

# Materials Provided to Faculty Candidates & Evaluation Rubrics for Renewable Term Appointment Positions

James Madison University, Department of Chemistry and Biochemistry, Fall 2021

Link to website: <http://www.jmu.edu/chemistry/jobs>

Link to narrative about the search: [ChemRxiv Link](#)

## 1. Rubric used to evaluate candidate cover letters.

Rubrics were not provided to candidates during the 2021 search; they will be refined and provided to candidates during future searches.

	3 (acceptable)	1 (limited)	0 (not addressed)
<b>DEI knowledge</b>	Shows knowledge of DEI issues, some understanding of the challenges faced by underrepresented individuals, acknowledges the importance of DEI.	Only defines diversity in a single dimension; does not look at diversity broadly (nationalities, race, ethnicity, gender, ableism, etc.).	<b>No knowledge or awareness about DEI issues concerning gender, ethnicity, race, sexual orientation, disabilities, or cultural differences.</b>
<b>DEI commitment</b>	Demonstrates strong interest in contributing to promoting DEI in teaching, research, or service; describes promoting DEI as a core value.	Vaguely states commitment without providing specifics.	<b>Not addressed or does not feel personal responsibility for helping to create an equitable and inclusive environment.</b>
<b>DEI experience</b>	Strong commitment through past participation.	Minimal evidence of past participation.	Did not discuss any prior work in DEI.
<b>Undergraduate commitment</b>	Talks specifically about working with undergraduates.	References undergraduates in vague ways.	Talks about graduate students or does not mention undergraduates.
<b>Lower division interest</b>	Focuses on teaching / potential to teach in lower division classes and labs.	Talks about undergraduate courses across the curriculum or vague about the level.	Not addressed or only talks about specialized courses.
<b>Prior teaching experience</b>	Experience teaching (own class or working as a graduate student instructor), involved in preparing future faculty or other professional development activities.	Taught occasional classes or involved in other educational experience.	Not addressed or no experience.

If candidates did not address **their commitment to contributing to an equitable and inclusive environment**, they were not invited to submit materials for further review.

## 2. Instructions on submitting an anonymized research and teaching & diversity statements.

These instructions were sent to candidates who were successful during the first round of review.

The JMU Chemistry & Biochemistry search committee reviewed your preliminary application and we want to know more! For further consideration by the committee, we would like you to submit a single statement that integrates your philosophy on teaching and diversity.

For the first round of review, we used a blinded application process to mitigate unconscious biases that might compromise a fair assessment of the strengths of your application. Non-anonymous information was administratively separated before documents were seen by the search committee.

We will continue to use a blinded application process for this round of review. We ask you to submit an **anonymized** statement. To be clear, “anonymized” does not mean that you obscure the specific content of your work and plans. Rather, **you omit your name, mentors’ names, institution names, and journal names so that the search committee can focus on the merit of your application.** Examples are provided in the attachments. During this round, the committee will only review the statement that you provide.

We have attached guidelines to help you prepare an integrated statement that aligns with our search criteria and our Diversity Statement.

- Your statement should be sent to [search email] with the subject line “*Teaching / diversity statement for the lecturer position.*”
- Your statement should include the word ‘*teaching*’ in the filename.
- Only your email should contain identifying information. All identifying information should be removed from your teaching and diversity statement.
- Materials should be submitted by [date]. If you need additional time, contact me at your earliest convenience.

### **ANONYMIZED INTEGRATED TEACHING / DIVERSITY STATEMENT**

Lecturers at JMU primarily teach service courses with 60-200 learners from diverse majors. Our service courses include General Chemistry I and II (CHEM 131/132); Concepts of Chemistry (one-semester health professions, CHEM 120); Physics, Chemistry and the Human Experience (general education, ISCI 101); Organic Chemistry I and II (CHEM 241/242); Concepts of Biochemistry (CHEM 260); and Biochemistry I (CHEM 361). All faculty are involved in laboratory instruction in our general chemistry (CHEM 131L/132L), organic chemistry (CHEM 241L/242L), biochemistry (CHEM 260L) lab programs. Your statement should focus on these learning environments. If you feel that you are particularly well qualified to assist with other courses (e.g. analytical, inorganic, or physical), you should also address that in your statement. A list of existing course offerings can be found here: <https://bit.ly/3AQPQbk>. **Please describe the equitable and inclusive learning environment that you will create for a diverse group of JMU undergraduates in the classroom and in other learning spaces.**

Your statement should be no longer than 1,200 words, excluding references. Your filename should include the word ‘teaching’. **Omit your name, mentors’ names, and institution names so that the search committee can focus on the merit of your application.**

The search committee will evaluate your statement along these dimensions.

