head so notifies the departmental committee and the faculty member. The dean also prepares a letter informing the faculty member of the decision, including appeal options.

COS Dossier Guidelines

As with other faculty promotion processes at Virginia Tech, the format for and content within the dossier is prescribed by the Provost. Candidates and departments are referred to the Provost's webpage for the P&T Dossier Template and P&T Promotion Guidelines available there.

The department head and/or his/her designate and/or the candidate's mentor, should work with the candidate to assist in the initial preparation of the dossier. Dossiers are submitted at the departmental level by the candidate as directed by each department's guidelines. Dossiers are submitted to the College by the department head or his/her designate.

Once a dossier is submitted by the candidate, the content may not be revised or modified except for clarifications of existing content and the required addition of material by department head, departmental promotion committee, dean and college promotion committee. Should additional information become available or if errors are identified during the review process, they should be included and/or explained as part of the department head letter and/or dean letter.

Beginning in 2023-24, each dossier must contain a dossier certification form. The form is signed by the candidate certifying that their dossier is an accurate and truthful record of their scholarly achievement and that they assume full responsibility for the presentation and formatting of the dossier. The name of the department head, chair or school director, the department/school P&T committee chair, or the candidate's faculty mentor who reviewed the draft of the dossier and provided the candidate with dossier preparation feedback and mentoring should also be included.

NOTE: For all citations counts, the candidate and department head should include the date when the citations were counted.

- All information and counts in the Executive Summary should clearly match the
 information presented in the later sections of the dossier. The later sections should be
 organized with this in mind. It should be an easy task for those who review the dossier
 to understand how the candidate arrived at the counts/totals in the Executive Summary
- The Executive Summary (section I of the dossier) should include a table summarizing
 the candidate's accomplishments. The required table is a variation of the table provided
 by the Provost. For COS, the categories shown in the following example table are
 required in the order shown (the numeric values shown here are for illustrative
 purposes only):

Summary of Accomplishments

	While Associate	Before Associate	Total
External Funding: Total Amount (Direct+Indirect)	\$5,460,822	\$407,615	\$5,868,437
External Funding: Candidate Portion of Above	\$1,090,230	\$240,112	\$1,330,342
Internal Funding: Total Amount	\$130,200	\$15,100	\$145,300
Internal Funding: Candidate Portion of Above	\$65,100	\$15,100	\$80,200
Number of Grants (external, internal)	9, 1	2, 1	11, 2
Refereed Publications	18	10	28
Other Publications	5	2	7
Total Citations Received (Google Scholar)	640	351	991
Invited or Keynote Presentations	11	4	15
Other External Presentations	23	11	34
PhD Students (completed, continuing)	7, 4	2, 0	9, 4
MS Students (completed, continuing)	14, 2	5, 0	19, 2
Teaching Load (#courses taught, #SCH)	16, 1713	16, 2115	32, 3828
Awards and Recognitions	3	0	3

- The displayed table is for a candidate seeking promotion to professor. For promotion to associate professor, replace "Associate" with "Assistant" (if no activity Before Assistant, that column may be omitted).
- For candidates with time in their current rank prior to joining Virginia Tech, accomplishments in rank at VT and prior to VT should be clearly indicated. In this case, candidates should add extra columns as needed. For example, a candidate for promotion to associate professor may use 4 columns (instead of 3): "While Assistant at VT" and "While Assistant Before VT" and "Before Assistant" and "Total." (similarly for candidates currently at the Associate Professorlevel).
- Additional rows may be appended to the bottom of the table at the candidate's discretion. Common examples include:
 - Undergraduate Research Students
 - Postdocs Trained
 - Editorial Boards
 - Grant Review Panels
 - Peer Review for Journals
 - Keynote addresses
 - Average SPOT Score
 - h-Index (and/or other citation measures)

Other examples may be found in the Provost's guidelines. None of these potential additions is required; additional rows, if any, should be chosen in a manner that best highlights the candidate's strengths and contributions.

