Subject: Monday Matters: Student Success Initiatives in the Department of Chemistry and Biochemistry

Date: Monday, April 18, 2022 at 8:00:34 AM Eastern Daylight Time

From: Dodge, Gail **To:** Dodge, Gail

CC: Bayse, Craig A., Whitfield, Tiffany L.

Dear Colleagues:

I have offered Department Chairs the opportunity to write a Monday Matters message focusing on initiatives in their departments. I think it is important for faculty across the college to know about the great things going on in other departments, with the hope that new ideas will spread and expand. Today's message is from Craig Bayse, Chair the Department of Chemistry and Biochemistry.

As the Chemistry & Biochemistry Department settles into our brand-new building, we are implementing several initiatives geared toward enhancing the undergraduate majors' experience and improving success of students in our general education courses. This effort centers around welcoming students to the departmental community to establish a positive and supportive environment; engaging students on their goals and individual challenges; helping students obtain the tools they need for success; and informing them of future careers and opportunities to gain experience through research and internships.

Chemistry Success Center (CSC): The New Chemistry Building was designed with all first-year courses localized on the first floor. The CSC is staffed by our 1st and 2nd year course instructors, graduate teaching assistants, and MSRC tutors. While students in designated courses can meet with their instructors or TAs for office hours, they can also ask questions of anyone on duty. Thanks to the open design concepts of the building, students passing by the CSC can see their peers studying and working with instructors and tutors. This concept is intended to lower the barrier for students to walk in and ask for help. The CSC is also offering occasional student success workshops organized by the faculty and open to all students.

Curriculum Redesign: We are modifying our curriculum to welcome students into the major in their first semester to make sure they have the opportunity to fully benefit from the experiences the department has to offer. This Fall, incoming majors will take a new G course (CHEM 160G) that covers the required information literacy coursework, but also reinforces college skills (time management, forming effective study groups, interacting with faculty, etc.) in an active learning environment and engages students in career exploration and the real-world applications of the chemical sciences. Students will investigate the spectrum of job opportunities in chemistry and biochemistry, whether it be a job or graduate or professional school after graduation, through the American Chemical Society's extensive database of potential chemistry/biochemistry jobs, guest speakers, and field trips to local industry. The course will provide students resources to find internships and research opportunities that will help them reach their career goals. Students will also be encouraged to engage with other students by joining the ACS Student Affiliates student group.

Research Experience: Opportunities for students to participate in research in a faculty lab start in their freshman year. Through this experience, students gain hands-on experience with instrumentation and possible co-authorship on journal articles that will give them an advantage in the job market or on graduate school applications. The department pays for students who opt to participate in the Senior Thesis program to present their work at an American Chemical Society conference.

Intentional Advising: Advisors will begin engaging with students on an individual basis starting prior to the start of their college career. Our intent is for advisors to act more as academic mentors and develop positive, supportive interactions with their advisees to build trust with students and act as an open resource to assist

majors. Since our students have different backgrounds, strengths, interests, and challenges, advisor engagement with students on a personal level allows them to provide guidance based on individual needs and engage students in honest conversations about what they can do for themselves to be successful. As part of this process, advisors will discuss expectations for college life, study habits, positive attitudes toward course work, and potential careers. They will work with students to develop individual degree plans focused on timely graduation.

Through these initiatives, we hope to build strong, positive, long-lasting relationships with our majors and provide them with a solid foundation for a successful career after graduation. None of this would be possible without our dedicated faculty, staff, and graduate teaching assistants. I appreciate their hard work and commitment as we embark on this new chapter for our department.

If you would like more details about these initiatives, please contact Craig Bayse.

Best Regards, Gail

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