

We would like to thank the reviewers for their valuable comments. In this new version of the manuscript we have carefully reviewed the writing to solve the Grammar errors, typos and misprints. The changes are highlighted in bold blue font.

Here are our detailed responses to the reviewers.

Reviewer: 1

In this paper, the authors discuss using hardware and software to assist in teaching courses in Communication Theory. The paper is well-organized, and the study is thorough with a large testing group. However, the paper has a few weaknesses that need to be addressed:

- While authors show the application to Communication Theory, the authors should be encouraged to add content to extend this approach to other areas.

Thank you for the suggestion. In fact, as pointed in the conclusion of the paper, the proposed platform can be utilized in other subjects belonging to the same Degree, as Wireless Communications.

Besides this subject, other possible directions to look are those subjects belonging to the Computer Science degrees where Security and Computer Networks are studied. HackRF can be a powerful device to understand how to sniff and protect the content being transmitted. In fact, the Digital Modulation lab proposed in this paper goes in this direction.

- There is a year break in the student data. The authors need to clarify whether any of the other content in the course changed. Were the instructors the same?

Unfortunately we could not continue with the study during the academic year 2016-2017 due to the unavailability of authors that year, as they could not teach in the subject.

Although it is true that in 2016-2017 some lab sessions were introduced under the proposed platform, as pointed in the experiments section, the theoretical contents of the subject have been the same from 2015 to 2018, which are the years when the marks of the students have been broken down.

- There are spelling and grammatical errors throughout the manuscript.

We have done our best to correct them as well as the typos and misprints.

Reviewer: 2

This paper considers the important aspects of teaching highly theoretical subjects, such as the subject Communication Theory. Usually these subjects don't provide enough time to perform lab sessions requiring high computational skills. Due to the inherent abstract nature of these subjects, students are prone to lose interest and, as a consequence, the mathematical models and their possible applications in real life become harder to

understand. Usually this leads to a final failure in the exams in the majority of such courses.

As authors point out, many Universities try to overcome this situation considering some simulation software such as Simulink, or an equation-based environment such as Matlab. However, using these environments the students lack the practical experience to understand what a wave change means, or what is the consequence of modifying the parameters of the signals, e.g. the sampling frequency, which are important and hard grasping concepts in the subjects such as Communication Theory. The authors point out that using only mathematical models or simulations there is no real perception of what is physically happening to the signals. This is also proven to be true for other subjects.

In this paper the authors try to explain which theoretical aspects, that are difficult for the students to understand, are clarified through the lab exercises using HackRF and GNU Radio, but were less acceptable for the students using only Matlab. However, it would be better to emphasize the differences even more. For example, in the description of every lab project it would be good to see what would be different if the same exercises were done in Mathlab.

When performing evaluation of the results, the number of students included in the study is very important. The number of the included students in the performance evaluation in this study might seem small. However, the number of overall students enrolled in the subject (not only those who were repeating the subject) might have been small in the first place, so this information should be included when interpreting the results.

Thank you for pointing this out. As we started the study during the academic year 2015-2016, we did not have any prior data to compare with. That is why we focused on the students repeating the subject, and thus in the subsequent years we continued in the same direction for the sake of comparability.

Regarding the number of repeating students, it is true that is greatly affected by the number of enrolled students, this being 43 in 2015-2016 (21 repeaters, all completed the survey) and 41 in 2017-2018 (20 repeaters, 15 completed the survey).