 A secondary table must be included to provide a detailed breakdown of the candidate's publications while in the current rank. Here is the format:

Publications while in current rank

	Lead/Corresponding Author	Co-author/editor	Total
Books	1	0	1
Book Chapters	0	1	1
Papers in Refereed Journals	11	7	18
Refereed Conference Proceedings	0	0	0
Other Papers and Reports	1	2	3
Total	13	10	23

- Additional rows may be appended to the secondary table (preceding the Total row) if applicable. If an additional column is pertinent to the discipline, that, too, may be added. If the Lead Author concept is not applicable to the candidate's discipline, this should be so stated.
- o Following the secondary table, if desired, include a statement providing numbers of publications in the table sharing authorship with the candidate's students.
- The candidate's statement (section III of the dossier) should be concise and focused on accomplishments in research, teaching, and service and outreach. It should briefly indicate future plans in each of these areas.
 - COVID Statement

To help internal and external evaluators understand the issues that candidates for promotion and/or tenure were dealing with during COVID-19 impacted years, candidates may choose to write a faculty COVID-19 statement that highlights changes in circumstances attributable to COVID-19 that had a demonstrable negative impact on their ability to conduct research, scholarly, creative, or

outreach activities and/or publish their results. Lab closures, changes in the focus of granting agencies, the cancellation of book contracts due to the closure of university or other presses, the shuttering of performance spaces – these and other kinds of professional issues should be included. This statement will be sent to external evaluators and added to the candidate's dossier. Please see Adaptations to Promotion and/or Tenure Processes Due to COVID-19 (12/3/2020) on the Provost's promotion webpages.

- Two in-depth peer evaluations of teaching must be included in the dossier. These reviews should be a minimum of two pages each and provide substantive detail regarding teaching and advising activities. Peer evaluation of teaching should address topics such as course organization and management, pedagogical strategies, content knowledge and communication, assessment strategies and student engagement among others. Additionally, the two peer reviews should represent different points of time in the review period and different classes and/or instructional events.
- Faculty whose evaluations of teaching, including peer evaluations and SPOT scores suggest improvements in teaching are warranted should be sure to list what they have done to improve in subsection M below (e.g., CETL and TLOS workshops).
- Due to the disruption of the COVID-19 pandemic on teaching, SPOT scores for the calendar year 2020 (spring, summer, and fall) are not required to be reported in any promotion dossier.
- Please specify the candidate's portion of funding that is current. In some cases, it may be
 important to address the percentage of effort the faculty member has been and will be involved
 with the funded work independent of funding amounts.
- At a minimum, five (5) external review letters are required by the College. Department chairs are encouraged to secure commitments from six (6) external reviewers to allow for last-minute ghosting.
 - o If a candidate has received a tenure clock extension, then the letter to the external reviewer must include the following:
 - "This candidate has received an extension of their tenure probationary period under university-approved policies. Your are asked to evaluate the candidate's accomplishments and appropriateness for tenure and/or promotion to associate professor as if the record had been accumulated during our normal six-year probationary period."
 - The letter must also include a statement regarding confidentiality:
 - "The policy of Virginia Tech is to hold in confidence all letters of evaluation from persons outside the institution. Only the committees and administrative officers directly responsible for the decision of concern here will have access to your letter. It will not be provided to the candidate unless we are required specifically to do so by law."
 - Please ask each evaluator to clarify her/his relationship with the candidate. The following statement may be used:
 - "As part of your letter, please describe your relationship with the candidate. This should include how long you have known the candidate, whether you have a personal or professional relationship with the candidate, and in general, whether there is potential for conflict of interest. The university guidelines state that our external reviewers should not include former advisors, post-doctoral supervisors, co-investigators on recent grants, or co-authors on recent publications or

should not have other relationships that may be perceived as being too close to the candidate."