- How well does the candidate describe how they will create an equitable learning environment in service classes and laboratories? How well does the candidate make use of their prior experiences and personal attributes to meet this goal? *To maintain anonymity, do not include names of people involved in these experiences or institutions where you had these experiences or training.*
- What goals does the candidate have for their students? How well does the candidate define and measure student success?
- How well does the candidate demonstrate a knowledge and awareness of Diversity, Equity, and Inclusion (DEI) issues in higher education? How well does the candidate describe a plan to promote DEI as a JMU faculty member through their teaching, research, and service?
- How well does the candidate discuss approaches to effectively engage students in service classes and laboratories? To what extent does the candidate consider the impact of these approaches on learners with different backgrounds, expectations, and needs?
- How does the candidate plan to continually develop as a teacher?
- What plans does the candidate have for scholarship and service? How do these plans fit into or expand existing department initiatives? *Existing initiatives include - but are not limited to - advising, assessment, course coordination, enhancing student success, IDEAS (Inclusion, Diversity, Equity, And Social justice), K-12 teacher education, laboratory development, learning assistant training, outreach, retention.*

You should write your **anonymized** statement like this.

- As a graduate student, I was a guest lecturer in General Chemistry II, where I implemented Peer-Led Team Learning techniques that I learned through a professional development program.

You should **avoid writing** your statement like this non-anonymized statement.

- As a participant in the University of Harrisonburg workshop called *How to be an Amazing Teacher*, I learned about Peer-Led Team Learning, which I used when I was a guest lecturer in General Chemistry II for *Professor Nobel Laureate at Number One University*.

### **JMU Department of Chemistry and Biochemistry Diversity Statement**

Diversity, equity, and inclusion are important to our department. You've made it to this stage in the application process because you've indicated that this is also important to you. Since we've asked you to share your values with us, we'd like to share our values with you.

*The Chemistry and Biochemistry Department is committed to an inclusive environment that celebrates the diversity of its community. We view our opportunity to teach, serve, and interact with many, varied individuals to be a privilege. We will strive to reach, support, and show respect to every person and we expect our community will do the same. We affirm that the lives and experiences of Black, Indigenous, and People of Color matter, and that we as a community, and as individuals, have a moral obligation to acknowledge, condemn and change hurtful behaviors and structures. We pledge to uphold these values through action, active listening, and accountability to our BIPOC community.*

You can learn more about the Department's commitment towards inclusivity, diversity, equity, and antiracism in our [5-year plan](#).

### 3. Rubric used to evaluate anonymized teaching and diversity statements.

Rubrics were not provided to candidates during the 2021 search; they will be refined and provided to candidates during future searches.

	4-3	2	1-0
<b>Equitable learning / DEI plans</b>	Clear and detailed plans for making learning environments more equitable in service courses and labs; detailed plans for advancing DEI.	Some ideas about promoting equity in the classroom (service classes and labs) but lacks a knowledge base, interest, or details; some ideas about advancing DEI but not much detail.	Does not present a plan to create a more equitable learning environment. (Give a 0.)
<b>DEI awareness</b>	Clear and deep understanding of dimensions of DEI in higher education.	Some evidence of awareness but does not demonstrate significant knowledge base or deep interest.	Little to no evidence of awareness of DEI issues in higher education or their field.
<b>Student success</b>	Candidate describes concrete goals for their students. They identify what student success looks like and have concrete plans to achieve their goals. Has appropriate goals for different populations of students (e.g. ISCI vs. GenChem /Org/Biochem; i.e. they meet the students where they are).	Provides generic goals for students, e.g. students will learn and do well on tests.	Learning goals described for students are vague or are framed solely in instructor-centered terms.
<b>Student engagement</b>	Provides specific examples of how they will engage students in different teaching environments.	Provides specific examples of how they will engage students in limited learning environments (e.g. just classroom or just lab).	Provides generic or no examples of how they plan to effectively engage students.
<b>Prior experience</b>	Brings in concrete examples of prior teaching and reflects on the implications for future teaching. (Teaching experiences should be broadly defined.)	Discusses specific examples from prior teaching experiences.	Mentions prior teaching experiences but is vague and does not connect prior experiences to future plans.
<b>Scholarship &amp; Service</b>	Has a developed idea that integrates with existing department initiatives or adds something new (and valuable to the department)	Provides generic ideas, but does not explain how they may integrate into current initiatives or how they are novel	Mentioned but vague ideas or no specific plans
<b>Development plan</b>	Has a concrete plan to stay up to date or improve their teaching practice.	Has a vague plan or has expressed generic ideas like 'the need to stay current.'	Does not discuss their development as a teacher.
<b>Departmental Needs</b>	Content expert and can teach in [areas of need].	Can teach it if they have too; content knowledgeable or has experience in [areas of need].	Teaching interests are outside of [areas of need].

## 4. Phone interview questions provided to candidates.

### 1. Why did you apply to JMU? What is attractive about our environment?

*JMU Chemistry and Biochemistry is a unique environment. We are not an R1 graduate program, nor are we a small, undergraduate only liberal arts college. We are a research-intensive BS-level program at a large institution. JMU is moving to R2 status, but our department is committed to undergraduate education.*

- Learn more about the JMU experience <https://www.jmu.edu/humanresources/recruitment/recruiting/applicant/index.shtml>

### 2. One of our challenges in our General Chemistry program is that our students come in with different levels of preparation. Every semester, we work with underprepared students. How would you support these students in your General Chemistry class?

