

Faculty Personnel Committee Feedback Notes, 2019-2020
Jordan C. Hanson, Department of Physics and Astronomy

INTRODUCTION:

The Faculty Personnel Committee's purpose at this time is to provide you with our response to what you have presented to us about your performance in the most important area in faculty evaluation as specified in the Faculty Handbook, Part III: Section B.4: teaching. These notes represent for you and for FPC a summary record of the points and issues the committee considered when reviewing your materials. We hope our comments enable you to evaluate your progress towards tenure and promotion and to plan your future PEGPs. As stated in the *Faculty Handbook*, "Individuals should recognize that...a good progress report from FPC, or even a succession of positive reports, will not necessarily lead to tenure and promotion or guaranteed retention, since other considerations—including departmental recommendations, administrative considerations, etc.—also carry weight in personnel matters."

STATUS

Jordan, you are an Assistant Professor in the department of Physics and Astronomy, and this is your third year in the tenure-track at Whittier College. This PEGP submission is a 3rd year update focused solely on teaching.

MATERIALS SUBMITTED

You submitted a 23-page PEGP and supporting materials as follows. Syllabi and course evaluations of courses you have taught since your last PEGP submission (SPRING 2019: PHYS135B-01 & PHYS180-02; JANTERM 2019: COSC390; SPRING 2018: PHYS 306/COSC330). Syllabi of courses you are teaching during the current semester (FALL 2019: INTD-255, PHYS150-2, PHYS 135A-01). Miscellaneous items, sample student work and feedback; unsolicited correspondence from students; Artemis handouts.

FPC also received a letter from the chair of your department, Seamus Lagan, which is now included in your file.

DEPARTMENT LETTER

Your department is very pleased with your work. They state that you are meeting expectations for teaching and engaging students in research, and are thankful for your participation in departmental activities and outreach.

TEACHING:

In response to recommendations and questions by FPC, you described the teaching philosophy presented in your last PEGP submission as "...a beginning, but something that should continue to evolve to serve the students". You explained that you now view teaching physics as being about growth, and that students should leave a class with an improved understanding of physics concepts, measured by the degree to which they can retain, understand and apply the said concepts. As a physics professor, you believe that this growth can be achieved by applying teaching strategies that lead students to advanced topics by building the system of classical physics in their minds through laboratory experimentation and demonstrations of how physics formulae are used to solve problems.

FPC agrees that this is a good beginning to your teaching philosophy, but we would like you to elaborate it and articulate the ways in which, as a physics professor, you fit in this small liberal arts college. For instance, are there things that your physics courses could offer to majors in business, history or music that other disciplines cannot?

In addressing FPC's questions on what you try to achieve as a teacher, and the goals that you set for your students, you distinguished between your courses for majors in physics (PHYS150/180) and the ones you teach to non-majors (PHYS135A/B). For both majors and non-majors' courses, you have three areas of focus: curiosity, improvement of analytical skills and application to society. For your advanced courses, which are geared towards Physics majors, you taught Computer Logic and Digital Circuit Design (PHYS306/COSC330) and Digital Signal Processing (COSC390) and identified the areas of focus as: Mental Discipline, Strength in All phases of Science and Communication.

* FPC was pleased to note that you now have specific learning goals for each area of focus in all your courses - which you matched to the departmental goals - and you have ways by which you evaluated the student learning outcomes.

Thank you, for educating FPC on the instructional strategies that you deploy in your classes, why you use them and from where the strategies originate. You described the strategies as being based on Physics Education Research, and distinguished between classical teaching styles and "research-based content strategies (i.e. Peer Instruction, Just in Time Teaching, and Physics Education Technology)". FPC appreciates your detailed description of how, when and to what end you apply the instructional strategies in the classroom, and how they allow you to adjust the pace and manner of instruction in a given lecture period.

You made a wise decision to adjust your instructional approaches since your last PEGP in order to serve your students better. You slowed the pace of the content, increased the number of "step-by-step examples in class, and included more "traditional lecture content", in the form of "integrated lecture/laboratory formatted classes". FPC applauds you for choosing to use only the strategies that were demonstrably suitable and effective for your students, and for the prudence to abandon the "Just in Time Teaching module" which did not seem to work.

yay. Both the qualitative and quantitative student evaluations of your classes offer clear evidence that your instructional strategies are working. From the qualitative evaluations, one student in PHYS135B said *"the best aspects of this course were the group exercises and labs"*. This sentiment was expressed in different ways by others in this class, PHYS135B, and PHYS180, and is strong evidence that Peer Instruction and Physics Education Technology are winning strategies for your classes. In this vein, FPC would like to encourage you continue to think of ways to diversify activities within a lesson in the classroom, so that students are not jaded by the instructional modules. As you know, several students, in PHYS135B expressed a strong desire, in different ways, for breaks during the class period. For example, one student wrote this, *"Cut class time by 20 minutes or give a 10 minute break"*.

From the quantitative teaching evaluation scores, it is clear that your teaching has improved across the board. As such, FPC concurs with your department, "...the excellent evaluation scores in PHYS180 [and COSC390] indicate that you are very good at engaging students interested in Physics

and Engineering", and that "...the high scores in PHYS135B indicate that Jordan is getting a handle on how to engage non-physics students".

yay!
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Well done! FPC wishes you well, and encourages you to remain vigilant in your teaching as you continue along this path of continuing improvement to teaching excellence.

CONCLUSION:

Jordan, these review notes represent the committee's reflection on your accomplishments in the first and second years of your probationary period. FPC appreciates the work you must have put into the detailed statistical analyses of the numerical scores of your courses. However, we would like you to know that for future submissions, simple summaries of the scores are sufficient.

We hope that you understand that we make these comments in the spirit of helpful candor and that candor among colleagues, while sometimes difficult, is necessary for us to thrive as an intellectual community. In addition, these notes offer recommendations and questions that FPC would like you to consider and to reflect on in your next PEGP. Since you have submitted a third-year PEGP, your next PEGP submission will be your regular fourth-year PEGP submission, due next year, 2020, and should fully cover teaching, scholarship, advising and service.

Please remember to submit a copy of these review notes with your next submission.