

MASTER OF SCIENCE IN PHYSICS EDUCATION AT THE UNIVERSITY OF GUADALAJARA: THE CURRICULAR DESIGN PROCESS

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INTRODUCTION

The need for a postgraduate degree in Physics Education arises from the importance of improving science learning, in particular physics, in students from elementary to high school derived from the analysis of test results such as PISA (OECD, 2019). In addition, training high-level human resources who generate knowledge regarding the teaching-learning process of Physics at any educational level (including undergraduate and postgraduate) is important.

JUSTIFICATION

The problems experienced by contemporary society are complex, their solution and understanding require the articulation of different skills, knowledge, attitudes and values related to science and technology due to the constant progress of these areas. The curricular team, based on this scenario and considering what is stated in the educational model of the University of Guadalajara (Castellanos et al., 2007) about focusing activities on what the student does, decided that the postgraduate training process would be based on the development of skills.

THE CURRICULAR DESIGN PROCESS

For this reason, the work for the curricular design of the Master of Science in Physics Education at the University of Guadalajara was developed through nine phases (Díaz-Barriga, 1990): Formation of a curricular team; Detection of Physics Education needs; Identification of potential demand; Detection of similar programs; Delimitation of the graduate's field of action; Definition of competencies; Identification of knowledge necessary for the professional performance of the graduate; Definition of Learning Units and curriculum plan; Determination of an evaluation plan for the program (internal and external). In this work, the generalities related to the curricular design process of the Master of Science in Physics Education program at the University of Guadalajara are presented. From this process we have obtained a proposal of the program, now we are waiting for the suggestions and approval by the highest government authority at our University, *Consejo General Universitario* (the creation project can be viewed [here](#)).

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