



Department of Chemistry and Biochemistry

UNIVERSITY OF COLORADO **COLORADO SPRINGS**

Department of Chemistry & Biochemistry Annual Merit Review Criteria *Spring 2022*

Overview

Faculty are evaluated in the areas of teaching, research, and service based on points accumulated in the Annual Merit Review Evaluation Spreadsheet (AMRES) for various activities and by qualitative self-reflections for teaching. While the performance categories of Below Expectations, Meeting Expectations, Exceeding Expectations, and Outstanding are somewhat nebulous in nature, departmental faculty consider performance of Meeting Expectations to represent performance that, while not sufficiently poor to warrant disciplinary action, meets only the minimum expectations of the profession. Given such, faculty seek to cultivate a culture in which going above-and-beyond such minimal expectations is the norm, a practice that encourages and rewards innovations and helps to ensure that the department is always well positioned to meet the evolving needs of the modern student. Given this philosophy, departmental faculty aim to make the Exceeding Expectations rating the norm among its members, with the rating of Outstanding reserved for those faculty who truly “stand out among the rest” when compared with all faculty in the College of Letters, Arts & Sciences.

Slight adjustments to the AMRES can be made each year to allow for flexibility in times of significant disruption. For example, incorporating FCQ scores was made optional during the COVID-19 pandemic, sabbaticals or FMLA time can be entered in the AMRES to account for gaps in teaching, research, and service for a semester or full year. Additionally, the departmental chair, through consultation with each faculty member, can choose to adjust scores to account for factors such as how faculty create a climate of professionalism, civility, and respect within the department.

Details on the AMRES point system and teaching self-reflections are provided below. Overall, these evaluation techniques were designed to ensure that faculty members are working towards the departmental mission.

Chemistry & Biochemistry Departmental Mission Statement

We strongly believe in providing a positive educational experience for our students. As stated in our campus Core Values, "We will seek the development of a multicultural campus environment in which each person contributes unique talents to make the university a better place and, in turn, is fully valued and supported." Our goal is to recruit and foster a diverse population to pursue careers in chemistry-based sciences, including chemistry and biochemistry research, medicine, medical research, dentistry, pharmaceuticals, and teaching, to name a few. (chemistry.uccs.edu)

Teaching self-reflection

Each faculty member writes a 150-200 word essay that discusses feedback received in the past year in the area of teaching and how that received feedback will inform future teaching activities. Faculty are encouraged to write a reflection that balances positive and negative feedback. Ultimately, this reflection is intended to serve as a springboard for the thoughtful improvement of teaching related activities. This reflection is then converted into a quantitative score by considering how well the reflection aligns with the departmental mission statement.

Claiming Activities

Annual Merit Evaluations necessitate that, among other requirements, faculty self-assign numerical scores (0-5) in each of the areas of Teaching, Research, and Service. The AMRES is intended to provide a transparent and efficient way for departmental faculty to quantitatively evaluate their activities and products in these areas. Departmental faculty strive to use the annual evaluation process to both reflect on (and receive credit for) past activities while simultaneously planning for future activities to improve individual endeavors in teaching, research, and service. A full breakdown of how the AMRES is used to self-assign numerical scores in each of the areas of Teaching, Research, and Service is provided below.