- The candidate may submit, to the department, a list of up to six names of potential external reviewers.
- The department head and/or committee independently prepares a list of potential reviewers. Please note that generating the department's list independently from the candidate's list avoids the appearance of any conflict of interest associated with the candidate's suggested reviewers.
- The department head and/or committee uses the two lists to select the external reviewers. At least three of the external reviewers must be from the list prepared by the department head and/or departmental committee. These three may include externals independently identified by both the department and the candidate. The dossier is to contain a table, prepared by the department head, specifying which of the two lists, or both, that each external appeared on.
- There should not be more than one (1) letter from the same institution.
- The candidate's Ph.D. advisor may not be an external reviewer. Likewise, reviewers who have collaborative relationships with the candidate or whowere involved in the candidate's graduate or postdoctoral education, are not allowed. When possible, please avoid soliciting external reviews from the candidate's Ph.D. granting institution or from universities at which the faculty member had a prior position. No more than three reviewers may be from medical institutions (due to the different probationary periods used by medical centers).
- If the candidate was asked to prepare a list of external reviewers and chose not to submit a list, the dossier should note this below the chart of external reviewers.
- In the tabled list of external reviewers, please include all letters received. Do not
 include reviewers who did not submit an outside letter in the table. Provide an
 explanation if there are any unusual aspects to the outside reviewers.
- If more than five letters are solicited and received, all must be included in the dossier.
- Contents of External Reviewer Packets
 - The candidate's full CV.
 - A narrative from the candidate encapsulating her/his research (maximum of five pages). This narrative is different from the candidate's statement in the official dossier: it is a technical document intended for those with strong expertise in the candidate's field. The narrative should clearly present the intellectual profile of the individual.
 - Copies of five publications, with citation analyses that define the impact and direction of the research.
 - A listing of all grant support.
 - Material as deemed appropriate to help the reviewer understand the scope of the candidate's responsibilities and service to their department, profession, and Virginia Tech. This could include an overview of the candidate's teaching and service loads. Tables such as those prepared for the executive summary in the dossier may be useful in this regard.
 - Since evaluators are required to evaluate cases based on the relevant expectations, departments may wish to share either the departmental and/or college documents describing expectations and indicators for promotion and/or tenure.
- Other Evaluation Letters
 - o If the candidate's research is primarily through a team in a research center or

- institute, the center or institute director (or designee) should provide a letter of evaluation. This letter should be addressed to the department head. In recent years, this has been especially pertinent for COS faculty working at BI or VTCRI.
- For faculty who present significant interdisciplinary or multidisciplinary and collaborative teaching, research, outreach, or extension as part of the record, the dossier should include one evaluation letter from the director, coordinator, or leader of the interdisciplinary or multidisciplinary program. This letter should be addressed to the department head. For example, for a candidate with significant activity in the Academy of Integrated Science, the department should solicit a letter of evaluation from the Academy, which should be penned by the Academy director and/or her/his designee.
- Work Under Review or In progress Work listed in this section can be updated but cannot be included in early parts of the dossier. For example, a paper that was under review when the dossier was first submitted may be accepted prior to sending the dossier to the college or university committees. An annotation in this section is acceptable.

Supplemental Material required by the College of Science

Supplemental material for the dossier is to be included in a separate .pdf file with bookmarks.

In most cases, supplemental material can be scanned if not already available as pdf. If there is something that cannot be scanned, please contact the dean's office. Supplemental material is not to be included in the Table of Contents and pages do not need to be numbered.

The order of the supplemental material is:

- 1. Candidate's full, current CV, including *highlighted* developments (if any) occurring after solicitation of the external letters.
- 2. All other materials in the packet that external reviewers receive. Here, too, highlighted updates to reflect developments (if any) since the packet was sent out may be included. Candidate's full "SPOT" reports for the past three years (append the pdf's). Note: Due to the disruption of the COVID-19 pandemic on teaching, SPOT scores for the calendar year 2020 (spring, summer, and fall) are not required to be reported in any promotion dossier.

The supplemental material will be used by the college committee only and will not be passed on to the university committee.

Summary of 2022-23 changes in the Provost and COS guidelines regarding a candidate's dossier preparation are listed here as a reminder.

- (2022-23) NOTE: Once a dossier is submitted by the candidate, it may not be revised
 or modified except for the inclusion of Section II of the dossier. Should additional
 information become available or if errors are identified during the review process, they
 should be included and/or explained as part of the department head letter and/or dean
 letter.
- (2022-23) The candidate's statement should provide all reviewers with a clear understanding of the candidates' research; teaching, including graduate and undergraduate student mentorship, service and outreach.

- (2022-23) In Section IV H, candidates should be sure to also include information about student mentorship and contributions to graduate student mentorship, as appropriate. Candidates should describe mentoring accomplishments in detail, including exams, completed, scholarship published, funding of graduate students on grants and contracts, the successful graduate of master's and/or Ph.D students, and other milestones that demonstrate effective and successful graduate student mentorship. The Provost's website provides a sample table, which should be modified to best present the information.
- (2022-23) In Section IV, all faculty who teach should have multiple form of teaching evaluation, including SPOT and peer evaluations and these evaluations should be included in the promotion dossier. Two letters or reports from departmental or college peer reviewers since the last promotion are required. This includes faculty with low teaching assignments, but who teach or regularly guest lecture.
- (2022-23) In Section IV M, faculty whose evaluations of teaching, including peer
 evaluations and SPOT scores suggest improvements in teaching are warranted
 should be sure to list what they have done to improve in subsection M below (e.g.,
 CETL and TLOS workshops).
- (2022-23) In Section V C, there should be clear evidence of external funding to support graduate education at a level appropriate for the candidate's discipline/field. There should be an explicit statement about whether the funding is sufficient to meet the department/college's expectations.

