

## Homework 6 – OWL

Put all answers as a link from your web site. You can put the answer to #1 and #2 as a separate document linked on your web site. This document can be of any type (text, Word, etc.)

1. (p. 128, 4) Strictly speaking, the notion of SymmetricProperty was not needed in OWL because it could have been expressed in terms of other language primitives. Explain how this can be done. (*Hint*: Consider the inverse, too.)
2. In the example African wildlife ontology, what problem would emerge if we replaced owl:allValuesFrom by owl:someValuesFrom in the definition of carnivores? (*Hint*: Consider the definition of tasty plants.)
3. Update the university ontology by doing the following:
  - a. Correct any errors from previous assignment
  - b. Specify any appropriate cardinality restrictions
  - c. Specify any classes that are disjoint
  - d. Specify any properties that are inverses
  - e. Specify any functional properties
  - f. Define a graduate course that is a course that has at least one graduate student enrolled