



POLITECNICO
DI TORINO



UNIVERSITÀ
DEGLI STUDI
DI TORINO



Dipartimento Interateneo di Scienze, Progetto e Politiche del Territorio



Course of Excellence

" Geographic Knowledge Infrastructure: Applications for Territorial Intelligence and Smart Cities"

Lecture: Prof. Robert Laurini, INSA-Lyon, France, and KSI, Chicago, USA,

Programme

Tuesday, February 28th 9.30-12.30

Presentation of the objectives of the course

- 1 - From Geodata to Geographic Knowledge
- 2 - Knowledge Representation
- 3 - Towards Geographic Knowledge Systems (GKS)

Wednesday, March 1st 9.30-12.30 – 14.00-17.00 (with coffee break)

- 4 - Geographic Objects
- 5 - Geographic Relations
- 6 - Complex Geographic Objects and Structures
- 7 - Geographic Ontologies
- 8 - Gazetteers and Multilingualism

Thursday, March 2nd 9.30-12.30 – 14.00-17.00 (with coffee break)

- 9 - Geographic Knowledge Discovery and Data Mining
- 10 - Geographic Applicative Rules
- 11 - Geovisualization and Chorems
- 12 - GKS: Querying and Interoperability
- 13 - Knowledge as Infrastructure

Evaluation of the course

Location:

Politecnico di Torino, Corso Duca degli Abruzzi
DIATI – door 3 – Meeting room (1st floor)

For registration, please contact prof. Marco Piras: marco.piras@polito.it

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Short BIO:



Dr. Robert Laurini, presently professor emeritus at KSI, USA and associate researcher at INSA Lyon, France, is a well-known specialist in GIS. He has also taught GIS at the University of Maryland, USA, at the IUAV University of Venice, Italy; and at several other universities especially in Latin America. He speaks French, English, Italian and Spanish. His present interests are in location-based services, geographic knowledge and territorial intelligence. He is also the founder of «Academics Without Borders» which is a network of academic consultants working for the modernization of higher education institutions in developing countries.

Main publication:

LAURINI R. (2015) "Geographic Ontologies, Gazetteers and Multilingualism", *Journal Future Internet*, 2015, 7, 1-23; doi:10.3390/fi7010001

LAURINI R. (2015) "Fundamentals of Geographic Engineering for Territorial Intelligence". In "Knowledge Engineering Principles, Methods and Applications" Edited by A. Perez Gama, Nova Science Publishing, New-York, ISBN: 978-1-63463-909-5, pp. 1-56.

LAURINI R. (2014) "A Conceptual Framework for Geographic Knowledge Engineering", *Journal of Visual Languages and Computing* (2014), Volume 25, pp.2-19, <http://dx.doi.org/10.1016/j.jvlc.2013.10.004i>.

LAURINI R. (2012) "Importance of spatial relationships for geographic ontologies". In "Planning Support Tools: Policy Analysis, Implementation and Evaluation" Proceedings of the Seventh International Conference on Informatics and Urban and Regional Planning INPUT 2012, pp. 122-134. (Editors: Michele Campagna, Andrea De Montis, Federica Isola, Sabrina Lai, Cheti Pira, Corrado Zoppi, (ISBN code: 9788856875973.

LAURINI R., THOMPSON D. (1992) *Fundamentals of Spatial Information Systems*. Academic Press, Février 1992. 680 p.