Timeline for College of Science Promotion and Tenure, 2023-24

Due Dates are bolded and in red. All other dates are suggested timeframes for departments.

May 2023	Departments determine faculty members who will be considered for promotion to Associate Professor with tenure, tenure only, and Professor, as well as those who will be considered for promotion in the Research Professor ranks, during fall semester. Department Chairs discuss promotion cases with the Dean by May 31 and prior to initiating the promotion process. Department ensures that a complete dossier including teaching, research, service, and outreach accomplishments can be assembled.
June 15, 2023	Notify the Dean's Office (Allison Craft) of faculty for whom external letters will be requested.
May – June 2023	Six or more external reviewers are identified and invited to serve.
July 1, 2023	Letters and candidates' packets, including candidates' (external packet) statements, are sent to external reviewers.
September 14, 2023	Due date for external letters to be received.
October 2023	Departmental deliberations and vote; dossiers for candidates going forward to the college are completed.
October 27, 2023	Promotion dossiers submitted electronically to COS NAS.
November 17, 2023	COS P&T Committee Charge Meeting – Dossiers available on SharePoint to COS Promotion and Tenure Committee members.
December 1, 2023 (Friday)	COS P&T Committee – First day of deliberations (all day)
December 7, 2023 (Thursday, Reading Day)	COS P&T Committee – Second day of deliberations (all day)
January 2024	College and Departments complete the dossiers for all tenured and tenure-track candidates going forward to the University Committee.
January 26, 2024	Final dossiers submitted to the Provost's Office.
January 2024	College and department staff members complete the final dossiers for all research track candidates going forward to the OVPRI.
February 1, 2024	Final dossiers submitted to the OVPRI.

Expectations for Promotion and Tenure College of Science

As specified in the Faculty Handbook, each case for tenure and for promotion in rank is reviewed at the department, the College, and the University level. This document broadly outlines College of Science expectations for its tenure track faculty seeking promotion and/or tenure.

The following italicized passages from the Faculty Handbook summarize University expectations for tenure and/or promotion:

Each candidate for tenure and/or promotion to associate professor is evaluated in the light of the triple mission of the university: learning [also known as teaching], discovery [also known as research] and engagement [also known as service]. Although not all candidates are expected to have equal levels of commitment or equal responsibilities in each of these missions, a high level of general competence is expected.... Beyond that basic foundation of competence, decisions related to tenure or promotion to associate professor require evidence of excellence in at least one area.

Each candidate for the rank of professor must demonstrate a high level of competence in an appropriate combination of instruction, outreach, and professional activities relevant to his or her assignment. Because of the university's mission and commitment as a major research institution, successful candidates for the rank of professor must demonstrate excellence in research, scholarship, or creative achievement, as appropriate for the candidate's discipline and assignment. Promotion to the rank of professor is contingent upon national or international recognition as an outstanding scholar and educator.

Besides consideration of specific professional criteria, evaluation for promotion or tenure should consider the candidate's integrity, professional conduct, and ethics.

The following pages will flesh out the above passages as implemented in the College of Science, with special attention to research, teaching, and service. As an aid to clarity, activities falling within these three areas are described next.

Research encompasses those activities leading to the production of new scientific knowledge, to development of new methods for knowledge generation, and to novel synthesis of existing scientific knowledge. Research results most often appear as articles in peer-reviewed research journals and/or as patentable discoveries or deliverables in funded research projects. Research results may also appear as book chapters, as books, as software, and occasionally as translational scholarship in practice-oriented journals. Research activity is typically accompanied by presentations at academic meetings and other suitable venues, and/or by contributions to research seminars and workshops.

