

STATISTICS TEACHING STRATEGY ON ENVIRONMENTAL ISSUES OF TECHNOLOGICAL MATTERS

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INTRODUCTION

The following poster describes the application of a particular statistical tool to a problem of atmospheric pollution for postgraduate students of the Environmental Masters program of the University de Santiago de Chile.

This graduate program aims to train a professional with the following features, among others: comprehensive and updated picture of the environmental management and sustainable use of natural resources, the broad interdisciplinary knowledge of environmental issues, ability to research applied to national reality and capacity for analysis, modeling and simulation of environmental management processes.

A strategy on statistics teaching will be shown during this document focusing on an environmental post-graduate class. In order to change the average oral and written lecture procedures software SPSS will be used with the purpose of raising class motivation along with improvements of the teaching-learning process.

Lecture will be based on polluted atmospheric particulate material (APM) behavior, measured through out different testing stations of the Región Metropolitana of Santiago de Chile using a multivariate procedure know as ANOVA inherent to above mentioned software.

CONCLUSION

In conclusion, this tool allows a proper interpretation of APM behavior and development of key competences in the students such as analytical capacity, statistic environmental management system modeling and simulation.

REFERENCES

- Estrada Rafael & Quiroga Dante (2007) Estrategia para la Enseñanza de Estadística. Universidad Nacional de Salta.
- Gramsch E., Cereceda-Balic F., Ormeño I., Palma G. and Oyola P. (2004) Use of the Light Absorption Coefficient to Monitor Elemental Carbon and Pm_{2,5}. Example of Santiago de Chile. *Journal of the Air and Waste Management Association*. 54, 799 – 808.
- López G. (2000) Estudio de Efectos en la salud PM₁₀, PM_{2,5}. CONAMA (Comisión Nacional de Medio Ambiente)RM Seminario V Taller Aire Limpio. Chile
- Pérez C. (2005) Métodos Estadísticos Avanzados con SPSS. Universidad Complutense. Thomson.