Ontologies and the Semantic Web

Asunción Gómez-Pérez

{asun}@fi.upm.es

http://www.oeg-upm.net

Omtological Engineering Group
Laboratorio de Inteligencia Artificial
Facultad de Informática
Universidad Politécnica de Madrid
Campus de Montegancedo sn,
28660 Boadilla del Monte, Madrid, Spain

Lecturers

1. Asunción Gómez Pérez (Coordinator)
   - Departamento de Inteligencia Artificial
   - asun@fi.upm.es

2. Guadalupe Aguado de Cea
   - Departamento de Lingüística computacional
   - lupe@fi.upm.es

3. Oscar Corcho García
   - Departamento de Inteligencia Artificial
   - ocorcho@fi.upm.es

4. PhD students will help with the hands-on activities

ToC

- Introduction to the Semantic Web
- Computational Linguistics
  - Terminological resources: Lexicons, thesauri, controlled vocabularies, terminological DBs
- Ontologies
  - Theoretical Foundations
  - Languages: RDF(S) y OWL
  - Methodologies:
    - Requirement specification
    - Reuse, Reengineering and Learning
    - Mappings
    - Multilinguality
- Semantic Web
  - Annotation
  - Ontology extraction from folksonomies
  - Applications

Syllabus

http://delicias.dia.fi.upm.es/wiki /index.php/MasterRD09-10

Evaluation

Two Alternatives
- Hands-on activities only
- Exam only

February: 11th February 2010 at 11am

1. Hands-on
   - Weekly work and participation in discussion (15 %) +
   - Build an ontology network following the methodology (55%)
   - Research work for those students that already passed the ontology building hands-on (30%)
2. Exam

September
- Build an ontology (70%) + Research work (30%)
- Exam

No Exam in June/July

Lecture structure

- All lectures, except for the introductory one, will follow this structure:

  - Presentation (90 minutes)

  - Discussion about work done during the week (e.g., papers that have been read, assignment that has been carried out) (25 minutes)

  - Description of work to be done for the following week (5 minutes)

Hands-on delivery

1.   Send students' name in your group to
     masterr09@delicias.dia.fi.upm.es before October 18th

2.   Avoid the use of Asun and Oscar e-mails

3.   Groups of two people for all the hands-on

4.   Topics in the Web site

5.   Send them to masterr09@delicias.dia.fi.upm.es. The deadline finishes at 9pm