Determining quantitative scores

1. Teaching – The teaching score is in the range of 0-5 using the following point breakdown.

- Teaching reflection (20%) – Instructors will write a reflection on/interpretation of qualitative assessments of their teaching (150-200 words) and self-assign points (out of 100). The purpose of the teaching reflection is 1) to take the time to thoughtfully consider how faculty teach and identify possible areas of improvement, and 2) to include qualitative aspects of teaching in an evaluation that are not captured fully by tallying up teaching activities or through FCQ scores.
- FCQ scores (30%) – The Department of Chemistry & Biochemistry identified the FCQ questions that most closely indicate *quality of instruction by the instructor teaching the course* are provided by questions #3, 4, 7, 9, 10, and 11. Only the points from these questions are included in the teaching score. Each question has a 20% weight on the FCQ score except for questions #7 and #11, which both have a 10% weight. The 10% weight on these questions was chosen because both evaluate a similar aspect of teaching. FCQ scores are included in the teaching score as a weighted average of 50% per course taught and 50% per student taught. This was implemented to more fairly compare small upper-division classes and large introductory courses, since these types of courses often receive markedly different FCQ scores. The FCQ questions included in the AMRES are:
 - Q3: Assessments clearly related to course content
 - Q4: Course afforded increase in knowledge, skills, subject understanding
 - Q7: Instructor explained course ideas in clear and understandable manner
 - Q9: Instructor demonstrated interest in student learning
 - Q10: Instructor demonstrated respect for and professional treatment of all students
 - Q11: Instructor communicated effectively with students about the course.
- Teaching activities (50%) – Teaching activities are divided into two main categories: 1) Primary points, and 2) Secondary points. Primary points constitute the activities identified by the Department as necessary for *meeting expectations for teaching in the Department of Chemistry & Biochemistry*.
- Meeting expectations for teaching – The baseline for meeting expectations for teaching requires that faculty perform all the following “primary point” activities in each course taught:
 - Attending scheduled course meeting periods
 - Providing syllabi that describe course details/regulations
 - Grading and returning student assessments in a timely fashion

- Holding weekly office hours
- Presenting course goals/learning objectives to students
- AMRES teaching activities – The following table shows the points accumulated for performing various teaching activities

| AMRES Teaching Activity | Points |
|---|---------------|
| Primary Points | |
| Attending scheduled course meeting periods | 10 |
| Providing syllabus that describes course details/regulations | 3 |
| Grading and returning student assessments in a timely fashion | 4 |
| Holding weekly office hours | 2 |
| Presenting course goals/learning objectives to students | 1 |
| Secondary Points | |
| Posting the course syllabus on Canvas | 2 |
| Dynamically communicating an updated syllabus/schedule with students | 2 |
| Utilizing classroom technology | 2 |
| Providing course material to UCCS Book store and/or Excel Science Center | 1 |
| Grading/returning at least one assessment before census date | 4 |
| Posting lecture notes/slides/reading material to Canvas prior to class period | 8 |
| Recording and posting podcasts to Canvas | 6 |
| Posting lecture recordings to Canvas | 6 |
| Posting announcements to Canvas regarding student questions, topics, <i>etc.</i> | 2 |
| Providing answer keys for quizzes, tests, problem sets <i>etc.</i> | 2 |
| Writing/crafting original student assessments (e.g., exams, quizzes, <i>etc.</i>) | 4 |
| Grading student assessments using a clearly communicated rubric/grading guide | 2 |
| Managing student graders or teaching assistants | 2 |
| Using electronic audience response system (e.g. clickers) in course | 2 |
| Providing feedback on graded assessments for student improvement | 2 |
| Managing student discussions in course | 2 |
| Regrading of students' assessments based on their feedback | 2 |
| Developing and grading higher level/greater difficulty graduate student assessments | 3 |
| Answering student emails within one business day | 4 |
| Preparing materials for a laboratory course prior to scheduled laboratory period | 4 |
| Giving Starfish alerts | 2 |
| Giving Starfish Kudos | 2 |
| Incorporating active learning activities in course material | 4 |
| Interacting with students during active learning activities | 4 |
| Utilizing peer leaders in the classroom | 4 |
| Administering mid-semester evaluations | 2 |

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|---|----------|
| Discussing results of mid-semester evaluations with students | 2 |
| Incorporating mid-semester feedback into structure of <i>current</i> course | 2 |
| Administering pre- and post-course evaluations | 2 |
| Incorporating post-course feedback (survey and/or FCQ) into future courses | 2 |
| Significantly revising a course (traditional, hybrid, or online) | 0-10 |
| Developing a new course | 0-20 |
| Incorporating Open Educational Resources (OER) into course | 0-10 |
| Performing an unreciprocated Guest Lecture | 3 |
| Cross-referencing language and/or material between parallel lecture and lab sections | 2 |
| Interrelating chemistry sub-disciplines within course curriculum | 2 |
| Major contribution to published textbook | 0-50 |
| Minor contribution to published textbook | 0-20 |
| Utilizing peer observation in your classroom | 8*Number |
| Actively observing a peer in their classroom | 8*Number |
| Crafting a letter reporting results of peer evaluation | 1*Number |
| Meeting post-observation to discuss observer feedback | 2*Number |
| Adopting new teaching methods based on peer evaluation feedback | 2 |
| Assessing honor student activities in a course | 2 |
| Choosing/evaluating new textbooks or laboratory manuals for course adoption | 2 |
| Creating original textbooks or laboratory manuals | 0-20 |
| Mentoring students in independent research/projects | 2 |
| Mentoring honors thesis students | 2 |
| Crafting written research-related documents alongside students | 0.25 |
| Crafting presentations (oral and poster) alongside students | 0.25 |
| Mentoring students on career goals/plans | 0.25 |
| Participating in an on-campus teaching workshop/activity/conference | 5 |
| Participating in a national/international teaching workshop/activity | 10 |
| Organizing/facilitating a teaching workshop/activity/conference | 20 |
| Earning an FRC teaching badge | 10 |
| Acting as an FRC teaching fellow | 10 |
| Being honored with a college teaching award | 10 |
| Being honored with a campus teaching award | 20 |
| Being honored with a regional or national teaching award | 30 |
| Being honored with a conference presentation award (<i>e.g.</i> , best poster award) | 5 |