*At JMU, all STEM majors and most pre-professional health majors take CHEM 131 & CHEM 132 (General Chemistry I & II). While a few very well-prepared students take an accelerated version of this course, most students enroll in a section of 120-150 students. We support students through drop in hours with faculty, Peer-Assisted Study Sessions (PASS), and tutoring through the Science & Math Learning Center and in-house free tutors.*

### 3. Which classes do you have experience teaching? Which classes (lectures and labs) would you be most interested in teaching? Which other courses could you teach? How will you create an inclusive environment in a large-enrollment course?

*We have teaching needs in analytical chemistry, inorganic chemistry, and our service courses (Concepts of Chemistry, General Chemistry, Organic Chemistry, Biochemistry, and ISCI). Most faculty teach at least one large-enrollment course. A list of courses taught by faculty in our department can be found here <https://bit.ly/3AQPQbk>*

*Here are the typical class sizes for our lecture courses.*

- *Concepts of Chemistry, General Chemistry I & II: 120-160 students*
- *Organic Chemistry I & II, Biochemistry: 80-120 students*
- *ISCI 101 - Physics, Chemistry, and the Human Experience (General Education): 40-60 students*
- *Analytical Chemistry, Instrumental Analysis, Inorganic Chemistry I, Physical Chemistry I, Literature & Seminar I & II: 30-60 students*
- *Biochemistry II, Inorganic Chemistry II, Physical Chemistry II, Biophysical Chemistry, electives: 5-25 students*

### 4. What are your plans for scholarship and service in the department? How will these plans fit into existing department initiatives?

*Although it can be negotiated, most lecturers in the department have the following distribution of responsibilities: 80% teaching, 10% scholarship, and 10% service. While lecture and laboratory teaching is a lecturer's primary responsibility, this position has scholarship and service components. We would like you to elaborate on your vision of scholarship and service and describe how this might interface with existing department initiatives. These initiatives include - but are not limited to - advising, assessment, course coordination, enhancing student success, IDEAS (Inclusion, Diversity, Equity, And Social Justice), K-12 teacher education, laboratory development, learning assistant training, outreach, retention.*

**5. What are your plans to continually develop as a teacher? What are your long term professional goals? How do you see your career ten years from now? <sup>1</sup>**

*Our department is committed to supporting the development of faculty as teachers-scholars. We have extensive professional development opportunities on campus through our Center for Faculty Innovation (CFI) <https://www.jmu.edu/cfi/index.shtml>. The department encourages lecturers to be active in professional societies, attend meetings in their field, and present on their teaching and scholarship.*

**6. How will you benefit from being a part of a cohort hire? What will you bring to the cohort?**

*The Department of Chemistry and Biochemistry is hiring a cohort of faculty that we hope will develop together, support each other, and support the department's mission to improve diversity, equity, and inclusion in our program. We'd like you to reflect on how being part of a cohort could impact your teaching, scholarship, and overall professional development.*

**7. Do you have any questions for us?**

*Feel free to ask us anything.*

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<sup>1</sup> One of our candidates pointed out that this question was ageist; it was discriminatory to chemists who may be closer to retirement. This language should be refined to be less biased.

## 5. Teaching demonstration guidelines provided to candidates.

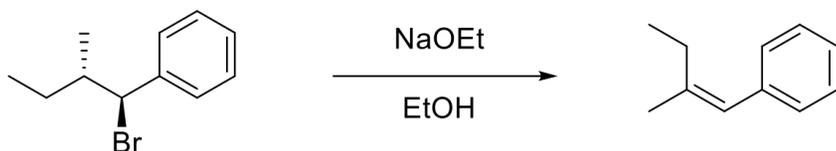
### Teaching Demonstration

For your teaching demonstration, you will present a 45-minute class. Your presentation should reflect the classroom environment you would want to create when you're teaching this topic. The faculty and students in the audience will participate in any way you prefer. If you have special needs (model kits / education technology / accessibility) please let us know so we can accommodate you. We will use your talk to further evaluate how you teach and coach undergraduates as well as your commitment to fostering a diverse and inclusive learning environment.

We have two scenarios for you to choose from based on your primary teaching interest. You should clearly articulate your student learning objectives in your presentation.

**General Chemistry - polar molecules.** You are a lecturer in General Chemistry I. You recently introduced students to bond polarity and the process of identifying molecular geometry and shape. You notice that your students have a hard time with the concept of polarity and have trouble connecting these ideas to predict whether a molecule is polar or nonpolar.

**Organic Chemistry - Newman projections and the E2 mechanism.** You are a lecturer in Organic Chemistry I. Earlier in the semester, you introduced Newman projections. You just introduced the E2 mechanism. You notice that your students are struggling with 3-D visualization, Newman projections, and connecting these ideas so that they can predict the E/Z configuration of the product of an E2 reaction. You should use this reaction in your demonstration.



### Teaching Space

You will give your presentation in a conference style room. There will be a podium computer, screen, and whiteboard. We would prefer for you to use the JMU computer (PC) so we can Zoom broadcast to students and faculty who cannot attend your seminar in person. If you need to use your own computer because of specialized software, let us know what type of connection you require.

[Several views of the teaching space were provided.]