Teaching activities are those directly involved in the education of Virginia Tech students, and the application of knowledge to practical problems in that educational context. This includes the development of instructional materials or methodologies, advising of students for their academic and professional careers, and participating on thesis and dissertation committees. Common teaching activities are classroom instruction, new course development, one-on-one teaching such as leading independent studies and directing graduate student research, authoring textbooks, developing instructional software and videos, publishing articles on instructional practice, and contributions to teaching workshops.

Service activities are those other than research or teaching that help maintain or improve the operations of a department, a program, the College as a whole, the University, or the faculty member's profession. Service also includes outreach, in which professional expertise is brought to bear in meaningful ways with partners outside the academic community. Examples of service include advising student organizations, refereeing manuscripts submitted to journals and serving on journal editorial boards, refereeing grant proposals; serving as a member of committees at the departmental, college, or university level; serving on community and government committees requiring the faculty member's professional expertise; and serving as an officer of academic or other professional organizations.

Promotion to Associate Professor with Tenure

The award of tenure represents a substantial and long-term commitment by the Department, College and University. A faculty member's professional accomplishments and contributions to his or her department's academic mission are expected to grow while an associate professor, and to remain at a high level for the duration of their time at the university. Accordingly, a prime consideration is judgment of the probability that a faculty member will continue to develop after the award of tenure.

As quoted above, the Faculty Handbook requires general competence in teaching, research, and service, with excellence in at least one. For promotion to associate professor with tenure, the College of Science requires there be strong evidence of excellence in research. The College further expects a high level of general competence in teaching, along with a reasonable level of service. These requirements are described in more detail below.

RESEARCH: For promotion to associate professor with tenure, a faculty member is
expected to have established a publication record in top-tier, peer-reviewed venues that
materially and substantially contributes to disciplinary and/or relevant interdisciplinary
knowledge. This body of work should show evidence of influence on the work of others,
with growing national recognition within the field. Such a body of work cannot be
defined by quantity alone, and no specific number of publications (or pages thereof) is
necessary, or sufficient, to demonstrate the required excellence. Indeed, the question of
quantity is inseparable from that of quality, and neither admits a simple, formulaic
approach.

Quality is reflected by the influence the research has on other research and researchers in their field; by ranking and impact of publication outlets; by judgements of importance, of novelty and usefulness of methods; and of conceptual/theoretical sophistication; and by the research's capacity to attract external funding. Quality is demonstrated by a growing scholarly reputation in the faculty member's field of scholarship. Examples of evidence for quality include evaluations of external reviewers, invitations to present at prestigious forums, invitations to referee research papers and grant proposals, and a positive citation analysis.

Research funding, at a level appropriate to the field, is a necessary component of a promotion-worthy research record. This can be from federal or other governmental sources, from industry, or from foundations, so long as it has supported consequential scientific research. Grants, contracts, and other research funding are viewed by the College of Science as an important and necessary enabler of scientific advance. However, even an exceptional funding record does not supplant the requirements for an excellent publication record and accompanying indicators of research leadership.

The candidate's research portfolio is evaluated not just on accomplishments to date, but on the likelihood of ongoing success and continued development. Accordingly, each individual (department head and dean) and committee (department and college) that evaluates the portfolio as part of the promotion process is charged with forecasting future development of the candidate. Such forecast should take into account publication and funding arcs, including evolution of intellectual development with special attention paid to work conducted while a Virginia Tech faculty member. An individual's or committee's recommendation should specifically address how the body of research supports the forecast.

The College of Science recognizes that there are disciplinary differences to be taken into account when evaluating a candidate for tenure and promotion. As one example, in some disciplines it is common to enter the tenure-track directly from the completion of the PhD, while in others, two or more years of postdoctoral work is a minimum requirement. Again, in some disciplines all doctoral students are expected to be supported on research grants, while in others this is not the case. The College of Science expects that the research portfolio of a successful candidate would be competitive for tenure at peer departments from across the country, and from around the world in the same discipline.

The expectations outlined here avow that a candidate must be making significant scholarly contributions. They further specify that the types of evidence employed in support of these expectations may vary by discipline. Pre-tenure reviews at the 2^{nd} and 4^{th} (or 3^{rd} and 5^{th}) years of the probationary period should provide explicit guidance and

feedback on the faculty member's progress toward meeting these expectations. While a candidate's publications may be outgrowths of work initiated with the PhD supervisor or postdoctoral mentor, they should include work that demonstrates independent intellectual growth and research leadership. If the preponderance of a candidates' research is published jointly with more senior scholars, there must be clear evidence of the candidate's important original contributions.