- The Teaching Point Curve is used to convert accumulated teaching activity points into a Teaching Activities Score to be used for the Total Teaching Score. The maximum value of the curve (see Figure 1) is based on how many primary points the instructor receives. If the instructor does not receive all primary (meeting expectations) points, it is not possible for them to receive a 5/5 for their full teaching score no matter how many secondary points they earn. Since teaching points

are 50% of the total teaching score, the curve has a maximum of 2.5 points for instructors that complete all primary activities.

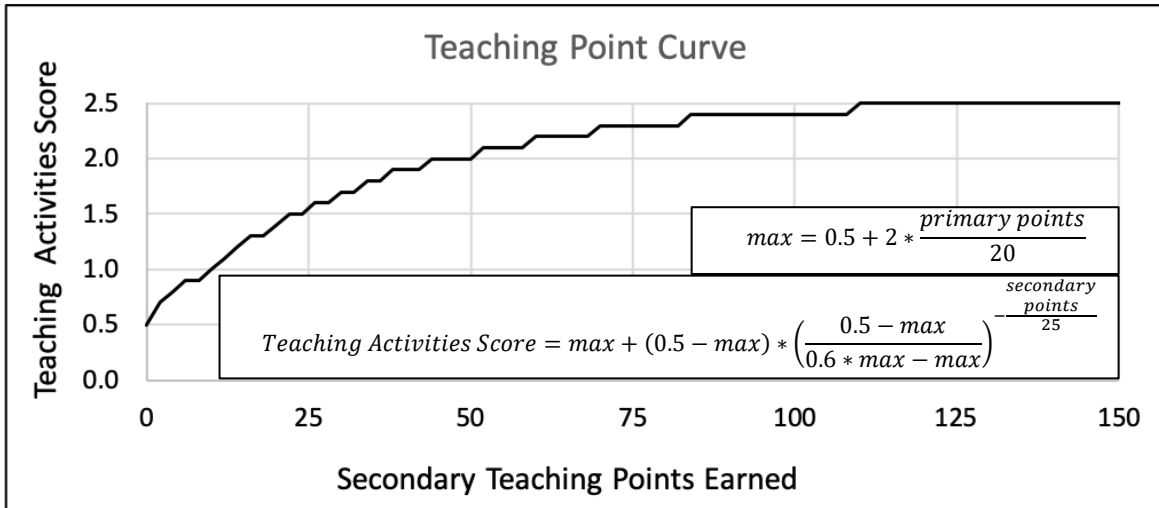


Figure 1: Equation and plot of the teaching point curve used to calculate the teaching activities score based on secondary teaching points earned in the AMRES

2. Research – The research score is in the range of 0-5 using the following point breakdown.

- Meeting expectations for research – The score range associated with meeting expectations in the area of Research is from 2.5 to 3.5 on a 5 point scale. Owing to the unique nature of each faculty member’s research, there is not a universal list of activities that must be completed in order to achieve a score corresponding with “meeting expectations” in the area of research. Rather, such a score can be achieved through any combination of the below outlined Research activities.
- AMRES research activities – The following table shows the points accumulated for performing various research activities

