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Chemistry teaching in the new degrees of Agricultural Engineering

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The academic year 2011-12 is the second one implementing Bologna process in ETSI at the subjects of Agricultural Chemistry I and Chemistry II in the new four Degrees: Graduate in Engineering and Agricultural Science, Food Engineering Graduate, Graduate Environmental and engineering Graduate in Biotechnology, for it has been necessary to design and implement new interactive methodologies in the teaching-learning process based on the use of the virtual platform of the UPM, implement new evaluation systems that promote continued participation active student and the development of educational materials to support the subjects of chemistry designed new degrees within the EEES.

In addition to the above actions, an assessment test prior chemistry knowledge has been made to all students who enter into Agricultural Grades, improving laboratory practices and the comparative study of academic obtained by the students of the new grades in the subjects of chemistry during the year 2011-12 compared to the 2010-11 academic year. More than 15,000 data have showed a good correlation between the student's prior knowledge, the level test performed, test scores, the overall success rate of the course and the abandonment of the different degrees.

Academic results show a higher percentage of students enrolled and presented on a greater number of passes on students enrolled in the 2011-12 academic year for students enrolled in the previous academic year. The improved results have influenced the actions taken and the level of knowledge with students entering.

Finally, we propose possible solutions to fix these results in future courses, aiming to improve the degree of efficiency, success and significant absenteeism in the first year as it will condition the dropout rate of these new degrees.

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