TEACHING: For promotion to associate professor with tenure, a faculty member is
expected to have stablished, by the end of the probationary period, a record of
consistently good classroom teaching, as evidenced by SPOT evaluations appraise
relative to an appropriate comparison set, and by peer evaluations. They must
contribute to department/college teaching programs as appropriate including, as
needed, advising and mentoring of students and serving on thesis and dissertation
committees.

Peer teaching evaluations should reflect the candidate's success in presenting course content at a suitable level; effectiveness of pedagogical skills such as organization, presentation, and evaluative techniques; and timeliness of feedback to students. The degree to which the candidate treats students with respect and courtesy should be addressed. Teaching accomplishment can also be evidenced by effective use of various instructional modes, classroom technology and pedagogical strategies; course revision and/or new course development, as well as new program development; successful mentorship and guidance of graduate students; recognition via teaching awards; and other pertinent teaching-related activities.

 SERVICE: For promotion to associate professor with tenure, the service record should exhibit both internal and external components. Internal service efforts should focus on activities such as constructive participation in faculty meetings, and membership on a modest number of departmental and/or college committees. External service efforts should be concentrated in areas that facilitate scholarly work, such as serving as a referee for journal manuscripts and organizing conference sessions. While it is important that both service components be meaningfully present, service involvement cannot be so extensive as to negatively impact a candidate's ability to excel in research and teaching.

Promotion to Full Professor

As quoted above, the Faculty Handbook states that "Promotion to the rank of professor is contingent upon national or international recognition as an outstanding scholar and

educator." Promotion to professor in the College of Science thus requires a candidate to be established as a research leader in their field, and that they be an accomplished and innovative teacher recognized for effective instruction and guidance of students. There is also a stronger service expectation than that for promotion to associate professor. These requirements are described in more detail below.

 RESEARCH: For promotion to professor, a candidate must demonstrate maturation of research excellence while an associate professor, to the level of becoming an acknowledged research leader. They must have established a national and international scholarly reputation in their area of research, have shown and continue to show substantial influence on scholarship in that area, and have sustained research achievement as indicated by continued publication in top-tier journals, by an appropriately notable funding record, and by professional contributions to their field of scholarship.

The College of Science specifically looks for significant and sustained impact on a research field. This typically cannot be demonstrated by the publication record alone. Only if these contributions have a significant influence on scholarship in a field has the standard of excellence been met. Indicators of significant impact in research include publication of work that is known and respected by leading scholars in a field; that has influenced the direction of research in a field, including successfully addressing fundamental questions, and/or identifying important new questions; that has significantly altered thinking and practice in a field.

Publication excellence is one key component of demonstrating research leadership. Leadership must also be demonstrated in activities other than publication. Examples of such activities include guiding research of graduate and undergraduate students, mentoring of junior faculty and post-docs, serving on editorial boards with high-quality professional journals, and significant involvement in collaborative research projects that reach beyond the candidate's department.

Strong research funding, at a level appropriate to the field, is a necessary component of a promotion-worthy research record. This can be from federal or other governmental sources, from industry, or from foundations, so long as it has supported consequential scientific research. Grants, contracts, and other research funding are viewed by the College of Science as an important and necessary enabler of scientific advance. However, even an exceptional record does not supplant the requirements for an excellent publication record and accompanying indicators of research leadership.

• TEACHING: For promotion to professor, a faculty member is expected to have maintained a record of consistently good classroom teaching, and to have substantially contributed to the teaching missions of the department, the college and the university. Teaching activities should include substantive engagement in curriculum development, advising students, serving on masters and doctoral committees, participation on program advisory and ad hoc program committees, involvement in student recruitment, and/or other activities that advance the teaching mission.

Baseline evidence of sustained achievement in teaching must show good student evaluations relative to the appropriate comparison set, and strong peer teaching evaluations; see the expectations for tenure candidates above for further details. The requirements for promotion to professor are distinguished by the expected level of additional teaching accomplishments in areas such as outlined in the preceding paragraph. Evidence can include innovation in the use of instructional technology and/or pedagogical strategies with demonstrated impact beyond the candidate's classes; development of new courses; development of new, or revision of existing, academic programs; successful mentorship, guidance and placement of graduate students at a department-appropriate level; and recognition of teaching excellence through departmental, college, or university awards.