| AMRES Research Activity | Points |
|--|---------------|
| Accepted refereed research manuscript with student co-authors | 10 |
| Accepted refereed research manuscript without student co-authors | 8 |
| Accepted refereed research review/short communication with student co-authors | 8 |
| Accepted refereed research review/short communication without student co-authors | 6 |
| Submitted research manuscript with student co-authors | 5 |
| Submitted research manuscript without student co-authors | 4 |
| Bonus points for accepted manuscripts with UCCS faculty/staff co-authors | 2 |
| Bonus points for accepted manuscripts with non-UCCS faculty/staff co-authors | 1 |
| Bonus points based on impact factor of journal | Impact factor |
| Invited presentation at major meeting | 4 |
| Peer-reviewed presentations (talks or posters) at meetings | 3 |
| Non-peer reviewed presentations (talks or posters), e.g., CSURF, MLRD, etc. | 1 |

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|------------------------------------|---|
| 1st external grant funded | 10 for first ≤\$50K + 1 for each additional \$50K |
| 2nd external grant funded | |
| 3rd external grant funded | |
| External grant proposal submitted | 4 |
| Internal grant funded (CRCW, etc.) | 3 |
| Internal grant proposal submitted | 2 |
| Student/faculty research award | 1 |
| Research students | 1 |
| New facilities development | 2 |

- The research score is determined based on points earned in the AMRES. The curve used to convert points earned into the research score is shown in Figure 2.

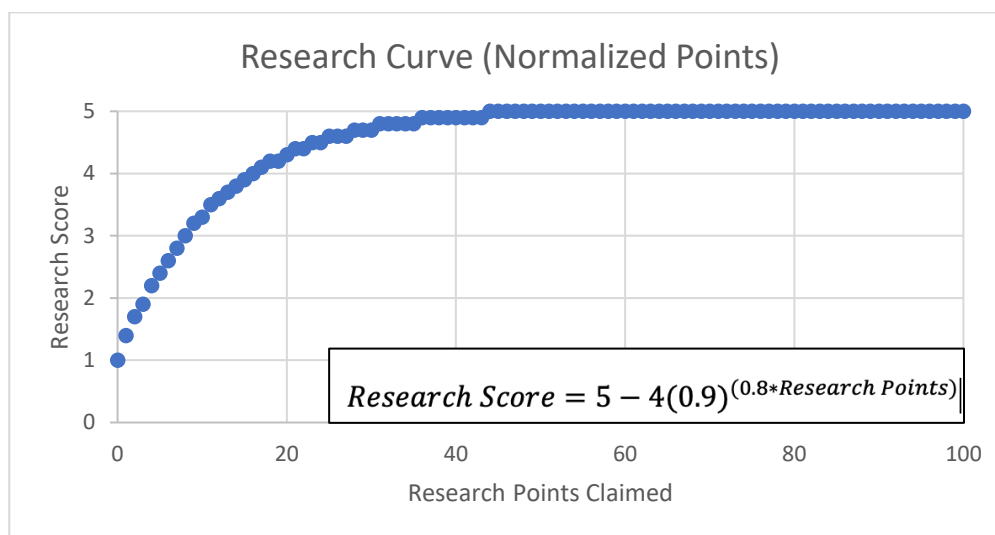


Figure 2: Equation and plot of the research point curve used to calculate the research score.

3. Service – The service score is in the range of 0-5 using the following point breakdown.

- Meeting expectations for service – The score range associated with meeting expectations in the area of Service is from 2.5 to 3.5 on a 5 point scale. Owing to the different nature between service expectations of Instructor Track Faculty (ITF) and Tenure Track Faculty (TTF), the activities required to achieve a score within this range differ between ITF and TTF. For ITF, a service score corresponding with “meeting expectations” is achieved by receiving full points for “departmental participation each semester”. For TTF, only claiming “departmental participation each semester” will receive a score corresponding with “below expectations,” while scores corresponding with “meeting expectations” can be achieved through any combination of additional activities.
- AMRES activities – The following table shows the points accumulated for performing various service activities

| AMRES Activity | Points |
|--|--------|
| Departmental participation each semester | 2 |
| Major work committee (>8 hours per semester) | 4 |

