INF5020

Philosophy of Information

WARNING:
This course may actually make you think.

INTRODUCTION – *Organization of the course*

- Your **instructors** are:
  - M. Naci Akkøk (NAK) for the first 4 weeks of lectures.
  - Erek Göktürk (EG) for the rest.

- **The course is 14 weeks**, distributed as…
  - 4 x 3 hours (12 hours) of lectures
  - About 8 x 3 hours of seminar (student presentations and discussions), depending a bit upon number of students
  - 2 x 3 hours of "space" for essays and the final term project – week 40 (starting Monday 27th September 2004) and week 42 (starting Monday 11th October 2004)
  - NB! Week 40 coincides with the school fall vacations and 42 coincides with mid-terms for the whole institute

- **Exam:**
  No other exams than the three essays (counting 20% each) and the final term project (counting 40% of your total grade).

- **IN CAPITAL LETTERS:**
  ALL WORK IS STRICTLY INDIVIDUAL!
  THESE ARE YOUR EXAMS!

- **Mandatory exercise:**
  There is no "classical" mandatory exercise in this course. What is "mandatory" in this course is presenting a paper (or the equivalent), joining discussions, and also presenting the theme you choose for your final term project.

- **Information about the course:**
  All information, as well as course materials and relevant messages are on:
  http://www.uio.no/studier/emner/matnat/ifi/INF5020/h04/

  See also the "official" home-page of the course:
  http://www.uio.no/studier/emner/matnat/ifi/INF5020/

FIRST ESSAY
- **DUE: Friday 28th September 2004, before 16:00 hrs.**

- **GOAL:** Understand and discuss what information is, also in terms of its function (<u>in different contexts</u> like for example computational and human/social contexts), also in comparison to data and knowledge etc.
- Note that you really want to be able to (at least) distinguish between data, information and knowledge, and you want a "definition" that makes sense at least in one specific context. Do specify which one(s)!
- Do not come with a summary of syllabus (like L. Floridis article on information in chapter 4).

- **TITLE:** "Information Is and Information Does: In Search of the True Meaning of Information".

SECOND ESSAY
- **DUE: Friday 22nd October 2004, before 16:00 hrs.**

- **GOAL:** Understand and discuss concepts of reality, objectivity, subjectivity, meaning and (especially) communicating meaning from the point of view of classical categorization theory versus Roschian categorization theory (i.e., typicality).
- Focus on the <u>consequences</u> of the two attitudes (i.e., classical vs. Roschian attitudes) upon our conceptualization of reality, objectivity, subjectivity, and upon the act of communicating meaning (or "informing").

- **TITLE:** "Do We have a Sufficiently Common Understanding of Reality for Sound Communication?"

THIRD ESSAY
- **DUE: Friday 19th November 2004, before 16:00 hrs.**

- **GOAL:** Discuss how information may be represented computationally so as to enable semantic querying.
- Think of an infrastructure like the Semantic Web.
- Think of a yes/no question as your "semantic query". For example: "Does education improve welfare?"
- Beware: You do not want the "Semantic Web" to give you volumes of text as an answer (i.e., you do not want keyword search), but a simple yes or no, or a conditional yes and a conditional no (with explanations of under what conditions the answer is a yes or a no).
- You will need to surf around in Artificial Intelligence (AI) resources, the Semantic Web and Knowledge Representation etc. You may also want to search for information on models of the mind, reasoning etc.

- **TITLE:** "Modeling Information for Semantic Information Retrieval"

- NOTE that this is not an easy task. If we could do this, we would be a giant step closer to intelligent machines. So just do your best. Discuss at least the shortcomings of existing schemes of representing information.

THE FINAL TERM PROJECT
- **DUE: Wednesday 15th December 2004, before 16:00 hrs.**

- **GOAL:** Show your mastery of the syllabus and the subject area.

- **TITLE and THEME:** YOU CHOOSE!
- NOTE:
    - You must first deliver the theme with a short description (~3 sentences, a paragraph) on week 43 (week after the second break), i.e., by 16:00 hrs Friday 22nd October 2004 (together with essay #2).
    - The earlier you deliver your theme, the better: it may be rejected, starting to write early will help etc. You can hand in as your final term project only a theme that is accepted.
    - Some may be asked to present their themes in class (and you can always volunteer).

See the Web-site for more info on the exam:
http://www.uio.no/studier/emner/matnat/ifi/INF5020/h04/undervisningsmateriale/EXAM-INFO.htm

NOTE:
The **Grading Style**:
- A-F
- Except for PhD students who (by regulation) get a pass/no-pass (bestått/ikke-bestått)

Goal:

To understand information from a philosophical perspective…

But not only that:

- Also to learn and use concepts and philosophical stances, understand what the consequences of choosing different theoretical/philosophical foundations may be etc.

- Also to learn how to formulate arguments and write consistent articles.

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See the lecture plan on the Web-site:

http://www.uio.no/studier/emner/matnat/ifi/INF5020/h04/undervisningsmateriale/LECTURE-PLAN.htm

See also the syllabus (pensum) on the Web-site:

http://www.uio.no/studier/emner/matnat/ifi/INF5020/h04/undervisningsmateriale/SYLLABUS.htm

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Note:
- You must choose a paper/article/URL to present from the seminars listed in the lecture plan within end of week 37 (3rd week of lectures), i.e., before Friday 10th September 2004 16:00 hrs.
- Please send your choice by mail to Erek Göktürk (erek@ifi.uio.no)!

See also the syllabus (pensum) on the Web-site:
http://www.uio.no/studier/emner/matnat/ifi/INF5020/h04/undervisningsmateriale/SYLLABUS.htm

ANY QUESTIONS?

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