



June 11, 2024

Dear Kevin, Wendy, and Lexi,

Thank you for taking part in this inaugural year of the Department & Program Review (DPR). The focus of the DPR redesign was to simplify the compilation process, to highlight successes and voice critical needs, and to connect the College plan to a department or program's vision. Your engagement in this process is important, and we applaud the time and effort you spent reflecting on your program and analyzing the work you are doing.

## Commendations

We enjoyed learning about project-based learning activities in your classes and about the potential for new software and technology to engage students. We were pleased to learn about your exploration of BILAPOC and other data to identify trends and address systematic inequities. One highlight was hearing about efforts in Physics courses to create a classroom environment where students feel comfortable and safe to ask questions. Further, we recognized activities where Physics students are asked to reframe assumptions are consistent with best practices in teaching metacognition. These self-reflective practices empower students by increasing their aptitude for problem solving.

Engineering students faced unique challenges when ENGR 102 was canceled in the middle of Winter 2024, but the chair and faculty members provided alternatives in the spring and summer to help students stay on track. Further, there are discussions about how emeritus professor Bruce Emerson can provide some mentoring in the upcoming year that can help address the problem in the long term.

## Recommendations

At our DPR meeting, we requested additional information that would help you to refine your goals and align them with your and the College's strategic priorities.

In our discussion, we requested that you rewrite your goals in ways that make clear how students will be empowered or engaged and in ways that link your goals to the College's strategic plan. In follow-up discussions, we've talked about plans for ENGR 102, astronomy, and 100-level physics. Please draw upon those conversations as you craft your goals. We request a rewrite of the goals in a revised report to be submitted no later than Friday, September 20, 2024. An earlier submission is most welcome.

One of your department members completed an anti-racist pedagogy workshop and is employing new skills to increase engagement among all students. What are some things you can do as a group to address the needs of minoritized students?

Similarly, you have noted that students who identify as female are successful in second year coursework, "once they get to this level." What can you do as a group to increase the chances of success in first-year courses for students who identify as women?

You expressed a desire to rekindle your relationship with OSU—Cascades to align program requirements. In a recent meeting, OSU-C instructional administrators confirmed that Engineering ranks among the largest groups that transfer from COCC. OSU-C is hiring a mechanical engineer, which may be an opportunity for us as well. We encourage you to develop and maintain this relationship to ease transfer for engineering students and explore shared opportunities to connect students with professional development, advising, and employment opportunities.

You've acquired 3D printers. Might a long-term goal be creating a makerspace? Someone might investigate how to create one or whether to partner with MATC to do so. There may be grants to support such an idea. Spaces that unlock students' creativity and curiosity generate excitement for exploring and learning, which may draw more students to our STEM programs.

The OPIRC grant in conjunction with NSF and U of Oregon sets out a pathway from COCC to UO for future industry and lab researchers, but it also includes chances for non-UO bound students to interface with UO's Alliance for Diversity in Science and Engineering, take part in industry site visits, and attend talks by industry guest speakers. Please consider what OPIRC activities you can support for Physics and Engineering students.

## Challenges

We made note of the challenges described in your DPR report, as well. While the report itself was short on the specifics and details of these challenges, our response meeting provided the space to ask questions and better understand some of the head winds ENGR and PH courses have experienced since its last DPR. We understand that most of these challenges are related to the enrollment decline caused by the pandemic, and we hope that recent, positive enrollment trends for the College translate to similar trends for your discipline. We also recommend re-evaluating the dual enrollment options and K-12 partnerships for ENGR and PH classes, as these can provide enrollment pathways into your disciplines for students thinking about enrolling at COCC. Similarly, participation in the OPIRC grant provides current students with opportunities to connect with working scientists, participate in STEM-focused university events, and to engage in undergraduate research. These opportunities — which can and should be used in your marketing materials — demonstrate to prospective students that ENGR and PH courses are directly connected to their career and educational goals, and the clarity of that connection often helps to drive enrollment in other disciplines at the College.

Thank you for your ongoing dedication to student readiness. Together, we can build on our achievements, address the challenges ahead, and meet the evolving needs of our students.

If you have any questions or need further clarification, please reach out. **We look forward to receiving your revised report (goals section) no later than September 20**, as noted earlier, and we also look forward to working collaboratively to enhance the quality and impact of the Physics and Engineering programs.

Sincerely yours,

Annemarie E. Hamlin Vice President of Academic Affairs

Annemarie & Hambin

Tony Russell Instructional Dean Nick Recktenwald
Director of Assessment and Curriculum