• SERVICE: For promotion to professor, a candidate must demonstrate substantial engagement in a full range of internal and external service activities. For service to the Virginia Tech community, this can include activities such as actively serving on and chairing departmental, college, and university committees; serving as advisor to student organizations; organizing campus activities that promote teaching effectiveness or enhance the research environment, and participation in university governance. Service to the profession, which in some instances will also demonstrate research leadership, can include activities such as organizing conference; taking leadership roles in professional organizations; serving on professional or governmental panels or in other advisory capacities to constituencies outside the university; and taking on senior editorial posts with professional journals.

In addition to the above, all faculty members are expected to demonstrate professional collegiality, and to conduct themselves with utmost integrity, behaviors which are prerequisites for promotion to any rank. Collegiality includes but is not limited to participating in meaningful and positive ways in the activities of the Department, College and University; interacting with others (students, staff, and faculty) in respectful ways in all communications, whether spoken or written; acting with integrity in all interactions with members of the university community, and in any capacity in which a faculty member may be viewed as representing their department and/or Virginia Tech; and supporting the intellectual and professional development of colleagues at Virginia Tech and elsewhere.

College of Science - Progress toward Promotion

All departments should have a mentoring program focused on providing support for the continued professional development of both assistant and associate professors. Programs will vary by department but should include a description of mentee/mentor responsibilities with well as focus on expectations for tenure and promotion and the mentee's faculty member' progress toward promotion.

All tenured and tenure-track faculty are reviewed annually each January by departmental committees and department heads/chairs using the FAR (Faculty Activities Report). In addition, each department adheres to the Virginia Tech policy that pre-tenure faculty receive two progress toward promotion reviews during their probationary period and that tenured faculty receive one . These review processes allow departments to identify those faculty who may want to be considered for promotion to associate professor with tenure before their mandatory year as well as those to be considered for promotion to full professor. Department heads are required to discuss the list of faculty being considered for promotion with the Dean by May 31 of the previous year, make final decisions by June 15, in accordance with the published COS P&T Timeline and then to communicate directly with faculty being considered.

Assistant Professors in the College of Science are provided with two reviews of their progress towards tenure and promotion. These reviews are typically conducted after the second and fourth years in rank, though in some departments they are in/after years three and five. Tenure clock extensions can also affect the timing. As for content, the Faculty Handbook (see section 3.4.2 for further details) says:

Reviews are substantive and thorough. At a minimum, departmental promotion and tenure committees must review the faculty member's relevant annual activity reports, peer evaluations of teaching, and authored materials.

The pre-tenure reviews should analyze the faculty member's progress toward promotion and tenure and offer guidance regarding future activities and plans. All reviews must be in writing, with the faculty member acknowledging receipt by signing and returning a copy for his or her departmental file. In addition, the promotion and tenure committee and the department head or chair meet with the faculty member to discuss the review and recommendations. Individual faculty members are also encouraged to seek guidance and mentoring from senior colleagues and the department head or chair. Pre-tenure faculty members bear responsibility for understanding departmental expectations for promotion and tenure and for meeting those expectations.

Associate Professors receive at least one progress review for promotion to Professor. The following is from section 3.4.5.3 of the Faculty Handbook:

At least one review of progress toward promotion to professor should be conducted three to five years after promotion and tenure is awarded (or after tenure is awarded at the current rank of associate professor). The review is required for faculty promoted and tenured during 2012-13 and thereafter. The review is to be substantive and thorough. At a minimum, an appropriate departmental committee (e.g., promotion and tenure committee, personnel committee, annual review committee) the faculty member's relevant annual activity reports, peer evaluations of teaching, and authored materials since the last promotion. The committee may also wish to review an updated curriculum vitae.

The review should be developmental and focus on the faculty member's progress toward promotion to professor. The developmental guidance should focus on recommended future activities and plans that will position the faculty member for promotion. All reviews must be in writing, with the faculty member acknowledging receipt by signing and returning a copy for his or her departmental file. In addition, the faculty member may request a meeting with the department committee chair and the department head or chair to discuss the review and recommendations. Individual faculty members are also encouraged to seek guidance and mentoring from senior colleagues and the department head or chair.

All progress reviews, once completed and signed, such be submitted to the COS share. In your departmental FAR folder there is a sub-folder titled "Progress reviews pre- and post-tenure."

Within that sub-folder, progress reviews are arranged by year.