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|--|--|
| Chair of major work committee | 2 |
| Search committee | 2 |
| Chair of search committee | 2 |
| Attend and provide feedback on departmental interviews | 1 |
| Professional service (review of manuscripts, proposals, etc.) | 2 for first review + 1 for each subsequent review |
| Minor work committee (<8 hours per semester) | 2 |
| Chair of minor work committee | 2 |
| Primary unit committee | 2 |
| Chair of primary unit committee | 2 |
| Instrument maintenance | 2 |
| Establishing internship | 1 |
| Mentoring activities | 1 |
| Advising, orientation, majors/minors fair, etc. | 1 |
| Open house, awards ceremony, or other event participation | 1 |
| Participation at invited local meeting | 1 |
| Letters of recommendation (minimum 5 letters to accrue points) | 1 per 5 letters |
| Community service (science fair, Science Olympiad, community outreach, etc.) | 1 |
| Leadership role in outreach associations | 2 |
| Organizing outreach symposium/workshop | 2 |
| Alumni outreach initiatives | 1 |

- The service score is determined differently depending on if the faculty member is TTF or ITF due to the different workloads (20% for most TTF and 5% for most ITF members). The curve used to convert points earned into the research score is shown in Figure 3 for TTF and Figure 4 for ITF.

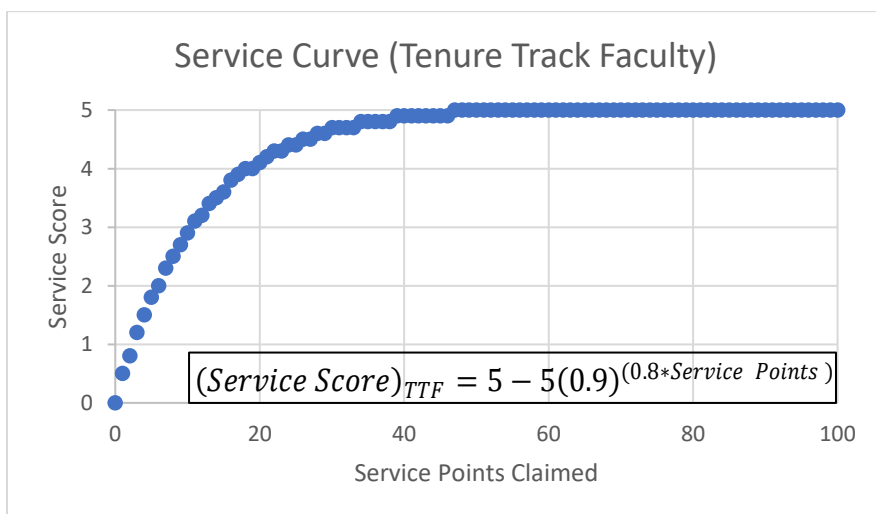


Figure 3: Equation and plot of the service point curve used to calculate the service for TTF.

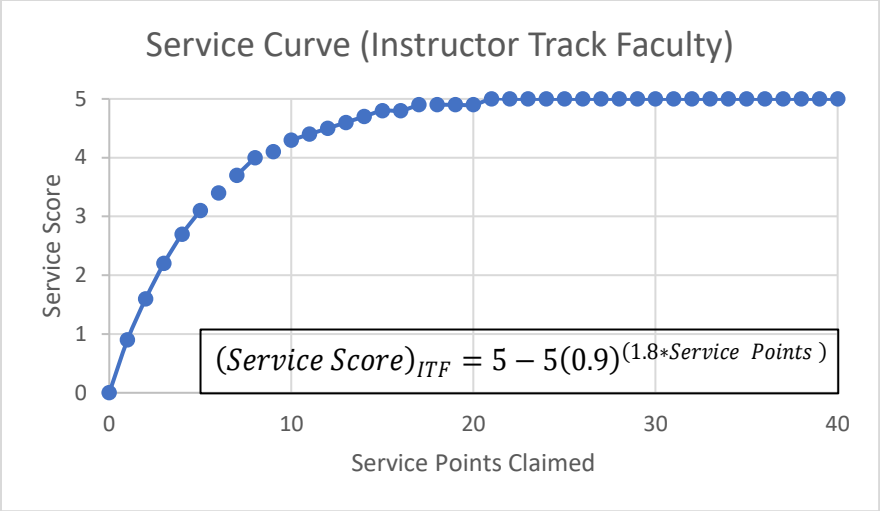


Figure 4: Equation and plot of the service point curve used to calculate the service activities score for ITF.